



IBM Cognos 8 BI: Migrating from Series 7 Professional Workshop

IBM Cognos Series 7 Refresher - Terms you need to know for migration to IBM Cognos 8



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What is IBM Cognos Series 7	6
Applications and components that have an in-direct relationship with migration	5
Cognos Query:	7
Noticecast:	7
Visualizer:	7
CWS (Cognos Web Services):	7
CPS (Cognos Portal Services):	7
Applications and components that have a direct relationship with migration	8
Impromptu Administrator	13
Catalogs:	13
Catalog Automation (OLE):	13
Joins:	13
Folders:	13
SQL:	13
Prompts:	14
Type-In Prompt:	14
Picklist prompt:	14
Catalog:	14
Filter:	14
Frames:	14
Snapshot:	15
Hotfiles:	15
Upfront	15
NewsBoxes:	15
NewsItems:	15
Drill-Through	15
What Is Drill-Through?	16
Impromptu Client	16
Queries and Reports:	16
Calculations:	16
Impromptu Web Reports	17
Report sets:	17
Events:	17
User Class Mapping:	17
PowerPrompts:	17

Architect	17
Metadata Modeling:	18
Architect Models:	18
Metadata Source:	18
Filters:	18
Transformer	19
PowerPlay Connect:	19
Cube Groups:	19
Time-Based Partitioning:	19
IQD as a Datasource:	19
OLE versus MDL (Automation Techniques):	19
OLE:	19
MDL	20
Building a Model:	21
Creating PowerCubes:	21
Deployment PowerCubes:	21
PowerPlay Enterprise Server Administration	22
Publishing PowerPlay reports to Upfront:	22
Publishing PowerPlay reports to IBM Cognos Connection:	22
PowerPlay Admin Tool:	22
Publishing from PPES to IBM Cognos 8	22
PowerPlay Client	23
PowerPlay Portable Report file (.ppx):	23
PowerPlay Report (.ppr):	23
Local:	23
Remote:	23
Deployment Manager	23
Creating (Packing) a Deployment Manager Package:	23
Deploying (Unpacking) a Deployment Manager Package:	23
Access Manager	24
Authentication Sources:	24
Users:	24
User Classes:	24
Applying permissions:	24
What is IBM Cognos 8	25
Framework Manager	25
Query subjects (DataSource, Model, Stored Procedure):	25

Data Source:	25
Model:	25
Stored Procedure:	25
Cognos SQL versus Native SQL:	26
Creating packages:	26
DMR (Dimensionally Modeled Relational):	26
General Modeling Recommendations:	27
Cognos Connection	29
Data Sources:	29
Reports and Report Options:	29
Permissions\Security:	30
Read Permissions:	30
Write Permissions:	30
Execute Permissions:	30
Set policy Permissions:	30
Traverse Permission:	30
Analysis Studio	31
Analysis Studio versus PowerPlay Web:	31
PowerPlay Studio versus PowerPlay Web:	31
Report Studio	31
IBM Cognos Configuration	32
Startup Configuration File:	32
Starting and Stopping the IBM Cognos 8 BI Service:	32
Starting Services:	32
Stopping Services:	32

What is IBM Cognos Series 7

IBM Cognos Series 7 typically is defined as a family of products, including but not limited to the following products and components: (Impromptu, Impromptu Web Reports, PowerPlay, PowerPlay Web, PowerPlay Windows, PowerPlay Excel Add-in, PowerPlay Enterprise Server, NoticeCast, Upfront, Architect, Cognos Query, Visualizer, Transformer, DecisionStream, and Metric Manager. As part of its comprehensive BI offering, IBM continues to support and develop IBM Cognos BI Series 7 capabilities, including the reporting capabilities of IBM Cognos Query, IBM Cognos Impromptu, and IBM Cognos Impromptu Web Reports

The following table consists of a quick reference guide for applications that are not attributed

directly to migration. Additional detailed information exists below the table.

Application/Component	Purpose	Example
Cognos Query	Allows self-service direct access to corporate data resources for real-time data exploration.	Users create reports from any data source and distribute them to business users across the organization for better decisions and improved corporate performance
Noticecast	Sends automatic email alerts and allows consumers to receive alerts on their desktop, PDA, or cell phone. Automatically alerts users of critical events in their data.	Users can be notified when new BI is published, when a performance metric crosses a threshold, or when events occur in your operational data.
Visualizer	Creates advanced data visualizations with exploration that includes zoom, rotation, and fly- through Displays data using a wide variety of chart types including histograms, thermometers, control limits and gauges	Allows user to unite data from core departments—including sales, marketing, finance, HR, logistics, distribution, and more so companies can have a true, complete picture of profitability.
Cognos Web Services (CWS)	Is a universal integration platform for extending industry-leading Cognos Series 7 business intelligence into other applications and environments.	Allows customers and industry partners to rapidly integrate Cognos into leading-edge Web, vertical-market, and wireless applications.
Cognos Portal Services (CPS)	Offers portal services.	Allow organizations to manage and display Cognos business intelligence, planning, and scorecarding in existing enterprise information portals.
Cognos Application Firewall (CAF)	Provides supplemental security and acts as a smart proxy for the Cognos 8 product gateways and dispatchers.	Requests are analyzed, modified, and validated before the gateways or dispatchers process them, and before they are sent to the requesting client or service.

Cognos Query: IBM Cognos Query lets novice and experienced users directly access corporate data resources for real-time data exploration. Using only a Web browser, users can navigate suites of published queries, saving and modifying them as required meeting their information needs. IBM Cognos Query balances ease of use and power. Query users and authors can service themselves, quickly and easily accessing published sets of queries using the fully integrated Cognos portal. Users can run and modify existing queries, design new ones, and optionally publish queries back to the portal for future use. Users can take advantage of advanced features, like query-to-query linking, prompts, and the ability to define sophisticated calculations in the browser environment.

Noticecast: IBM Cognos Noticecast provides automatic email alerts and allows consumers to receive alerts on their desktop, PDA, or cell phone. This permits multiple-alert messages and can send varying messages based on a single event to different recipients or groups, such as summaries for a manager and detail for a sales rep. IBM Cognos Noticecast also provides guided analysis where users can use links in the message to analyze source information.

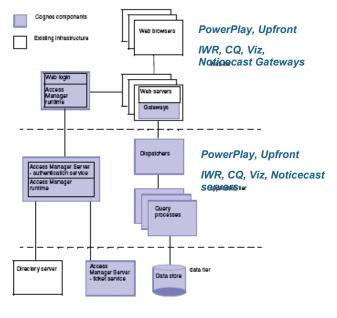
Visualizer: IBM Cognos Visualizer lets users create advanced data visualizations for their IBM, dashboards. Dashboards optimized through the IBM Cognos Visualizer component of IBM Cognos ReportNet improve your performance by: Provides one version of the truth—dashboards connect goals to reality, helping companies confront pressing business issues and execute more effectively. Presents a real-world view of business as ever changing and evolving—one that static reports cannot render. Unites data from all the core departments—including sales, marketing, finance, HR, logistics, distribution, and more so companies can have a true, complete picture of profitability. Supports mission-critical strategic initiatives—such as Six Sigma, ISO Certification, and Total Quality Management and Provides answers at a glance—for faster understanding and action by staff.

CWS (Cognos Web Services): IBM Cognos Web Services is a universal integration platform for extending industry-leading Cognos Series 7 business intelligence into other applications and environments. Using standard Internet technologies such as XML, simple object access protocol (SOAP) and Web services description language (WSDL) to build connections between Cognos software and multiple applications, Cognos Web Services allows customers and industry partners to rapidly integrate Cognos into leading-edge Web, vertical-market, and wireless applications.

CPS (Cognos Portal Services): IBM Cognos software offers Portal Services that allow organizations to easily manage and display Cognos business intelligence, planning, and scorecarding in your existing enterprise information portals. Including IBM Cognos reports, analysis, dashboards, scorecards, and other capabilities drives higher returns in your information and portal investments.

CAF (Cognos Application Firewall): Cognos Application Firewall (CAF) is a tool designed to supplement the existing Cognos 8 security infrastructure. By default, this supplemental security is enabled. Cognos Application Firewall acts as a smart proxy for the Cognos 8 product gateways and dispatchers. HTTP and XML requests are analyzed, modified, and validated before the gateways or dispatchers process them, and before they are sent to the requesting client or service. CAF works to protect the Cognos 8 products from processing malicious data. The most common forms of malicious data are buffer overflows and cross-site scripting attacks (XSS links), either through script injection in valid pages or redirection to other web sites. To ensure that the Cognos 8 solution is as secure as possible, CAF should NEVER be disabled in a production environment.

IBM Cognos Series 7 BI components



Windows Clients

- PowerPlay
- PowerPlay Excel add-in
- Impromptu
- Transformer
- Architect
- NoticeCast Client

Admin and external integration

- Product-specific admin tools
- Access Manager
- Deployment Manager
- Configuration Manager
- Cognos Application Firewall
- OLE Automation
- cws
- CPS

The following table consists of a quick reference guide for applications that are attributed directly to migration, with a section detailing how they are affected with regards to migration. Additional detailed information exists below the table.

Application/Component	Primary Purpose	Example	Relevance to Migration
Impromptu Administrator	Creates Impromptu metadata catalogs which can be distributed and utilized by consumers within Impromptu Client.	Users create Impromptu reports based on an existing Impromptu catalog.	Properties of an Impromptu catalog are migrated to properties of a Framework Manager namespace. (See Page 72 of the user guide for more info).
Impromptu Client	Allows users to create Impromptu reports based on catalogs generated from within Impromptu Administrator.	Users create Impromptu reports in the Impromptu Client application after connecting to a catalog.	Impromptu report functionality is preserved when equivalent or similar functionality is available in IBM Cognos 8. (See Page 81 of the user guide for more info).
Impromptu Web Reports	Delivers Impromptu reports across the Web to larger groups of users. Users can subscribe to published reports, and customize them.	Reports created in Impromptu client can be published to a portal to be viewed by consumers over the web.	Deployment Manager packages are used to migrate Impromptu Web Reports. You must migrate Impromptu catalogs before migrating IWR Reports. (See Page 125 of the user guide for more info).
Upfront	Customizable portal that you use to view, find, organize, and share IBM Cognos reports and queries on the Web	Once users are authenticated, they are able to view Upfront NewsItems which are links to underlying BI content	You can migrate Upfront content created by Power-Play, Impromptu and Impromptu Web Reports. (See Page 121 of the user guide for more info).
Architect	A data, business and package metadata modeling tool that provides a common administration point for IBM Cognos Series 7 applications.	Architect Models (.cem) are created and used as the datasource for the Cognos Query application (referenced in the table above).	The Architect model migration tool converts an Architect model to an xml file that you can use as a metadata source in Framework Manager. (See Page 35 of the user guide for more info).

Transformer	The OLAP modeling tool you use to define, build, and refresh PowerCubes.	Define the Dimensions, Measures and Categories for one or many PowerCubes.	You can continue to use IBM Cognos Series 7 Transformer to build and maintain .mdc format PowerCubes for use in IBM Cognos 8 You can install IBM Cognos Series 7 and IBM Cognos 8 Transformer on the same computer allowing for a smoother upgrade of PowerCubes, however models saved in IBM Cognos 8.3 and above are not backward compatible to IBM Cognos Series 7. (See Page 21 of the user guide for more info).
PowerPlay Enterprise Server Administration	PowerPlay Enterprise Server offers • a centralized OLAP application server for Web, Windows, Excel, and mobile users • a browser-based portal to organize access to all your business intelligence information	Users can access Powerplay reports on the web after they have been published from PowerPlay Enterprise Server Administration.	Deployment Manager packages are used to migrate Impromptu Web Reports. (See Pages 51, 67 of the user guide for more info).
PowerPlay Client	Client based application which allows PC-based or off-line users to analyze their data using PowerCubes.	Users can attach to a PowerCube (.mdc) file and create explorer and reporter reports for analysis purposes.	The Migration tools do support the bulk migration of PowerPlay reports to Report Studio and Analysis studio, however IBM Cognos 8 version 8.4 includes PowerPlay Studio which is the preferred target for migration of PowerPlay 7. Reporter mode reports are migrated according to Powerplay Client behaviour whereas Explorer mode reports are migrated according to PowerPlay Web behavior. (See Pages 49, 67, 93 of the user guide for more info).

Deployment Manager	An administration tool that packages IBM Cognos business intelligence data from the "source" so that it can be moved to the "target".	After you create the Deployment Manager package, you run the IBM Cognos Series 7 migration tool against the .dmp file.	You use Deployment Manager to create the package, which defines the components that you want to migrate. The package and packlet files must be located on the computer where you are running the IBM Cognos Series 7 migration tool. (See Pages 51, 52 of the user guide for more info).
Access Manager	Provides a centralized environment to define, store, and maintain user authentication information for IBM Cognos business information applications.	Users are presented with a logon screen to insert their credentials. Once authenticated as a valid user, they will be presented with content based on their specific authorization (ie: you are now logged in, now what can you see?)	You can include IBM Cognos Series 7 security information when you migrate IBM Cognos web- based content in Upfront. Migration does not include database signons, therefore these will have to be recreated in Cognos Connection. (See Page 24 of the user guide for more info).
Cognos Connection	Provides a single access point to all corporate data available in IBM Cognos 8 Bl. You can use IBM Cognos Connection to work with entries such as reports, analyses, queries, agents, and packages.	- The content of the Upfront portal can appear within IBM Cognos Connection by modifying values in the system.xml file - PowerPlay reports can be published directly from PowerPlay Enterprise Server Administration into IBM Cognos Connection - IBM Cognos Series 7 PowerCubes can be used as a datasource in IBM Cognos Connection	If you have PowerPlay reports published to IBM Cognos Connection, you can migrate those reports to Analysis Studio or Report Studio by using the "Open With Analysis Studio" or "Open With Report Studio" functionality. The migration service must be started before you are able to use "Open With". If the published PowerPay reports are from a previous version such as Series 7.3 MR3, you cannot migrate those reports directly and therefore must use the batch migration tools. (See Page 67 of the user guide for more info).

Analysis Studio	The component of IBM Cognos 8 BI that you can use for multidimensional analysis and exploration of large data sources.	PowerCubes created in IBM Cognos Series 7 can be used as a package source for Analysis Studio	PowerPlay reports can be migrated to Analysis Studio via the IBM Cognos 8 migration tool. To do this, include the "-y analysis" parameter. (See Page 63 of the user guide for more info).
Report Studio	A Web-based tool that professional report authors use to build sophisticated, multiple-page, multiple-query reports against multiple databases.	Users can create professional reports against any package and can also leverage enhanced reporting features.	PowerPlay reports can be migrated to Report Studio via the IBM Cognos 8 migration tool. To do this, include the "-y report" parameter. Note: This is the default action if you choose to not use the "-y" parameter. Since IBM Cognos 8 version 8.3, Report Studio is available in two authoring modes, those being "Professional" and "Express". The migration tools can migrate reports in the Professional authoring mode only. (See Pages 13, 63 of the user guide for more info).
IBM Cognos Configuration	The centralized IBM Cognos 8 configuration tool where you specify paths, properties, gateways, dispatchers plus general configuration properties, in addition to starting and stopping IBM Cognos 8 services and components.	Administrators define system parameters for IBM Cognos 8, such as gateway and dispatcher settings as well as security provider information.	You can upgrade IBM Cognos Series 7 Transformer models containing IBM Cognos Access Manager security and you can continue to use that same security if desired. To do this, you must configure IBM Cognos 8 against the same IBM Cognos Series 7 Access Manager namespace that the upgrading Transformer model uses. These values are set in IBM Cognos Configuration. (See page 24 of the user guide for more info)

Impromptu Administrator

(Use Impromptu Administrator to create catalogs as an internal data source which can be distributed and utilized by consumers within Impromptu Client)

Catalogs: A file (with the extension .cat) that contains all the information necessary for Impromptu to access and retrieve information from a relational database. A catalog does not store data, but it does provide Impromptu with a business view of the data. A catalog also contains information about what database to access, where the database is stored, and how the tables in the catalog are joined.

Catalog Automation (OLE): OLE automation exposes the methods and properties of objects and collections that let you analyze data that drives your business. You can use OLE automation to

- · create and distribute standard reports that identify and highlight exceptional data
- control access to database information and administer user group privileges and restrictions
- optimize the performance of the Impromptu application
- customize the user environment so that users can be efficient and conform to company standards
- verify and update an Impromptu catalog after a change to the connected database.

You can automate repetitive tasks when the Impromptu application, catalog object or report document opens or closes by writing OLE automation macros. Then you can use Scheduler to run the macro. The Impromptu Application object is organized into a logical tree of objects which reflects how these contained objects depend on each other to operate. The application hierarchy indicates which objects you need to have in existence before you can create the object you want.

Joins: Joins relate the data in one table to the data in another table in the same database, enabling you to retrieve data from more than one table at a time. For example, you may want to see the purchases made by each customer, but the information about purchases is stored in the Sales table and the information about customers is stored in the Order table. You create joins between these two tables so you can create reports that use columns from each of these tables. A join can have several columns linked together. The relationship between the columns is called a link.

Folders: When you create a catalog, each table in the catalog appears as a folder containing the table's columns. You can also store conditions, calculations, and catalog prompts in folders. Folders enable you to organize data items logically, according to users needs, rather than based on how tables and views are physically stored in the database. This logical rendering of information enables report users to access information without knowing about the tables, indexes, and joins that comprise a typical corporate database. You can modify and organize the folders and items in the folders. Additional aspects of folders include:

- create new folders and show the contents of a folder,
- copy folders and folder items and paste them in new locations,
- move and remove folders and folder items,
- rename and sort folders and folder items,
- generate a folder from a report,
- use folder items to synchronize catalog changes to reports

SQL: Structured Query Language. A language developed by IBM in the 1970s for defining and manipulating relational databases. It has since become the industry standard, and is often used to access the data held in existing corporate databases. It is a computer language designed for the retrieval and management of data in relational database management systems, database schema creation and modification, and database object access control management

Prompts: You can use prompts to filter reports, calculate data items, format prompts, and format data. The types of prompts are "type-in", "picklist", and "catalog". When you open a report that contains more than one prompt, Impromptu presents the prompts in the order they are listed in the Available Prompts list (Prompt Manager dialog box, from the Report menu, Prompt Manager). Drag the prompts in this list to change their order. Only prompts that are used in the report appear in the Available Prompts list in the Prompt Manager box. If the prompt is used in a filter, calculation, or condition, its uses are also listed in the reference box.

Type-In Prompt: A type-in prompt captures information that you enter into the prompt. You can define either a single value or multiple values in a type-in prompt. Type-in prompts are best suited for capturing dates or numeric values that do not require familiarity with the contents of the database.

Picklist prompt: A Picklist prompt presents you with a list of data items from which you select one or more values, so you need not be familiar with the database. The values listed in picklist prompts can be retrieved from 1:) a database via a catalog when you want to select information that often changes. 2:) a column in another saved Impromptu report, a snapshot, or a HotFile, when you want to select values from a subset of those available in the database, and 3:) a text file saved in a comma delimited ASCII format when you want to base a prompt on information from another application. If the text file has a single column of values, the value in the Prompts dialog box is the filter value. If the text file has two columns, the value in the Prompts dialog box comes from the second column and the corresponding value from the first column is the filter value. Use two columns in the text file to provide descriptive text for the filter values.

Catalog: The administrator can create catalog prompts stored in a folder within the catalog. Users can also create their own catalog prompts if they have the access rights or are working with a personal distributed copy of the catalog (Folders in the **Catalog** menu). Because the catalog prompts reside in the catalog, they are available to any report that attaches to the catalog. You can access catalog prompts from the Filter tab (**Query** dialog box). A folder for catalog prompts appears under the **Catalog Columns** in the **Available Components** box. The catalog prompt symbol identifies a catalog prompt. You can move, copy or delete catalog prompts just as you can any other catalog folder item using OLE automation.

Filter: A set of criteria used to retrieve a subset of records. For example, instead of viewing total sales, you can view sales for a specific region, product line, or time period. You can add filters to entities, use filters to create specialized subtype entities, and use filters to ensure consistency in the filter expressions used by report users in Impromptu, PowerPlay Transformer, and IBM Cognos Query. You can also restrict the data that users can see by applying filters to objects within a user class. For example, you can create a filter on the Salary table so that only the Human Resources department can view that table.

Frames: Frames are containers for report objects such as data, text, pictures, and charts. You can use frames in your reports to organize complex data into a more readable form. You can use the following types of frames to create reports

List frame contains data items and other report objects in a tabular row and column format.

Form frame contains other report objects, including other frames. You can create a form frame report or insert a form frame in another frame.

Chart frame contains a visual representation of data such as a pie chart.

Text frame contains data items or text that you enter. You can edit the text that you enter into a text frame but you cannot edit a text frame that contains a data item.

Picture frame contains a static graphic (such as a company logo that doesn't change) or a dynamic graphic (such as a unique product photo for each product number).

Object Linking and Embedding (OLE) frame contains an object such as data, pictures, charts, and so on from an OLE-compliant application. If the OLE frame is linked to the source application then the information in the frame automatically reflects changes made in the source application. Impromptu treats an OLE object as a default frame.

Sub-report frame contains the results of several reports combined into one report.

Snapshot: When you use a snapshot, you separate the report from its original data source. Other Impromptu users can access a snapshot report without having to connect to the original source database or catalog. All you need is Impromptu to run the report. Snapshots are integrated with the report. You cannot add new data to the report.

Hotfiles: A HotFile is a table of data. You need a catalog to bridge the report and the HotFile it accesses. You need Impromptu and the catalog to view a report that uses a HotFile. Hotfiles are separate, local data tables. A HotFile that is included in the catalog enables you to add additional data to the report.

<u>Upfront</u>

IBM Cognos Upfront is the customizable user interface that you use to view, find, organize, and share IBM Cognos reports and queries on the Web. The Upfront NewsIndex contains business information. After you log on to Upfront, you can explore the NewsIndex and open NewsIndex entries.

NewsBoxes: NewsBoxes are folders that contain other NewsBoxes, shortcuts, reports, agents, custom views, URLs, tools, and data sources. When you click a NewsBox, the contents of the NewsBox appear in the content frame. The main NewsBox is called the NewsIndex.

NewsItems: An object stored in the Upfront data store that represents a report, agent, custom view, data source, tool, or URLs.

Drill-Through

What Is Drill-Through?

You can drill through from a PowerPlay report to virtually any type of report, cube, or working file. For example, you can drill through to:

- PowerPlay, in order to view and explore the information you need. For example, one cube contains revenue information about all products in the Americas; another cube contains revenue information about all products in Europe. As the product manager for the European office, you use the European cube most often. Occasionally you need to compare revenue in the Americas and Europe, and this is when you drill through from one cube to another.
- Impromptu, in order to find transaction-level details in an Impromptu report. For example, a PowerPlay report shows that 80 backpacks were sold in the Americas in Q4 of 1997. You then drill through to Impromptu to see the actual quantities in each order for backpacks, including returns that may not be included in the PowerPlay cube.
- another application, using a macro
- any associated file, such as a Word file, Excel spreadsheet, or PowerPoint slide presentation (as long as the associated application is installed on your computer)

Impromptu Client

(Impromptu Client is an application that allows users to create Impromptu reports based on catalogs generated from within Impromptu Administrator)

Queries and Reports: When you query the database, Impromptu generates one or more SQL statements and sends them to the database. Where required, Impromptu complements the capabilities of the database with its own local SQL based query engine. A query is a question you define and send to the data source to retrieve the data. A report is an organized and formatted view of the data the query retrieved. The report does not have to include all of the data items you specify in the query. You indicate which query data items you want to appear in the report by selecting the items and clicking the Mark for Insertion button.

Calculations: A calculated field is a new data item based on a formula that you define. You can use calculated fields created by the administrator or you can create calculated fields of your own

You can create

- simple calculated fields with simple mathematical calculations, such as Product Price * Quantity = Total Cost
- complex calculations, which may combine existing columns with summaries, functions, and value constants

The number and complexity of the calculated fields in your report may affect performance. You also create a calculation called Profit Margin Ranges that uses a conditional expression and a data item such as:

if (Profit < 500) then ('Low') else if (Profit > 500 and Profit < 1000) then ('Medium') else ('High').

Impromptu Web Reports

(Impromptu Web Reports delivers Impromptu reports across the Web to larger groups of users. Users can subscribe to published reports, and customize them. Impromptu Web Reports is part of an enterprise reporting solution, which includes the IBM Cognos Web portal (Upfront), the Webbased point of entry for information consumers.)

Report Sets: Includes a catalog, one or more reports that use the catalog, and any supporting files, such as graphics files, HotFiles (.ims), or PowerPrompts applications. After a report set is published, it also includes report output files.

Events: In Impromptu Web Reports, an event is an occurrence that causes one or more reports to be run. For example, if the event is refreshing a data warehouse, Impromptu Web Reports runs a report each time the warehouse is refreshed.

User Class Mapping: If you know that the user classes in Access Manager have the same names as the catalog user profiles, you can select implicit user class mapping for a report set. For user class names that match user profile names, when a user runs a report, the data that appears in the report is filtered according to the governors and filters in the catalog. The matching of names is not case-sensitive. You cannot combine explicit and implicit user class mappings. However, you can manually map the user classes in Access Manager that don't match any user profiles in the catalog. If you use the implicit user class mapping option and the Access Manager user class names are not spelled the same as the user profiles, members of the unmatched user classes will not be able to run reports in the report set.

PowerPrompts: Instead of publishing volumes of reports, the IT department can publish one report that users can customize with prompts, pick lists, or PowerPrompts. A PowerPrompt is an intuitive "wizard" interface that guides users through multiple viewing options and, based on their choices, delivers the information that is most pertinent to their business needs. With PowerPrompts, IT can deploy a single report that meets the needs of many different users.

Architect

Architect is a metadata management tool that provides a single administration point for metadata that supports all your IBM Cognos queries. You use Architect to build a common set of business-oriented metadata so that your users can build queries, reports, and cubes.

Metadata Modeling: Metadata is "data about data", of any sort in any media. An item of metadata may describe an individual or content item, or a collection of data including multiple content items and hierarchical levels, for example a database schema. In data processing, metadata is definitional data that provides information about or documentation of other data managed within an application or environment. For example, metadata would document data about data elements or attributes, (name, size, data type, etc) and data about records or data structures (length, fields, columns, etc) and data about data (where it is located, how it is associated, ownership, etc.). Metadata may include descriptive information about the context, quality and condition, or characteristics of the data.

Architect Models: The Architect model describes the metadata from the underlying sources (data access layer), the business view of the corporate data (business layer), and which parts of the business layer will be used in applications (package layer).

- The data access layer contains the metadata that describes how to retrieve data from the physical environment. Tables, columns, joins, and other database objects may be included, as well as SQL statements and user-defined functions. The data may exist in multiple sources, such as relational databases or Impromptu HotFiles, or may be retrieved by using stored procedures, user-defined functions, or SQL statements.
- The business layer describes the business view of the corporate data as well as the information that your report authors and query designers require. It consists of the business model (entities, attributes, and relationships), which you can view as an entity-relationship diagram, business rules (calculations, filters, and prompts), and display rules (styles, and enumeration values). Architect generates objects in a basic business layer based on the objects in the data access layer. You can modify the business layer to reflect your users' reporting and querying requirements.
- The package layer contains packages that describe subsets of the business layer. Each package may be targeted for one or more IBM Cognos products (PowerPlay Transformer, Impromptu, and IBM Cognos Query) and defined for a single business intelligence application and user group.

Metadata Source: Any source from which Architect can import metadata. This includes relational databases such as ODBC, Sybase, and Oracle, and existing IBM Cognos applications such as Impromptu catalogs and IBM Cognos Query models.

Filters: An expression used to retrieve a subset of records. You use a filter to retrieve only relevant data and highlight the most important information. For example, you can create a filter to see only the sales data from North America. The expression used to create this filter might look like this: Country in ('United States', 'Canada', Mexico')

You can add filters to entities, use them to create subtype entities, and also use them to ensure consistency in the filter expressions your report users are using in Impromptu, PowerPlay Transformer, and IBM Cognos Query. You can also restrict the data users can see and report on by applying filters to objects within a user class.

Transformer

(Transformer is a modeling tool that you use to build multidimensional models from your source data. These models are distributed as PowerCubes that you can view in PowerPlay for Windows, PowerPlay for Excel, PowerPlay Web, or Cognos Visualizer.)

PowerPlay Connect: In PowerPlay, you cannot directly open a third-party OLAP cube. You must set up a connection file in PowerPlay Connect before you can access data in an OLAP server database. PowerPlay Connect is a component that allows you to create or change an .mdc pointer (or connection) file that stores information about server and database connections. You can select an .mdc pointer file in PowerPlay (File menu, Open) to open the corresponding cube in the third-party OLAP server or database. If a number of users need to connect to the database, you can store the .mdc pointer file in a shared LAN folder.

Cube Groups: A cube group is a set of similar cubes built by Transformer. Each cube group relates to a single level in one dimension of the model. Each member of the group is targeted at one of the categories in the level.

Time-Based Partitioning: A cube that combines multiple time-segmented PowerCubes based on the structural information in a control cube. Time-based partitioned cubes are set up by the administrator and have the same .mdc file extension as cubes.

IQD as a **Datasource**: A file with the extension of (.iqd), created by Impromptu that contains the definition for a database query. This can then be used as a datasource that feeds into a Transformer model

OLE versus MDL (Automation Techniques):

OLE: Using the IBM CognosScript Language, the IBM CognosScript Editor, and OLE automation capabilities, you can automate most IBM Cognos Business Intelligence applications using macros. Many IBM Cognos Business Intelligence applications are completely OLE compliant both as a client and a server. You can write a macro that will automate tasks involving two or more of the applications.

You can write a macro that

- reads the user classes in a database
- generates and saves a query definition file in Impromptu
- connects to a server and starts a PowerPlay Transformer batch job that runs a script to generate a PowerCube with user classes
- · generates a model in Transformer for PowerPlay for Windows using multiple data sources
- runs and saves a report using the multidimensional cube
- sets up Access Manager classes and data sources

Since IBM CognosScript is compatible with Visual Basic, you can create a macro in IBM CognosScript Language using

- the IBM CognosScript Editor
- · any text editor, such as Notepad
- any Visual Basic compatible macro editors

When you create a macro using a text editor, you cannot compile or run it from the editor. You must compile and run the macro in the IBM CognosScript Editor or another Visual Basic compatible macro editor. For more information about creating macros, see Example - Create a Macro.

Depending on the compliant application, you may not be able to run a macro from within the application.

- From Access Manager and PowerPlay Transformer, you must run a macro from the IBM CognosScript Editor.
- From Impromptu, you can run a macro five different ways: using a command, using a Toolbar button, at startup, using a command line option, and when you open a report.
- From PowerPlay for Windows, you can run a macro in four different ways: using a command, using the Launch Toolbar button, from a menu item, and in the Highlight Exceptions dialog box.

MDL: MDL is the proprietary model definition language for Transformer. You use MDL to create, manipulate, update, and store models without accessing the Windows interface. MDL represents Transformer models in text format and you can view the text in any text editor. The .py? file is a representation of the model, stored in default binary format. Note that it is equivalent to the .mdl file, with the exception of any adjustments made on the Windows interface and, in some instances, passwords.

MDL model statements can contain verbs, objects, and options. For example, in the statement

DataSourceUpdate 257 "All Staff" SourceType ExcelDatabase

- DataSourceUpdate is a verb specifying that a data source should be changed
- 257 is the object identifier and All Staff is its object name, identifying a specific data source object
- SourceType ExcelDatabase is the option that specifies the type of data source

You can use MDL in two ways:

- to create an MDL model that completely defines a Transformer model
- to create an MDL script that manipulates or updates an existing Transformer model

Update All Cubes Example

This script deletes all the categories in the Channels dimension, changes the data source for Channels to Channels.dbf, and generates categories from the new source. It then creates the .mdc file. It does not save the changes to the model.

OpenMDL "c:\Outdoors.mdl"
CleanHouse Dimension "Channels" 20011231 DataSourceUpdate
"Channels (dBase 4.0)" Source "c:\Channels.dbf"
PopulateFromQueries "Channels (dBase 4.0)" CreateFiles,

Building a Model: Use the New Model wizard to import your source data into Transformer. Transformer can create a preliminary model for you by using AutoDesign, or you can create your model manually. After you build your preliminary model, you can adjust the dimensions and levels so that the structure matches your planned design. You can then refine your model by adding custom time dimensions or categories, calculated measures or categories, manual levels, alternate drill-down paths, currency exchange rate data sources, and special categories.

Creating PowerCubes: A file (with the extension .mdc), You create a PowerCube based on your Transformer model. If you have one of the PowerPlay Transformer editions, you can create several PowerCubes from a single model, each one tailored to a different user group

Deployment PowerCubes: After you finish refining your Multiple Sources model in Transformer, you can create one or more PowerCubes to distribute to your users. Your users can view this PowerCube in PowerPlay for Windows, PowerPlay for Excel, or PowerPlay Web. If you are using PowerPlay Transformer Edition, you can also create regional PowerCubes based on the Multiple Sources model.

PowerPlay Enterprise Server Administration

PowerPlay Enterprise - Server Administration is a Java application that administrators use to configure PowerPlay servers and the cubes, reports, and folders registered on the servers

Publishing PowerPlay reports to Upfront: You can specify that reports published from PowerPlay Enterprise - Server Administration or PowerPlay Web are saved to one of the following portals. Upfront is the Web interface to IBM Cognos enterprise applications and other Web data. In PowerPlay Web you can save your report as a primary NewsItem in an Upfront NewsBox.

Publishing PowerPlay reports to IBM Cognos Connection: IBM Cognos Connection is the portal to IBM Cognos ReportNet or IBM Cognos 8 BI, the Web-based reporting solution. The IBM Cognos Connection portal provides a single access point to all corporate data available in ReportNet or IBM Cognos 8 BI.

PowerPlay Admin Tool: With the ppadmtool program, you can execute administration commands for IBM Cognos 8 PowerPlay server directly from the Microsoft Windows command prompt or UNIX command shell. The ppadmtool program saves you time.

You can

- enter your instruction from the command line rather than launching IBM Cognos 8 PowerPlay Administration
- redirect stdin to use batch commands
- redirect stdout to a log file

To launch the ppadmtool, from the ppadmtool directory double-click the ppadmtool.bat file on Microsoft Windows or execute ./ppadmtool.sh on UNIX.

Publishing from PPES to IBM Cognos 8: You can publish IBM Cognos Series 7 cubes and reports to IBM Cognos Connection, the portal to IBM Cognos ReportNet or IBM Cognos 8, to provide IBM Cognos ReportNet and IBM Cognos 8 users with single-click access to data in IBM Cognos Series 7 PowerPlay Web. If you publish a folder, all the cubes and reports in the folder are published to an IBM Cognos Connection folder. The IBM Cognos Connection folder to be published to is a folder object property and must be set before attempting to publish. IBM Cognos 8 must be configured to use the IBM Cognos Series 7 namespace before attempting to publish. Also, the Default Portal property in IBM Cognos Series 7 PowerPlay Enterprise Server Administration must be set to IBM Cognos ReportNet or IBM Cognos 8. If these are not set, then the Publish to Portal option is unavailable.

You cannot publish PowerPlay Portable Report files (.ppx) that have local cube references. PowerPlay Portable Report files are published from PowerPlay client applications and can be added to the PowerPlay Enterprise Server. You can update all .ppx files that have local cube references to have remote cube references instead. For more information, see the IBM Cognos Series 7 PowerPlay Enterprise Server Guide.

PowerPlay Client

With PowerPlay, you can easily examine the performance indicators in your organization. Performance indicators are the measures you use to evaluate your business.

PowerPlay Portable Report file (.ppx): A file format that can be read by any PowerPlay client. You can create .ppx files in PowerPlay for Windows and PowerPlay for Excel.

PowerPlay Report (.ppr): In addition to the PowerPlay portable report format (.ppx), you can also save and open a report as a PowerPlay report file (.ppr). PowerPlay report files (.ppr) can be read only by PowerPlay for Windows.

Attaching to local and remote cubes (differences):

Local: You can build reports using local cubes (.mdc), which are stored on your computer or network. You can access local cubes if you have installed PowerPlay User Edition or PowerPlay Transformer Edition (Windows or UNIX Edition). When you attempt to open a cube where access is restricted based on user class, you are prompted for authentication. If you receive an "Access Denied" error message, contact your administrator. You access a local cube from the **Choose a Local Cube** dialog box.

Remote: The cubes you use to build your report can be stored on a remote server. When you attempt to open a cube where access is restricted based on user class, you are prompted for authentication. If you do not know your credentials for IBM Cognos content, contact your administrator for more information. In addition to controlling security from a central location, the administrator can give you the name and location of your server connection.

Deployment Manager

Deployment Manager is an administration tool that packages IBM Cognos business intelligence data from one environment (the "source") so that it can be moved to another IBM Cognos environment (the "target") while retaining the data's integrity and web infrastructure.

Creating (Packing) a Deployment Manager Package: To define the data in the source environment that you want to pack, you create a package definition (.dmd). You can pack Upfront server information or mirrored/mapped server information. If you are packing an Upfront server, the Package Definition identifies all of the data represented by the entries in the Upfront NewsIndex. Optionally, you can modify the pack operation to pack only a subset of the data. The information in the package definition is used to pack the IBM Cognos business intelligence data in the source environment into a single package file (.dmp) and one or more packlets for each product that is packed.

Deploying (Unpacking) a Deployment Manager Package: Before you can unpack the data, you must provide the connection information for the computer in the target environment where the Upfront server, or mirrored/mapped server is running. You can unpack all of the data identified in the package or only a subset of that data

Access Manager

Access Manager provides a centralized environment to define, store, and maintain security information for IBM Cognos business information applications. In one central location, you can set up and maintain secure user access to data, such as cubes and reports that are created in other IBM Cognos applications. With Access Manager, you can also set up and maintain user signon information and auto-access privileges for the data sources and servers that contain the required data.

Authentication Sources: An authentication source contains security information about users, user classes, and the servers and data sources that users can access. You store connection information about your authentication sources in an IBM Cognos Security Administration file (.csa).

Access Manager supports the following types of authentication sources:

- a namespace on an LDAP directory server
- a local authentication export file (.lae)

Use namespaces on a directory server when you have a large number of users who are connected to the same network as the directory server. Use .lae files when you have users who are not connected to the same network as the directory server, such as remote users or users working offline. You can also use .lae files as an alternate source, regardless of whether the user is connected to the network.

Users: For each individual who must access secure data, you must create a user with Access Manager Administration, assign the user to one or more user classes, and specify a signon for the user. Access to the secured data is defined for each user class in the client application. To open an authenticated application or data source, a user must belong to at least one user class.

User Classes: When you add a user class, you enable administrators of client applications to restrict access to data or provide auto-access to data sources based on these user classes. Each user class that you create is contained within the root user class.

Applying permissions: User class permissions specify what members of that user class can do using Access Manager Administration. You can allow members of a user class to view users, user classes, data sources, and servers, or create and delete users and user classes, and add data sources and servers. The permissions specified in Access Manager do not determine the access permissions that members of the user class will have when using a client application. Those permissions are defined in the application. For example, permissions within Access Manager Administration determine whether that user, as a member of a user class, can view, create, or delete users and user classes and view, add, or remove connections to data sources and servers within Access Manager Administration. They do not specify whether that user can view a specific dimension while viewing a cube in PowerPlay. Permissions for viewing a cube must be specified in Transformer when the cube is created

What is IBM Cognos 8

IBM Cognos 8 Business Intelligence delivers the complete range of BI capabilities on a single, service-oriented architecture (SOA). Users can author, share, and use reports that draw on data across all enterprise sources for better business decisions. Business Intelligence Capabilities include: Reporting, Analysis, Dashboards, and Scorecarding

Reporting: Reporting gives you access to a complete list of self-serve report types, is adaptable to any data source, and operates from a single metadata layer for a variety of benefits such as multilingual reporting.

Analysis: Analysis enables the guided exploration of information that pertains to all dimensions of your business, regardless of where the data is stored. Analyze and report against online analytical processing (OLAP) and dimensionally aware relational sources.

Dashboards: Business dashboards communicate complex information quickly. They translate information from your various corporate systems and data into visually rich presentations using gauges, maps, charts, and other graphical elements to show multiple results together.

Scorecarding: Scorecarding helps you align your teams and tactics with strategy, communicate goals consistently, and monitor performance against targets.

Framework Manager

Framework Manager is a metadata modeling tool that drives query generation for IBM Cognos 8 BI. A model is a collection of metadata that includes physical information and business information for one or more data sources. IBM Cognos 8 BI enables performance management on normalized and denormalized relational data sources and a variety of OLAP data sources.

Query subjects (DataSource, Model, Stored Procedure):

Data Source: Data source query subjects directly reference data in a single data source. Framework Manager automatically creates a data source query subject for each table and view that you import into your model.

Model: Model query subjects are not generated directly from a data source but are based on query items in other query subjects or dimensions, including other model query subjects. By using model query subjects, you can create a more abstract, business-oriented view of a data source. Usually, model query subjects are created in the business view, not the import view.

Stored Procedure: Within Framework Manager, there are two kinds of stored procedures. Data Query and Data Modification. Data Query Stored procedure query subjects are generated when you import a procedure from a relational data source. Framework Manager supports only user-defined stored procedures. System stored procedures are not supported. The procedure must be run in Framework Manager to get a description of the result set that the procedure may return. After you import or create a stored procedure query subject, it appears as a broken object. You must run it to validate the underlying stored procedure and specify the projection list. Data modification stored procedures are used to update the database through Event Studio.

Cognos SQL versus Native SQL: Cognos SQL adheres to SQL standards, can contain metadata from multiple data sources, has fewer database restrictions, works with all relational and tabular data sources, and is portable. If you need to port your model from one vendor to another, use Cognos SQL. It also allows IBM Cognos 8 to generate the most optimized SQL possible, for example by removing unused elements at query time. Native SQL Allows SQL that is specific to your database. Native SQL may not be portable, and cannot contain metadata from multiple data sources.

Creating packages: You create a package to make metadata available to your users. A package is a subset of a project. It must contain all the information that a specific user or group of users needs to create reports. You can also apply security to the package. For example, if your data source contains information from different areas of a business, you might decide to create different packages for Human Resources and Finance. Ensure that your package meets a broad but related reporting need. Each report can contain information from a single package only. After a package is published to the server, it is available to your users

DMR (Dimensionally Modeled Relational): DMR stands for Dimensionally Modeled Relational, a Cognos modeling technique allowing user to perform OLAP-style queries on relational data sources by specifying dimensions, hierarchies, and levels, as well as measures. All OLAP-style queries, roll-ups\drill-downs are then transformed into appropriate sql (group by's, aggregations) by the IBM Cognos query engine. DMR, is a new capability available in Cognos 8's BI technology. DMR processes relational data on the fly and presents it back to end users in a hierarchical view, allowing them to navigate from summary to more detailed levels of data in a visual format. DMR can be used in dashboards, standardized reports, ad hoc queries and for analytical purposes.

General Modeling Recommendations:

1. Define reporting requirements and data access strategies

Before beginning any modeling exercises, determine what the reporting requirements are. This will help you to find the correct data and define a data access strategy. Based on available data sources, data volumes, and environmental factors such as network speed, hardware processing power, and so on, an appropriate data access strategy should be planned and implemented to ensure acceptable response times to report requests.

2. Import only required reporting objects in a phased approach and alter as little as possible

Import only what is required for reporting and import it in manageable chunks. Alter the data source query subjects as little as possible. Leaving the data source query subjects as simple all-inclusive select statements reduces future maintenance. For example, when a table has a new column added to it, simply update the data source query subject that references it in Framework Manager and the new column will appear as a new query item.

3. Verify relationships and query item properties

Verify that the relationships created during an import reflect those in the data source and that the query item properties are set correctly.

For relationships, notice:

- cases where a dimension query subject relates to a fact query subject on different keys
- cases where there are multiple valid relationships between query subjects
- dimension query subjects that belong to multiple hierarchies

4. Model in freehand to identify query usage

Model in freehand to identify modeling challenges and how query subjects are used (which query subjects are treated as facts, dimensions, or both). Identifying these issues on paper can provide a clear modeling plan.

5. Use model query subjects to control query generation and usage and to consolidate metadata

Begin creating simplified, abstracted model query subjects to resolve modeling challenges by:

- creating aliases where required to control guery paths
- modeling as a virtual star schema to control SQL generation (what is a fact, what is a dimension)
- removing descriptive (dimensional) attributes from fact tables
- consolidating related information into one model query subject for a cleaner presentation (for example, placing all product related query items in one model query subject)

6. Customize metadata for run time

Customize metadata for runtime by using:

- parameter maps and session parameters to handle dynamic column or row retrieval
- prompt values and query macros to add mandatory user prompts and security filters

7. Specify determinants as required

Specify determinant information where required to enable accurate aggregation in cases where a level of granularity has repeating keys, your data contains BLOBs, or you wish to avoid the distinct clause on unique values when grouping or enhance performance for regular dimensions.

8. Resolve multiple ambiguous joins between query subjects

Resolve any relationship ambiguities, such as multiple joins between two query subjects, by deleting surplus joins and by creating role-playing dimensions.

9. Create analysis objects if OLAP-style querying is required

Create regular and measure dimensions if authors need to perform OLAP-style queries on relational data.

10. Create the business view as a set of star schema groupings

Use star schema groupings to build logical business groupings in the business view and to indicate conformed dimensions based on naming conventions.

Cognos Connection

IBM Cognos Connection is the portal to IBM Cognos 8 BI, the Web-based reporting solution. IBM Cognos Connection provides a single access point to all corporate data available in IBM Cognos 8 BI. You can use IBM Cognos Connection to work with entries such as reports, analyses, queries, agents, metrics, and packages. You can use IBM Cognos Connection to create shortcuts, URLs, and pages, and to organize entries. You can personalize IBM Cognos Connection for your own use. You can use IBM Cognos Connection to create and run reports and cubes and distribute reports. You can also use it to create and run agents and schedule entries.

Data Sources: A data source connection supplies the information that IBM Cognos 8 BI needs to connect to a database. Each data source can contain one or more physical connections to databases. The data source connection specifies the parameters needed to connect to the database, such as the location of the database and the timeout duration. A connection can include credential information and signons. You can secure data sources using IBM Cognos 8 BI authentication. IBM Cognos 8 BI authentication respects any security that is also defined within the data source. You can create data source signons to isolate the database logon process from the end users. The signon stores the user ID and password required to access the database. You can also deploy data sources.

Reports and Report Options: A report can refer to the specification that defines the information to include in a report, or the results themselves. For Report Studio and Query Studio. report specifications can have saved results or you can run a report to produce new results. For Analysis Studio, reports are always run against the latest data in the cube. After a report is published to the portal, you can view, run, or open it or view report output versions. You can also view the report in various formats. You can distribute reports by saving them, sending them by email, sending them to your mobile device, printing them, or bursting them. You can also set run options for the current run, and set advanced run options for the current run. You can create an ad hoc report using Query Studio or you can use Report Studio to define layouts, styles, and prompts for your report. You can also create Analysis Studio reports (analyses). You can schedule a report to run at a later time or on a recurring basis. You can schedule a report as part of a job or based on a trigger. You can view the run history for a report. You can also include a report in an agent. You can add yourself to the alert list for a report so that you are alerted when new versions of the report are created. You can also specify watch rules in saved HTML report output so that you are alerted whenever the events specified by the watch rules are satisfied. You can disable selection-based features, such as drilling up and down and drill-through.

Permissions\Security: In IBM Cognos 8 BI, you can secure your organization's data by setting access permissions for the entries. You specify which users and groups have access to a specific report or other content in IBM Cognos 8 BI. You also specify the actions they can perform on the content. When you set access permissions, you can reference both authentication provider users, groups, and roles and Cognos groups and roles. However, if you plan to deploy your application in the future, we recommend that you use only the Cognos groups and roles to set up access to entries in IBM Cognos 8 BI to simplify the process

Read Permissions: View all the properties of an entry, including the report specification, report output, and so on, which are properties of a report. Create a shortcut to an entry.

Write Permissions: Modify properties of an entry. Delete an entry. Create entries in a container, such as a package or a folder. Modify the report specification for reports created in Report Studio and Query Studio. Create new outputs for a report.

Execute Permissions: Process an entry. For entries such as reports, agents, and metrics, the user can run the entry. For data sources, connections, and signons, the entries can be used to retrieve data from a data provider. The user cannot read the database information directly. The report server can access the database information on behalf of the user to process a request. IBM Cognos 8 BI verifies whether users have execute permissions for an entry before they can use the entry. For credentials, users can permit someone else to use their credentials.

Set policy Permissions: Read and modify the security settings for an entry.

Traverse Permission: View the contents of a container entry, such as a package or a folder, and view general properties of the container itself without full access to the content. Note: Users can view the general properties of the entries for which they have any type of access. The general properties include name, description, creation date, and so on, which are common to all entries.

Analysis Studio

Analysis Studio is the component of IBM Cognos 8 BI that you can use for multidimensional analysis and exploration of large data sources. Use the interactive drag-and-drop environment in Analysis Studio to explore and analyze data to find answers to business questions.

Using Analysis Studio, you can

- find and focus on items that are important to your business
- understand trends and anomalies
- compare data, such as details to summaries, or actual results to budgeted results
- assess performance by focusing on the best or worst results
- establish relative importance using calculations such as growth or rank
- share your findings with others

Analysis Studio versus PowerPlay Web: Several features have not been brought forward to Analysis Studio. You can accomplish some of these tasks by opening the analysis in Report Studio, such as creating prompts from filters, specifying filters based on depth, and exception highlighting, which is called conditional formatting in Report Studio. 80/20 suppression has been replaced with Top or Bottom filtering in Analysis Studio. Some IBM Cognos Series 7 features that remain outstanding are forecast, accumulate, and cumulative percent of base.

PowerPlay Studio versus PowerPlay Web: IBM Cognos 8 BI PowerPlay Studio lets you view, explore, format, and distribute reports, just as you did with IBM Cognos Series 7 PowerPlay Web. You access PowerPlay Studio from IBM Cognos Connection, the IBM Cognos 8 BI portal. When you open PowerPlay Studio it replaces IBM Cognos Connection in your Web browser. You can not configure PowerPlay Studio to open in a new window. While the user experience should be very familiar to PowerPlay Web users, there are some differences in PowerPlay Studio, such as: IBM Cognos 8 BI User Interface, Supported Data Sources, Agents and Notifications, Drill Through, Error Handling, Cube File Name in the Report Title, View Reports in PDF Format, Encoding for Export to CSV Format, Rendering for Export to XLS Format, and File Naming for Export to XLS Format

Report Studio

Report Studio is a Web-based tool that professional report authors use to build sophisticated, multiple-page, multiple-query reports against multiple databases. With Report Studio, you can create any reports that your company requires, such as invoices, statements, and weekly sales and inventory reports.

IBM Cognos Configuration

Use IBM Cognos Configuration to a:) set the initial configuration of IBM Cognos components after you install them to b:) configure IBM Cognos components if you want to change a property value or you add components to your environment, and c:) to start or stop the service for an IBM Cognos component on the local computer. You can run IBM Cognos Configuration in either interactive or silent mode. In interactive mode, you use a graphical user interface to configure the IBM Cognos component. In silent mode, the tool runs in the background and requires no interaction from you as part of an unattended installation.

Startup Configuration File: The cogstartup.xml file contains the properties of the IBM Cognos components you installed on your computer. The property values you see in the Properties window are derived from this file. The cogstartup.xml file is intended for use with IBM Cognos Configuration only. We recommend that you do not edit this file manually unless required. For example, on UNIX, if your computer does not support the X window system, you must edit the cogstartup.xml file to configure IBM Cognos components. You use the cogstartup.xml file for unattended installations to configure installed components. You can combine the cogstartup.xml file with a transfer specification file (.ats) in a batch file or shell script. You can then run the batch file or script during an unattended installation. Depending on your IBM Cognos component, you may have to copy other files from the source computer to the computer where you plan to run an unattended installation. For more information about unattended installation, see the Installation and Configuration Guide. There are some configuration settings that are not saved in the cogstartup.xml file unless you use the graphical user interface. For example, the server time zone is not set for your IBM Cognos components when you modify the cogstartup.xml file directly and then run IBM Cognos Configuration in silent mode. In this case, other user settings that rely on the server time zone may not operate as expected.

Starting and Stopping the IBM Cognos 8 BI Service:

Starting Services: Before you can use your IBM Cognos component, you must start the IBM Cognos service on each computer where you installed IBM Cognos server or resource management components. In Windows, the IBM Cognos service starts automatically when you start your computer. In UNIX, the IBM Cognos process starts and restarts, but you must configure it to run as a daemon. Ensure that you first configure the database connection properties for the content store database. To start IBM Cognos services: From the Actions menu, click Start. If the IBM Cognos service is currently running, from the Actions menu, click Restart to apply changes to the configuration. It may take a few minutes for the IBM Cognos service to start. This action starts all installed services that are not running. If you clicked Restart, it starts all installed services that are not running and restarts all services that are running. If you want to start or restart a particular service, select the service node in the Explorer window and then click Start or Restart from the Actions menu.

Stopping Services: You must stop the IBM Cognos service that is running on the local computer before you a:) add a new component to the current installation b:) uninstall a component from the current installation or c:) change the value of a configuration setting

To stop IBM Cognos services: From the **Actions** menu, click **Stop**. It may take a few minutes for the service to stop. This action stops all installed services that are running. If you want to stop a particular service, select the service node in the **Explorer** window and then click **Stop** from the **Actions** menu.