DETERMINING QUERY AND ANALYSIS END-USER REQUIREMENTS WITH BUSINESSOBJECTS XI RELEASE 2

INTRODUCTION

BusinessObjects™ XI Release 2 represents an opportunity for you to evolve your overall approach to business intelligence (BI). With it, you can ensure that you are delivering trusted information to people in your organization—where and how they work. For the majority of long-time Business Objects customers—like you—this means examining how their organizations are currently using the BusinessObjects full client for enterprise and departmental query, reporting, and analysis. Thousands of organizations rely on this client—which can be implemented in both two- and three-tier mode deployments—to provide Windows-based users with self-service access to the information they need to make critical business decisions.

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With the launch of BusinessObjects XI Release 2, we have renamed the BusinessObjects full client to BusinessObjects Desktop Intelligence. Desktop Intelligence will be available and fully supported on the BusinessObjects XI platform, thereby protecting and enhancing your existing investments in documents, universes, and user security. With this new release, you will also have the opportunity to move your deployment—via automated migration utilities—to the BusinessObjects XI platform directly from either version 5 or 6. At the same time, with BusinessObjects XI Release 2, we have significantly enhanced the BusinessObjects Web Intelligence interactive viewing framework and query authoring capabilities—so you can move to a 100% thin-client query and analysis environment. As a result, organizations will have the option of continuing to use the full client, switching to Web Intelligence, or combining both products within deployment.

In this paper, we will help you understand what is being delivered with BusinessObjects XI Release 2, so you can ensure that the right users are working with the right tools in order to get maximum usage and benefit from business intelligence.
Query and analysis products from Business Objects allow end users to interact with information and answer ad hoc questions with minimal knowledge of the underlying data sources and structures. The query and analysis options available via BusinessObjects XI Release 2 will allow you to more effectively meet the growing BI demands of your organization. For both IT and end users, these demands are typically a result of:

- The obvious usability and cost benefits of deploying query and analysis capabilities via the web
- Demand for greater interactivity, analysis, and personalization capabilities
- A wider range of user types requiring access to these capabilities

WEB INTELLIGENCE XI

Web Intelligence is designed to help organizations increase trust in decision making by providing an intuitive, yet powerful, ad hoc query interface for business users and analysts, as well as interactive viewing and analysis for casual users. With BusinessObjects XI Release 2, Web Intelligence will introduce powerful new capabilities, making it easier for end users to access, analyze, and share information. These features include:

- The ability to access data from multiple universes and synchronize it within a single report (also known as synchronized multiple data providers)
- The ability to create custom queries including sub queries, combined queries, and edit SQL
- Support for the vast majority of the full-client formula language functions
- Report creation features such as data ranking and custom sorts

Many of these features will further support the conversion of full-client documents to the Web Intelligence format. Additionally, tools and documentation will be available to support the automatic conversion of full-client documents to Web Intelligence, and to diagnose any issues potentially preventing conversion.
In order to determine the usage of the full client (to be renamed Desktop Intelligence with BusinessObjects XI Release 2) and Web Intelligence within a single BI deployment, you should take a number of factors into consideration. For example:

• Is a current report actively consumed by end users?

• Does existing report design meet current data requirements?

• How many users are now required to access and analyze information and at what cost?

• Are the data source structures optimized to provide users with the performance and analysis they require?

• Would certain reports be more valuable and cost effective if users could interact and personalize them over the web?

• Do users require the ability to perform disconnected or offline analysis? If so, which ones (and why)?

• Are advanced authoring features required to deliver specific reports? If so, for which group of users (and why)?

Additionally, the business and end-user requirements for query, reporting, and analysis typically change over time and are often not the same today as when the BI system was initially designed. And if they are the same, will they be the same as BI usage grows in your organization? Clearly identifying user segments and their requirements will help you determine if your current approach is the right one longer term. When it comes to user segmentation within a typical BI deployment you should consider:

• The need for powerful query and analysis capabilities in a single tool (referred to as “power users”)

• The need to analyze and interact with reports others have created—often involving a complete revision of the underlying report structure (referred to as “business users”)

• Simple report modifications—formatting, sorting, filtering—for basic report interaction (referred to as “casual users”)
Overall, a fresh assessment of the organizational and user requirements will dramatically enhance the design of an updated BI solution using BusinessObjects XI Release 2. And with the demand for dashboards and scorecards as part of an overall performance management initiative, there are a number of considerations and factors to consider as BI becomes more strategic within your organization. The Business Objects Professional Services organization—a team with expertise and experience in designing and deploying end-to-end BI solutions—can help you manage the user segmentation process, as well as ensure you get the most out of your BI investment.
When reviewing your user segments and overall BI strategy, specific IT and business requirements emerge. In addition to the expected benefits of web-deployed applications (lower deployment costs, centralized security, familiarity of user interface, and reduced software maintenance), you should consider four major areas when determining end-user needs:

1) Interactivity
2) Trust in the information and analysis
3) Usability of advanced features
4) The range of user types needing support

1) Interactivity

Many organizations share BusinessObjects full-client documents via the web using InfoView, the business intelligence portal from Business Objects. When users want to analyze or interact with information in those reports, they must download a copy to a locally installed client. For power users, this enables offline or disconnected analysis. But for business or casual users, Web Intelligence provides interactivity and analysis within the same web-based report consumption environment.

Web Intelligence interactivity capabilities respond to the essential needs of business users. These include:

- Customizing the formatting—whether simply highlighting a column or directly moving tables and charts to different locations in the document—for improved on-screen readability or for printing

- Analyzing information by modifying the level of visible detail by using drill, slice, and dice directly on tables and charts within reports

- Changing content context by grouping table values into sections, swapping columns, and adding calculations at different levels
2) Trust in the Information and Analysis

BusinessObjects Desktop Intelligence will use all of the security and semantic layer capabilities of the BusinessObjects Enterprise XI platform. But as user populations increase and the demands of compliance initiatives continue, it is vital that users trust the information upon which they make decisions. Web Intelligence offers the ability to provide that trust to a mass audience through the unique Context Panel that outlines report metadata in a simple to understand way within its interactive viewing framework. This includes:

• Each data source used to construct the report

• A visual display of all document filters that are restricting the data displayed

• Definitions of the report’s objects (coming directly from the Universe)

• Definitions of the variables and formulas the document uses

• Data lineage information generated by the extraction, transformation, and load (ETL) process using BusinessObjects Data Integrator (original source of data, expression used to create the final data, technical descriptions automatically added to the universe)
These features also have the additional benefit of increasing the efficiency of report maintenance. At a glance, report authors, editors, or consumers can see the underlying metadata and data lineage to quickly understand the context of information and discern how the report was constructed. This ensures that as a requirements change, a report can be both quickly modified and distributed to end users so they can use it to drive their decision-making process.

The process of defining and modifying synchronized dimensions has been significantly streamlined with Web Intelligence XI Release 2.

3) Usability of Advanced Features

With Web Intelligence XI Release 2, a number of advanced features have been added to ensure more complex query and analysis capabilities can be delivered via the web. Examples of these include synchronized multiple data providers, alerts, and custom queries (the ability to edit SQL, sub queries, conditional queries). While all of these advanced features are already available to full-client users, deploying them to a wider audience requires close attention to usability (which in turn impacts the extent of user training required to get maximum value from a tool).

Therefore, during the development of these capabilities in Web Intelligence, we placed a great deal of focus on improving ease of use to ensure that non-power users can benefit from them. For example, in Web Intelligence, the process of defining and modifying synchronized dimensions has been significantly streamlined, allowing many more end users to benefit from this functionality without the need to track and understand higher level query functions. As a result, Web Intelligence is the preferred option where large, varied user populations require access to these functions and end-user training opportunities are limited.
The Web Intelligence XI interactivity viewing capabilities respond to the essential needs of business users.

4) The Range of User Types Needing Support

As the use of business intelligence has grown within organizations, there has been an increasing need to support a wider range of user types and requirements—typically without increase in training or deployment costs. Historically, the BusinessObjects full client effectively met the specific needs of power users and report authors and viewers. However, in situations where a more varied spectrum of users exists, including the need to lightly reformat, explore, or add calculations online—Web Intelligence is a better solution with BusinessObjects XI Release 2.

Administrators can define user access to different functional areas of Web Intelligence (e.g. access to the query panel) and individual functionality (e.g. access to formatting toolbar or formula creation). This fine-grained control of web-based functionality ensures that the wide variety of end-user requirements are supported.
As an example of the flexible deployment options available to administrators of Web Intelligence XI Release 2, specific features can be mapped to the user types described below:

<table>
<thead>
<tr>
<th>USER DESCRIPTION</th>
<th>TYPICAL FEATURES</th>
<th>WEB INTELLIGENCE BENEFITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power user requiring deep analytical capabilities and having understanding of data structure</td>
<td>Query and edit queries, all interactivity features on top of reports</td>
<td>Full flexibility during ad hoc report creation, analysis, and editing</td>
</tr>
<tr>
<td>Business user with some requirements to conduct ad hoc report modifications</td>
<td>Filter, sort, add new reports, create new tables and charts, create and modify variables</td>
<td>Flexible analysis capabilities, all available within the online report consumption environment</td>
</tr>
<tr>
<td>Casual user</td>
<td>Basic formatting features, view report metadata and object definitions</td>
<td>Basic report navigation and simple report formatting to ensure readability</td>
</tr>
</tbody>
</table>

You can break down this user list even further into more refined groups. Administrators can give specific users access to certain features based on their specific needs and capabilities. And additional features can be gradually rolled out as end users become more comfortable using Web Intelligence.
Once you have considered the information above and made the decision to introduce Web Intelligence to new users, or to use the automated conversion tool to convert some or all full-client users to it, you will need to review the specific capability differences between Desktop Intelligence and Web Intelligence with BusinessObjects XI Release 2. This review will directly impact the decision as to which existing reports will be converted or replicated in Web Intelligence. It will also help you determine which reports should remain as-is (for the time being at least). The functional gaps breakdown into the following areas:

1) Query capabilities

2) Report creation and formatting capabilities

1) Query Capabilities

In some organizations, specific users have created reports that are dependant on data from personal data sources and stored on a user’s local system (e.g. Microsoft Excel spreadsheets or text files). With BusinessObjects XI Release 2, Web Intelligence will not be able to access information from personal data providers. However, any data source upon which you can build a universe can also be integrated into Web Intelligence reports. As a result, you may wish to view this conversion process as an opportunity to review whether data accuracy and data compliance would be better served through the integration of personal data providers with standard corporate data stores. Other BusinessObjects full-client capabilities that will be available with Desktop Intelligence, but not available with Web Intelligence XI Release 2 include:

• XML or visual basic data providers.

• Specific power-user query capabilities designed for production reporting requirements.

• The creation of queries built on the results of other queries.

• Stored procedures (often used to group a set of SQL statements used in a query). (Note that many organizations are now using the derived tables inherent in modern database systems to meet the same needs more efficiently).

• Some specialized users of the BusinessObjects full-client generate queries using free-hand SQL. (Note that while this is not supported in Web Intelligence XI Release 2, it will be possible to edit existing SQL.) Many organizations are transferring the burden of custom SQL to the derived table method mentioned above. This ensures these specialized results are available for all users, and not confined to a single report.
2) Report Creation and Formatting Capabilities

While you can replicate the majority of documents built with the BusinessObjects full client in Web Intelligence XI Release 2, while benefiting from greatly improved report consumption and interactivity capabilities, specific report creation and formatting features will not be available with this release. This may impact how reports will look and function once converted. Some areas potentially affected include:

• The automated grouping of data in tables or charts into combined, custom values (e.g. creating a custom sales region from two existing regions within a sales report), using the “bull-dog clip” functionality. Note that the formula language allows you to create custom values, enabling this reporting requirement to be met by Web Intelligence XI Release 2.

• The ability to create fold/unfold formatting in a report and hide report elements (charts, tables, or cells) based on their values. Note that this is often used to produce summarized data views, allowing users to expand to hidden details within the report. Web Intelligence can support this workflow in a number of alternative ways: by using HTML links between reports or documents, by simply using the drill functionality available online, or by displaying summary and detail information within each section of a report.

• Standard report templates allowing users to quickly create reports that meet corporate style guidelines. Web Intelligence will support specific report format settings that can be controlled by administrators, along with the ability to customize chart and table color palettes. Additionally, it is possible to create a “standard” Web Intelligence report, purge any data, and then make this available as a template.

Finally, the ability to show or hide report elements (charts, tables, or cells) based on their values is not supported with Web Intelligence XI Release 2.
CONCLUSION

BusinessObjects XI Release 2 provides full support for the BusinessObjects full client and sophisticated tools to help you migrate to the new platform from previous releases. The newly renamed Desktop Intelligence will allow you to preserve your existing investment in documents, universes, and users, as well as give you the opportunity to gain even greater value from that investment using the BusinessObjects XI platform. As well, with BusinessObjects XI Release 2, the Web Intelligence enhancements offer the opportunity to convert full-client deployments to the web, thereby increasing the number and range of users who can access and analyze trusted information.

When making decisions about the make-up of your BI deployment with BusinessObjects XI Release 2, it is important to consider your user requirements and current usage of BI tools within your organization. You must look at the functional differences between Web Intelligence and Desktop Intelligence in order to meet the specialized needs of the different BI user types in your organization. At the same time, it is critical that you truly understand the needs of your user communities, take a hard look at how information is being delivered today, and ensure that you are considering your overall long-term strategic BI and performance management requirements.

To find out more about BusinessObjects XI Release 2 and the many training and services offerings available, please contact your Business Objects representative today.