Managing the Conversion from Desktop Intelligence to Web Intelligence

 Applies to:

BusinessObjects 5.x/6.x, SAP Business Objects XIR2 to XI 3.1
For more information, visit the Business Objects homepage.

Summary

This document describes the process of how a company can move from Desktop Intelligence (DeskI) to Web Intelligence (WebI). It presents information around the benefits from such a project and describes some new capabilities for reporting users. The paper describes the different steps in the project, based on experiences from several companies in different sectors, of different sizes, and in different countries. This document is complemented by a second paper, called “Convincing Reasons to Move to Web Intelligence”.

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Introduction

Most companies with investments in Desktop Intelligence have considered moving their content and users to Web Intelligence. While an increasing number of customers have succeeded in this effort, other companies are intimidated by the implied efforts involved. Other companies simply maintain status quo for fear of disrupting a BI deployment that has well-developed processes and an educated user base of both authors and consumers. As the saying goes, “If it isn’t broke, don’t fix it.”

This paper tries to remove some of the anxiety about planning and managing the conversion of Desktop Intelligence content and users to Web Intelligence. For IT administrators and BI project owners, this paper will provide some key background information around making sure the rationale for such a project can be clearly articulated to different stakeholders. For Desktop Intelligence users, this paper describes some of the opportunities that Web Intelligence offers in terms of capabilities. For all readers, we will try to reduce the anxiety involved with projects that move Desktop Intelligence to Web Intelligence.

In any case, this paper will not sugarcoat the efforts involved with this transition. The efforts involved with the transition should not be taken lightly, and in some cases Desktop Intelligence content authors and even consumers may need to change the ways they create, modify, and consume their BI content. This document argues that one key is that it is essential to look at the overall project, the big picture. Overall benefits do significantly outweigh the costs.

Preparation is a key element to success: the more detailed the upfront preparation, the smoother the transition and the quicker to realize a project’s ROI.

The advice in this paper is not written in a vacuum. As a consulting company, we were involved in such projects at many different levels – planning, stakeholder communications, identifications of workarounds and training – throughout Europe. The evolution towards Web Intelligence is not just a regional phenomenon. In fact, communications with colleagues and companies in North America indicate a similar pattern: companies and users in North America that undertake well-planned projects to move their content to Web Intelligence realize outcomes similar to their successful European counterparts who’ve undertaken similar efforts.

This whitepaper complements the whitepaper titled, “Convincing reasons to Move to Web Intelligence”. While there is some overlap, that paper focuses more on the actual feature-function aspect of converting content. This paper is designed to provide a bigger picture of the process itself.
Triggers

There are different reasons why companies decide to undertake projects to convert their Desktop Intelligence content to Web Intelligence. The benefits of these projects to move to Web Intelligence can be measured in several ways:

- Reduced total cost of ownership (license price, maintenance cost, …)
- Reduced deployment time, resulting in a shorter time to market
- Business user empowerment through the ease of use and the large feature set
- Support for a more cost-beneficial architecture than Desktop Intelligence.

Sometimes there are other triggers motivating companies to investigate the latest versions of SAP Business Objects and while investigating the product offer in XI releases they find out that Web Intelligence outperforms Desktop Intelligence. However, companies with investments in Desktop Intelligence often have specific triggers that get them to the stage of recognizing the overall advantage of Web Intelligence. These triggers include:

- **Maintenance**
  
  SAP Business Objects’ support for Desktop Intelligence have defined end dates. These dates can be found on the following SAP Business Objects website: http://service.sap.com/pam. A document named “SAP’s Release Strategy for the SAP BusinessObjects Portfolio” can be downloaded from http://service.sap.com/releasestrategy.

- **3rd party software**
  
  Previous releases of SAP Business Objects or Desktop Intelligence were developed to interoperate with third party software which is no longer supported or part of the company’s support policy. XI introduces better integration with, for instance, Microsoft Windows Vista, Internet Explorer 7, Oracle 10g, and Microsoft SQL Server. This was the case with a retail company in Belgium which migrated because their current SAP Business Objects environment in Version 6.5 did not support the new version of Informix IQ.

- **Outdated features**
  
  As certain Desktop Intelligence features have increasingly become dated, companies began to investigate Web Intelligence as a more modern alternative that takes advantage of new technologies. For example, Desktop Intelligence includes features such as exporting data to dBase, while Web Intelligence relies on a modern web-based architecture and increasingly embraces emerging technologies such as Web Services. Some examples of those features include:

  - A financial company, expanding the user base to subsidiaries in other countries and continents required more advanced and detailed security and scheduling capabilities. Their needs were covered by XI 3.0. While migrating to the XI platform, they discovered the added value of Web Intelligence.
  
    - In general, SAP Business Objects reports a 50% performance improvement for refreshed Web Intelligence content versus Desktop Intelligence. Other Web Intelligence capabilities address performance issues in other ways. With a growing user base, a growing number of applications, and increasing volumes of data, companies get confronted with performance problems. Often one report is refreshed several times – with different filters – for different users. The performance is improved with the usage of report bursting.

  - A manufacturing company charges IT costs to different business departments based on the usage of resources. With the auditing capabilities of the XI platform, they finally can monitor exactly who is using which resources; who is adding documents; which user refreshes data; etc. Departmental management is assured and they feel confident that the invoice that they receive really reflects their usage of the system. Once within the XI platform, they decided to benefit from the additional features offered by Web Intelligence.
- A company in the non-profit sector integrated SAP Business Objects in Sharepoint, opening the benefits of working with SAP Business Objects to a large group of new users.

- An international financial company reported that installation of Desktop Intelligence packs were unmanageable due to the different installations on user PCs throughout different European countries.

Once these triggers happen and deeper investigations into Web Intelligence’s capabilities are launched, companies soon expand beyond a simple feature-function comparison between the two tools. One of the top three banks in Belgium decided to implement Vista as operating system from 2009/Q4 onwards. Since Business Objects Version 6.5 is not Vista compliant, they had to migrate to an XI release and found that there are clear benefits to switch from Desktop Intelligence to Web Intelligence:

- The company has a lot of Desktop Intelligence users with a viewer profile. The functional enrichment of BO XI 3.0 (BI-Portal, Interactive Viewing, Live Office, Scheduling, Publishing, Report Bursting) allows these Desktop Intelligence users to become BI-Portal users. The company estimated that they can reduce the number of fat-client installations to an absolute minimum. (Currently > 1200)

- Through the thin-client concept (publishing reports through the portal) they improve the time-to-market for new projects.

- They estimate that they can remove four Unix servers, reducing their deployment costs significantly.
ROI and Benefits

In most companies it is complex to get financial figures about return on investment. There are usually a combination of numerous benefits and trade-offs that are sometimes difficult to measure. Additionally, BI content and projects change in scope and size based on business cycle, information requirements, licensing and maintenance changes, acquisitions, and costs of hardware providers and other 3rd party BI “enablers”. However, it is a worthy exercise to begin to identify the true benefits and costs. This can only help in selling the project internally.

Costs and benefits to consider:

- **Ease-of-deployment**

  The ease of web deployment can provide the benefits of fact-based decision making to a much larger audience. Web-based deployment is well known to cost less to roll-out, maintain, and upgrade than windows applications. A rule of thumb is that client upgrades can average between $800 - $1000 per seat. It should be noted that, when end-user requirements will lead to deployment of Web Intelligence Rich Client on desktops, the web-based deployment changes slightly. However, the auto-update mechanism should effectively manage these costs.

- **Interactive web-based content**

  Web Intelligence content can be modified over the web through dHTML or Java. This introduces huge cost savings by reducing the report modification backlog and enables power user authors to focus on more value added tasks than simply adding or removing filters to report content or changing a sort. Besides the power user benefits, consideration should be given to the overall organizational benefits to be realized by providing more users access to interactive BI content for their decision-making.

- **Content authoring**

  Often, the power users relying on Desktop Intelligence surface the costs they incur – productivity changes, cost of recreating reports, learning curve, etc. These costs are sometimes real, sometimes perceived, and sometimes temporary costs that pay for themselves later. Nonetheless, they should be identified.

- **Content maintenance**

  We’ve heard from countless companies that their Desktop Intelligence reports remain in service because the original author left the organization and no one is sure how to edit or revise the document for fear of “breaking” something. Many Desktop Intelligence documents are needlessly complex for reasons that are covered throughout this document. Many other workflows for assessing content in Desktop Intelligence are comparatively inefficient (e.g. viewing a document’s synchronization plan). All things being equal in terms of training, we’ve seen that Web Intelligence is superior in terms of supporting maintenance of complex documents.

- **Platform capabilities**

  In many cases, new capabilities in the XI 3.x platform are often better supported within Web Intelligence.

- **Integration with other clients**

  Web Intelligence enables interoperability with other clients in BOE:
  - Explorer content can be transformed into Web Intelligence content.
  - Web Intelligence content can be used as data source for Xcelsius models, either through Live Office or through the web service feature (BI Service) in Web Intelligence.
  - The web service feature (BI Service) also enables many third party web services clients to consume Web Intelligence content. The documentation for BI Service is embedded inside Web Intelligence Rich Client help files (Help → Web Intelligence Help) under the section “Sharing Web Intelligence content with other Web applications.”
- Live Office enables Office users to browse for Web Intelligence report parts to consume and refresh directly in PowerPoint and Excel.
- Web Intelligence content can be pushed out as content in SAP’s Mobile solutions.
- Web Intelligence content can be displayed as desktop widgets in BI Widgets.

Below are some benefits that companies we’ve recently worked with have realized:

- A company in the finance sector with over 1000 active users reported that the conversion to Web Intelligence allowed them to cut back four Unix servers. They estimated an annual saving of €80000. The conversion to Web Intelligence eliminates a lot of work to keep local PCs updated with the correct service packs and software releases. A company estimated the cost at $800 - $1000 per PC per upgrade.
- Several companies reported that through the introduction of the XI platform they finally have three different environments: development – test / integration – production. They indicate that they only had a ‘fake’ set up for three different platforms in Version 6. With XI they finally were able to implement lifecycle management.
- Through XI and Web Intelligence, a bank managed to integrate the BI architecture with so called ‘normal’ projects. Users work with applications using parameters. After providing values for these parameters, a Web Intelligence report is scheduled. The users even do not know that they are using SAP Business Objects.

Several companies across different sectors have benefited from the auditing capabilities in the XI platform. Through the audit capabilities they are able to get valuable information such as:

- Complete information about the number of reports in the Central Management Server. This enables better maintenance, tuning, and scaling of their servers.
- Identification of users who refresh data, create reports, etc. This gives them better insight into the key metrics and content business users need, which helps them better protect those resources during peak periods.

In general, auditing information provides knowledge that can be used for:

- Accurate internal accounting to business departments. The cost of SAP Business Objects is charged to the users, weighing in their usage, the number of reports in the Central Management Server etc. Finally they have a correct accounting system.
- Capacity planning: the evolution of the number of reports, the number of instances, the number of users.
- Planning of effort for future migrations.
- Change management.

A financial company stated that with XI they have better control over users and reports. Within Version 5, the users had NT authentication with access to the data; in XI the users need access to the connection, but no longer require direct access to the underlying data. By converting to Web Intelligence users have to save all content in the Central Management Server and do not have any local files any more. (Except for the Web Intelligence Rich Client users).
A bank with users in different countries, and very strict security requirements, said that they were very pleased with the SDK. They created several additional applications based on XML files. These applications allow them to:

- Get a full view of the users, folders, authorizations etc.
- Use batch processes to add new users and folders to the Central Management Server.
- Create a daily incremental back-up and a weekly full back-up.

The project manager of a company in the area of processed foods reported: “We now have online deployment only, no desktop installations. We reached a lower TCO, with fewer support calls due to installation conflicts. Support costs have been cut in half. We are going to deploy Mobile for Blackberry and iPhone.”
Preparation

Most Desktop Intelligence to Web Intelligence projects involve an upgrade – often to the latest or near latest release so that companies can take advantage of more recent additions to the Web Intelligence value proposition. The migration to the XI platform is not an isolated project limited to the IT department and limited to redefining the BI server architecture and deciding on dates to go live. Like any successful IT project, converting to Web Intelligence will not succeed without involving users. Both authors and consumers should be involved throughout the complete migration and conversion process. The manager responsible for BI at a large car manufacturing company said: “A good communication creates a lot of goodwill. Users must understand why IT wants to upgrade”.

Change always generates obstruction. Users resist moving away from what they are familiar with and have been using for a long time. They will have specific objections to migration, upgrade and conversion, but these objections often hide the real reason: change is threatening.

There are two ways to combat this resistance. First, don’t simply focus energy on management and the business case. It is important to create awareness on all levels within the company and with all stakeholders involved. They should know what’s coming, what the rationales are, what the stages are, what is expected of them, etc. Second, we’ve seen that success can be greatly enhanced when end-users – authors and business users/consumers - become inquisitive. Create curiosity by investing in POCs, demos, sample reports, and presentations of new features and capabilities.

The preparation can be viewed as a three-phase process:

1. The first phase, before everything else, is to identify where a company is today with its Desktop Intelligence deployment by getting a deep understanding of the experience levels of the Desktop Intelligence user base, their key pain points, and what they like about it. This investigation can take the form of surveys, report audits, and interviews, but also can involve direct observation. (Appendix 1 provides a list of the most typical questions to ask users and to find out about each Desktop Intelligence deployment. This assessment will help identify potential blockages – real and perceived – and to develop a more focused phase two.)

2. In phase two, the people responsible for the migration and conversion develop a deep familiarity with the new release, Web Intelligence, and all of the platform-related services intertwined with using Web Intelligence. This knowledge will ensure that communications will be able to handle the exceptions and resistance that was identified in phase one. Additionally, it will help to shape the plans and communications around the opportunities that moving to Web Intelligence offers.

3. Finally, in phase three, there is a selling process to both internal users and to management in order to communicate the plans, the value propositions, and to describe what to expect and how to get help, etc. One of the most important things to communicate is that, in terms of functionality comparisons between Desktop Intelligence and Web Intelligence, the similarities far outnumber the deltas, and Web Intelligence-specific capabilities provide new opportunities. Experienced Desktop Intelligence users will focus on “what’s missing” rather than seeing the overall picture. Ensure that they see the big picture and understand the benefits of Web Intelligence.
Several channels exist to build insight and information about new releases and Web Intelligence’s functionality:

- **Presentations inside the company**
  
  One financial company organizes a presentation by SAP Business Objects for every new major release. Another company we’ve worked with organizes frequent info sessions for their support group: a senior external trainer/consultant hosts one-day sessions on security, new features, and tips and tricks. These sessions are most beneficial when they are not sales communications but include a high degree of technical detail. Talk to your SAP Business Objects sales representative about function and feature demos, case studies, customer references, etc. In some cases, you can even receive communications directly from SAP Business Objects representatives – sales consultants, marketing, solution management or even SAP’s product group at user group conferences.

- **Local user groups**
  
  User groups exist in most countries. The user group for Belgium and Luxembourg, for instance, organizes six events every year for the members, with educational sessions and user experience discussions. Attendees get a lot of insight by meeting and talking with colleagues from other companies. Companies can benefit from the lessons learned by others who have similarly sized Desktop Intelligence investments.

- **Global user groups**
  
  At GBN, for instance, SAP Business Objects presents the latest evolution in the software and shows previews of future releases. Users also present their experiences in several technical and business areas. (Note: GBN merged with ASUG).

- **On-line information**
  
  Documents describing the new features of a new release or service pack are helpful. On http://help.sap.com/businessobject/product_guides/boexir31SP2/en/xi31_sp2_whats_new_en.pdf for example, the new features of service pack 2 are described in detail.

- **Training**
  
  While Desktop Intelligence users will generally be able to pick up Web Intelligence without much of a challenge, if they are left to learn on their own they tend to explore in a very narrow sense, focusing only on Desktop Intelligence workflows they don’t see in Web Intelligence. Training will provide the big picture.

Once the project team and the BI support group are familiar with the new tool, they need to create stakeholder awareness. Management is most interested in ROI and TCO arguments. Communicate to them that by transitioning to Web Intelligence, the BI deployment will benefit from reduced deployment and maintenance costs.

Additionally, companies may consider another major benefit: With Web Intelligence more ad-hoc users will have BI capabilities at their disposal, enabling greater control over their use of BI content and decision-making. Desktop Intelligence deployments tend to involve a few users creating content consumed by masses of end-users. These end-users have little opportunity to interact with the content they receive. With Web Intelligence, consumers can finally interact with the content, making it relevant for their particular business contexts.

Organize internal presentations, track attendance and create incentives for the key stakeholders to attend. For all different users, explain the conversion, upgrade and migration plan, show them the ease of use, demo the extended functionality, and explain how things will change for them.
Communication is a key element for change, especially when it is clear that users are being heard. In one manufacturing company with over 4000 SAP Business Objects users, end-user issues and questions regarding the migration and conversion are logged into a database. A set of interactive Web Intelligence reports was created and published in the Central Management Server in a folder accessible to all. Any user can check the status of his/her issue. This company even goes further: Their internal Business Objects support team also publishes sample reports in this general folder. These reports illustrate new or enhanced features of any new release or service pack.
Moving from Desktop Intelligence to Web Intelligence

Defining your Desktop Intelligence Strategy

Every company must define their future strategy for Desktop Intelligence. Most companies are convinced that they have to switch to Web Intelligence. SAP Business Objects guarantees to support Desktop Intelligence at least until 2017.

An example of one company's strategy:

- Desktop Intelligence would no longer be available on end-users' PCs. This change obviously had to be carefully communicated and done in conjunction with Web Intelligence training, plans for migrating personal documents (or not), and careful timing. Desktop Intelligence users need to be aware of the business rationale for the decision. In one French publishing company, an end-user who hadn't yet been given Web Intelligence access lamented, "When they took Desktop Intelligence away, I lost my power to define my customer prioritization." Here is an example of how critical the communications aspect of the conversion strategy must be. If this user, who was not doing anything sophisticated, had been given access to and training on comparable content over the web, he might have understood not only the overall benefits, but also the opportunity that web-based interactivity on standard customer reports can provide.

- Going forward, the BO support team members would be the only users with a Desktop Intelligence installation. As described above, this sort of change should be communicated carefully to previous users. The BO support team should be viewed as enablers, not as usurpers of power.

- A limited set of existing Desktop Intelligence reports would continue to be refreshed and would be accessible to users through InfoView. When these reports required modifications, these changes would be developed by the BO support team. Users could not edit Desktop Intelligence reports. This forces the identification of possible areas for Desktop Intelligence content rationalization and provides a clearer map for conversion.

- No personal data providers would be allowed. While Web Intelligence Rich Client does support the use of ".xls", ".csv" or ".txt" files as data sources, as does Desktop Intelligence, the company decided that one-version of the truth was more important than the end-user flexibility and the corresponding opportunity for end-user error. Other companies however might swap at least certain users' Desktop Intelligence clients for Web Intelligence Rich Client to continue to provide self-service.

Moving from Desktop Intelligence to Web Intelligence involves migration at different levels. First, companies need to migrate their Desktop Intelligence content to the targeted release. Only then can companies consider the project of converting their Desktop Intelligence content to Web Intelligence. Migration is defined as the process of importing all existing objects (reports, universes, system-objects) from a previous release in the XI release, without making modifications. Modifications might still be required in the case of compatibility issues, however, such as layout, data formatting, etc.

Within the complete process of moving content from Desktop Intelligence to Web Intelligence we distinguish between:

- **Migration**: Bringing content from classic Business Objects (5x/6x) to the XI platform.
- **Conversion**: Moving Desktop Intelligence content to Web Intelligence.
- **Upgrade**: Moving from one version of XI to another (higher version, new service pack).
- **Promotion**: Moving from one deployment to another (development to test or test to production).

Moving users and content to Web Intelligence on the XI platform is a project. Improvements and evolutions in the Business Objects environment mean the architecture has changed significantly. Migration must be
planned. The more effort and care spent in planning, the lower the risk and the greater the likelihood of a quick realization of the overall project’s ROI benefits.

Most companies distinguish between migration and conversion. They separate the migration to the XI platform from the conversion from Desktop Intelligence to Web Intelligence. In several cases the IT department or the BI team executes the migration to the XI platform and the business users are responsible for the conversion to Web Intelligence. They get support from the BI team or from external consultants for the conversion. In an international financial company, the conversion of (almost all) Desktop Intelligence documents to Web Intelligence was finished in 3 months. The users were coached by a senior external consultant.

**When to Start the Project**

Companies that have significant investments in Desktop Intelligence have a critical choice to make. Should you migrate as soon as possible or should you wait for a new release or a new service pack of the software? Some companies are early adopters. They immediately start testing any new release. Other companies delay the migration and conversion so they can benefit from the lessons learned by other companies, improvements, and brand new functionality.

The major advantage of an early migration and conversion is:

- Over time, companies invariably deepen their investment in a client – in terms of author experience and expectations, the consumer’s reliance on specific content, and the content itself. Naturally, the earlier a company migrates, the less intense the investment in Desktop Intelligence. The more users and content involved in Desktop Intelligence, the more complex and resource intensive the migration.

A delayed migration and conversion can also bring advantages, including:

- More features are added to the software. By waiting, companies can take advantage of a higher conversion rate if there are critical features required for conversion that are not yet included in Web Intelligence. This decision should be taken carefully.
- Features in later releases tend to have fewer bugs.
- Tools that are critical for the migration process, such as the Report Conversion Tool, are more mature.
**Project Team**

The project team requires members from both the IT and from the business department. In some cases the team must include people spread across geographies even if the tendency is to keep the team small and local. One bank we worked with, which was spread across Europe and Asia, insisted that this was at the root of their successful migration and movement to Web Intelligence. This bank organized the following roles:

<table>
<thead>
<tr>
<th>Role</th>
<th>Team</th>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Leader</td>
<td>BI Team</td>
<td>Project management</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Preparation phase</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Functional iterations: as-is situation, to-be situation</td>
</tr>
<tr>
<td>System Engineer</td>
<td>BI Team</td>
<td>Technical Support</td>
</tr>
<tr>
<td>Technical Engineer</td>
<td>BI Team</td>
<td>Technical iteration</td>
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<tr>
<td></td>
<td></td>
<td>Support</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Life Cycle Management</td>
</tr>
<tr>
<td>Technical Engineers</td>
<td>IT Team</td>
<td>Technical upgrade infrastructure</td>
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<tr>
<td></td>
<td></td>
<td>Installation software</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Install VMWARE</td>
</tr>
<tr>
<td>Key Users Business</td>
<td>Business</td>
<td>Contact with business users</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Conversion to Web Intelligence</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Content and layout validation</td>
</tr>
<tr>
<td>Trainer</td>
<td>External</td>
<td>Training</td>
</tr>
</tbody>
</table>

The project team involved members of the BI team throughout the complete migration and conversion project. The people from IT were solicited for cooperation on an ad hoc basis. It is important to note that the team also included key users representing each of the business departments that were migrated.

Migration or conversion requires planning for testing. This could be one of the most critical aspects of the conversion process. If the work for scoping the tests is not well defined, it is almost certainly a recipe for project failure and will delay the ROI. Two types of tests must be done:

- **Content tests:** The data in the reports, tables and graphs must be compared to the content of the source report and should reflect the same numbers.
- **Layout tests:** Verify that the formatting is the same as before.

You need business users for acceptance tests.
Planning

It might seem obvious, but it is essential to create a Migration Roadmap with milestones and deadlines:

- Migrate by department, by project, or by application.
- Build the conversion timeline and plan resources.
- Decide how long to run two versions in parallel. This impacts the cost for hardware, software licenses, and support resources.
- Decide when to stop the old version.

During the migration process a ‘frozen period’ should be considered. During this period, no changes are allowed on existing Desktop Intelligence reports.

Decide about new projects and new reports. Most companies prohibit new developments using Desktop Intelligence. This is obvious for a migration, but is also important for a conversion from Desktop Intelligence to Web Intelligence.

Because Web Intelligence is a new tool and there is an extra learning curve to get familiar with the new version, which invariably affects the time to migrate / convert. Even though most features and workflows are either identical or improved in Web Intelligence, Desktop Intelligence users will still be slowed down by their real and perceived “deltas”.
Scope

The total effort for the migration and conversion is related to the number of objects in scope. Furthermore, for the move to Web Intelligence, existing Desktop Intelligence documents must be migrated to the XI platform and then converted to Web Intelligence. The project team has to define the scope of the migration and conversion process. They need to decide upon:

- Migrating only objects in the repository, or including Desktop Intelligence content stored on user disks.
- Including personal objects (universes, reports) in the scope or not.
- Migrating Inbox documents or not.
- Restricting the migration to specific object types, or migrating all types. For instance, a company with over 1000 active users decided to migrate only Web Intelligence and Desktop Intelligence documents. They decided to exclude Crystal Reports.

When the set of reports to migrate / convert is reduced:

- The migration and conversion cost is also reduced.
- The transition period is shortened; hence the time to run, maintain and support two parallel systems is shortened.

Several companies we’ve worked with decided to limit the scope of the migration to documents published in the repository. This strategy allows complete visibility of all the Desktop Intelligence report objects that will be migrated, and also enables defining a realistic plan. Usually it is incredibly difficult to accurately estimate the number of personal reports that are saved on local or shared disks and not published to the repository. The migration team of a company in the financial sector was planning the migration of a specific department and built their plan based on the 160 production reports in the repository. When migrating, they found an additional 1000 local reports. These local or personal reports can dramatically increase the scope of the project. IT might decide to either remove the local content from the migration process or require the end-users to convert the content themselves for continued use from their local machine (using Web Intelligence Rich Client).

Decide whether you migrate / convert all reports or not. Some companies first analyze the existing reports and assign a status to them:

- **Delete**
  The report is not used anymore, or the information in the report is also provided in another report; hence the report must not be migrated. One Telco company would cull the content in their repository on a periodic basis by sending an email to the author stating the document was no longer used and would be deleted unless she formally requested to maintain it. This might have been ruthless, but it did help keep redundant, superfluous, or dated content to a minimum. Migration of content to new releases and ultimately converting to Web Intelligence became much more manageable.

- **Migrate and Convert**
  The report is added to the scope of the migration process. In a way, this creates a level of commitment to that content that should not be taken lightly. It means that this content provides unique value to clearly identified business processes and users. The uniqueness is important. If there are other reports that contain similar content, project managers and businesses have an opportunity to rationalize the creation and maintenance capabilities.

- **Rebuild**
  The report will be rebuilt in Web Intelligence in XI. Typically in any production environment there are too many reports with overlapping functionality. This is the normal situation in an evolving BI environment. Users have almost the same requirements or slightly changed requests, and often a new report or report tab is added. In other cases, users require a similar report on another subset of the data. The migration /
conversion project is a good moment to review several reports and reduce the number of reports to keep in the production environment. Project owners have an opportunity to take advantage of Profiles, Publications, and Report Bursting in XI to enable a single pass through the data, generating reports on a customized subset for each individual user, resulting in less workload on the server.

Another opportunity to reduce the maintenance overhead relates to the report modification backlog. Many Desktop Intelligence deployments rely on a few power users to create content by the masses. The consumers however often request small changes to provide a slightly different way to look at report content. Instead of building reports that require the power users as sole owners of content modifications, Web Intelligence enables a full range of interactivity for consumers – ranging from simple calculations and formatting toolbars to viewing metadata, to filtering and sorting, to adding new data sources or complex calculations. Most consumers don’t need or aren’t trained to use the full range of interactive features. For them, IT can restrict end-users to a very granular level of interactivity, for example, only filtering and formatting of cells, rows, and columns.

Rebuilding the document in Web Intelligence can reduce the complexity of the report. Many Desktop Intelligence reports required complex workarounds to build a specific functionality, whereas the same functionality is offered in Web Intelligence as a standard feature.

This interactivity provides an opportunity for authors to build reports with the interactive consumers in mind. One North American IT manager we spoke to exposed a limited set of interactivity to a large percentage of his end-user community. “Our reports are much simpler to maintain,” he said, “We’ve gone from reports with 12 tabs to reports with 2 or 3”.

When upgrading from one XI release to another XI release, you can review the object instances and reduce the number of instances that you want to keep in the new environment.
Migration

The XI platform offers a complete new architecture compared to the classic BusinessObjects version 5 and 6. When migrating to the XI platforms sufficient time must be planned to implement the new security and scheduling environment.

Security Architecture

Just as with planning the testing of migrated and converted content, security is also a critical area that should be planned accordingly. This is especially true when migrating from a non-XI environment to XI. In previous versions, the security through the repository was quite limited. Companies had to build workarounds to ensure that content was sufficiently protected from unauthorized use. One company we’ve worked with had in version 6.1 around 100 universe domains and 100 document domains in the repository, only for security reasons.

Be aware that the XI security represents significant change from previous releases. The core elements of the new security concepts include:

- Folders, subfolders and objects.
- Groups and users.
- Authorizations to groups and users on folders and folder content.

Spend enough time to define and review your security definitions. It can be advisable to get external help from somebody with deep experience with defining and rolling out the security model at other companies.

Notice also that security also evolved between XI R2 and XI 3.0 and XI3.1. From release XI 3.0 onwards the security can be set up with much greater granularity than before.

Make a detailed security plan before implementing it in the Central Management Server. To simplify the management of your security implementation, most of the migrating customers we’ve interviewed and consulted with define authorizations at the Folder level and the Group level. Only specify exceptional authorizations on Object level or on User level.

Companies also need to define how users identify themselves in SAP Business Objects XI. The easiest method is to implement user verification is using the Enterprise authentication. In this case you use the security from within the Central Management Server. To simplify the user identification, to integrate with your existing security systems, or to evolve to “single sign on”, you might decide to do user / password verification through LDAP, Windows NT authentication or Windows Active Directory. Notice that you can change authentication afterwards quite easily.

Define the company policy and strategy about security. Designers can add authorizations on universe level: they can authorize groups or users to specific objects or to specific rows by specifying filters. This allows security specifications on the universe level. The drawback is that the security is spread out. Part of the security is centralized in the Central Management Server and part of the security is within the universes. This results in a more complex management of the full security.
Revise Scheduling

Before the XI platform, batch processing was created with Broadcast Agent (BCA). This is completely replaced by scheduling as a platform service. Some companies used VBA to build scripts for scheduling and distribution. These scripts can also be replaced by the XI Scheduling capabilities. Scheduling is completely integrated in the Central Management Server and offers the following features:

- Scheduling can be based on business calendars with recurring dates.
- Event scheduling: A task can start upon arrival of a file, or a task can start based on an event, generated at successful or failed execution of another report. So a scheduled report can create events or act on events.
- Scheduling generates instances of an object or report, offering the possibility to review or analyze historical versions.
- Report bursting with profiles and publications: Multiple instances of the same document, with different filters, are built through one single run of the query, reducing the resource requirements on the server. The result is personalized and distributed to the subscribers.
Conversion

Conversion is defined as changing a report from Desktop Intelligence format into Web Intelligence format.

Scope

As for the migration, you need to decide again which objects are in the scope for the conversion to Web Intelligence. This decision can be based on the answer on the following questions:

- Can a given report be converted to Web Intelligence? Does the Desktop Intelligence report use features that are not (yet) available in Web Intelligence?
- Are any further modifications required to complete the conversion of documents that were only partially converted?
- Is the complete conversion possible without any further manipulation?
- In any case should we rebuild certain reports to make other Web Intelligence capabilities such as data tracking or the general interactivity available for consumers?

To assist in defining the scope you might run a test conversion through the Report Conversion Tool and analyze the log file. To get a complete list with the latest, up-to-date information about (non-)available features in Desktop Intelligence or Web Intelligence, review the document “Web Intelligence to Desktop Intelligence feature comparison”.

Web Intelligence can match the vast majority of Desktop Intelligence features and workflows. It does not, however, cover 100% of the Desktop Intelligence feature set. For reports with features that do not (yet) exist in Web Intelligence and that block the Desktop Intelligence content from conversion or would require significant rework for a partial conversion to be redone, companies must decide between:

- Rebuilding the report in Web Intelligence with workarounds or different functionality.
- Keeping the Desktop Intelligence document as-is and allowing a limited number of users to work with Desktop Intelligence.
- Keeping the Desktop Intelligence document as-is, allowing access through InfoView, and restricting editing to the BI support team.

Note that these last two are most often temporary measures to buy time until the Desktop Intelligence document’s content can be recreated in Web Intelligence with acceptable workarounds, until moving to a version where Web Intelligence does have the needed feature, or until the corresponding capability is released in a future version of Web Intelligence. If you decide to maintain Desktop Intelligence content in one form or another, it should be a clear business decision and not based on maintaining the status quo and fear of the unknown. The challenge is that business users will pressure the conversion process to maintain any complex documents. It is generally worth it from an overall TCO and a time to ROI perspective to make the hard decisions and efforts early and not to allow them to be dragged out over many months or even years. That being said, it is true that sometimes time, resource availability, and even features will force the maintenance of Desktop Intelligence deployments.

Converting Desktop Intelligence reports to Web Intelligence using the Report Conversion Tool is the obvious, most efficient, path. Some companies use the conversion as an opportunity to review the reports.
One company from the health care sector converted documents after migrating to XI R2. Compared to XI 3.1, the Report Conversion Tool was less mature, resulting in more issues and in more features that could not be converted because they were not yet available in Web Intelligence. They decided to review all core reports and rebuild them, exploiting Web Intelligence’s new, broader feature set. They saw that Desktop Intelligence often required workarounds to build the result that users require. Ironically, these workarounds had been used for so long that the users internalized them and began to interpret the workaround as critical functionality. This results in complex reports that are difficult to maintain, especially when maintenance must to be done by someone other than the initial developer. In many cases these complex workarounds can be replaced by standard features in Web Intelligence.

Some examples illustrate how complex Desktop Intelligence Reports are turned into simple reports in Web Intelligence

**Example 1**

Building a ranking in Desktop Intelligence, showing all records that add up to 75% of the total revenue, requires a complex workaround with the creation of several local variables, additional sorting, and special ranking. Within Web Intelligence, the Rank window contains an option to build this request, no additional variables, or complex calculations are required. So the migration of a Desktop Intelligence report could be done as is (with the complex processing) or the Web Intelligence document could be re-created using the new features. Re-creating the report has a positive impact on the performance of the report refresh, but more importantly, the maintenance of the document is simplified.

![Ranking - Cumulative Percentage](image-url)
Example 2
Consider another report in Desktop Intelligence that requires an alerter, based on two measures: “show the value of company on a red background if the revenue < 2500 and the expenses > 500”. To build this alerter:

- Define a local variable to test on the combination of the two measures, since alerter conditions in Desktop Intelligence do not accept multiple measures:
  \[ <YN> = (<Revenue> < 2500) \text{ and } (<Expenses> > 500) \]

- Add an alerter on <Company>, with the condition:
  \[ <YN> = 1 \]

One alerter is no trouble, but many Desktop Intelligence reports they managed had significant numbers of similar alerters requiring variables. Besides the additional maintenance challenges, these extra variables also put pressure on performance. Within Web Intelligence, however, an alerter can contain conditions on multiple objects, so no additional local variable is required. The definition takes place in seconds and within the same “alerter” window.

Example 3
Many Desktop Intelligence deployments rely on VBA macros for scripting and report distribution. In the vast majority of cases we’ve seen, these macros can be removed and replaced by the standard features of scheduling. Again, this removes complexity from the BI content.

Example 4
New features such as Input Controls introduced with XI 3.1 SP2, enable authors to quickly define simple controls for filtering content. These controls are then available even for consumers in InfoView (i.e. No editing client needed). In Desktop Intelligence, authors sometimes create multiple reports to mimic similar functionality. While Web Intelligence consumption enables users to drive their “personalized” content views, several Desktop Intelligence documents might do so in a static way. Converting to Web Intelligence often allows replacing multiple documents by one single Web Intelligence document. This also reduces the migration cost and the number of reports in the Central Management Server.

These examples provide just a subset of specific functionality where Web Intelligence provides opportunities to improve the creation, maintenance, or consumption of BI content. Each Desktop Intelligence deployment will have its own opportunities.

Conversion Owner
The conversion to Web Intelligence is part of the complete migration and conversion process. Usually the project team has members from IT and from business departments. In most cases, IT is responsible for the migration part and the business users are owners of the conversion to Web Intelligence.

Two banking companies reported that the conversion is the responsibility of the users. In one of them, the BI support team coaches the users in the conversion process. In the other company, an external senior consultant was hired to help the users.
**Report Conversion Tool**

The Report Conversion Tool converts Desktop Intelligence XI reports to Web Intelligence XI reports and publishes the converted reports to the Central Management Server.

The Report Conversion Tool does not convert all Desktop Intelligence features and reports. The level of conversion depends on the features that are used in the original report. Desktop Intelligence features that are not (yet) available in Web Intelligence are of course not converted. The Report Conversion Tool is so powerful that it can modify, re-implement, or remove Desktop Intelligence features that are not supported in Web Intelligence.

The Report Conversion Tool assigns a status to each report. Values are:
- Fully Converted
- Partially Converted
- Not Converted

**Example**

Consider a folder with four Desktop Intelligence Documents in Web Intelligence XI 3.1:
- “Brochure Analysis” and “Tourists to Egypt” only contain features that are available in Web Intelligence.
- “Revenue Analysis per Country” contains the following conversion issues:
  - The result of a CountAll function on the object <Country> is presented in the footer of a table. This function is not implemented in Web Intelligence XI 3.1.
  - A table contains two measures. A filter is defined on this table based on the division of the two measures. Web Intelligence does not allow building such filters.
- “Youngest Tourist” contains a query with a condition on a calculation. The query generates a WHERE clause like:
  ```sql
  Date_of_birth = (Select MAX(Date_of_Birth) from table)
  ```
  Defining a Filter containing a calculation is not implemented in Web Intelligence.

The result of the processing by the Report Conversion Tool is shown below:
- “Revenue Analysis per Country” is partially converted:
  - CountAll(<Country>) is replaced by Count([Country]; IncludeEmpty; All) resulting is the same table.
  - The filter on the other table is removed; hence the result is different.
- “Youngest Tourist” could not be converted.
The “Fully Converted” reports and the “Partially Converted” reports are published to the Central Management Server.

The Conversion results log provides information about reasons why reports are not converted.
A complete list Desktop Intelligence features that cannot be converted or can only be partly converted can be found in the document “BusinessObjects XI 3.1 Report Conversion Tool Guide”. This document is available on the SAP website.

You should closely investigate documents that are partially converted. Although partially converted documents can be published to the Central Management Server, the result is sometimes completely different than the original document because the corresponding capability is not available in Web Intelligence.

Examples include:
- Filters on a measure: The filter is lost.
- Hide block formula: The formula is lost and the block is always visible.
- Hide object: The object is lost from the block.
- Folded break: The break is unfolded.
- Do not retrieve data option: The option is lost.

Most of the partially converted documents can be “fixed” in Web Intelligence through minor modifications. Occasionally a complete rewrite is required in Web Intelligence. Some companies reported that by modifying the Desktop Intelligence document slightly, the conversion happened without any problems and the cost and effort to modify the Desktop Intelligence document were lower than rebuilding the document from scratch.

Most issues surface around layout and printing capabilities such as ‘Fit to page’. These tend to be minor and reasonable fixes or workarounds can be made in the content.

With every new release or new service pack from XI, the list of ‘missing’ features in Web Intelligence is reduced and as a result the conversion rate increases. So when talking to companies about their conversion process it’s very important to know which release they are using and in which service pack they executed the conversion.

A health care company converted to Web Intelligence in release XI R2. They encountered problems on the layout level and they decided immediately to recreate all production reports. Since they didn’t have a large installed base yet, the conversion process was finished in 3 months. Their internal Business Objects support team built all reports in Web Intelligence.

A manufacturing company with users in different continents and different countries also converted in release XI R2. They mainly used the Report Conversion Tool to recuperate the query definitions and worked manually on the formatting afterwards. The query definition is the crucial part in the document creation process to ensure correct results. Usually – for complex queries – a limited group of key users is responsible for the definition of the queries and other users are only authorized to modify the presentation of the data. Recuperating a correct query ensures a correct result after conversion. Validation of the query or queries is often a difficult process, so it’s important to be able to continue using a validated query. The company decided that users would rebuild the presentation of the information to enable them using the latest features of Web Intelligence and remove redundant tabs from their reports. Query builders are usually a small group of users. If they have to spend time on the conversion of the query, they can be the bottleneck in the full conversion process. By focusing on the conversion of the query through the Report Conversion Tool, they reduce the elapsed time of the conversion project.
Validation

Once the set of reports has been defined, use the Import Wizard to migrate the objects. Notice that the options in the Import Wizard vary by version.

Validation tests (content and layout) are crucial in the migration process. You need to define who will manage these tests and to which level of detail the tests will be executed. The more complex the reports – numbers of tabs, pages, calculations, dimensions, layout, and alerters (conditional formats), etc. – the more time intensive the validation will be. Decide whether you need to validate each report or whether you can categorize the reports and validate a few reports within each category. The first option guarantees that you verify everything, but it also requires more effort, increasing the migration cost significantly.

Companies can have IT charged with the validation, push it to the business units, or even outsource it. Companies can even do a mix, depending on budgeting, confidentiality of data and time/resource availability. One caveat for business-driven validation – because users don’t always understand the implications on the data that feeds their reports (refresh, volumes, etc) they may not identify the proper validation tests. IT may need to provide guidance even if the business owns the actual process.

One finance company with representations in Europe and Asia migrated from V6.5 to XI 3.0. The BI Project team decided, with the support of the IT management, to make the business departments responsible for the functional validation and the content checking of the migrated reports. They also decided that the conversion from Desktop Intelligence to Web Intelligence was the task of the business departments. For the migration to XI, their original scope included > 2200 reports. After reviewing the reports, however, only 60% of these reports were chosen for migration and conversion. They estimated their effort to 200 man-days. Their reports had a wide range of complexity. They estimated that they could reach a high ratio of automatically converted reports by using the Report Conversion Tool. By making the business departments responsible for the validation of the reports they determined that small differences in layout were accepted by the users.

A retail company upgraded to XI R2. They outsourced the testing to an external company in India. Their estimation was that full testing with validation for > 5000 reports on > 250 universes would require > 2150 man-days. Note that this is only two times the number of reports from the previous example, but the cost in days is over ten times more. By outsourcing the validation they freed their own internal resources and they were guaranteed that everything was validated and corrected (through their SLA with the external company). Forced by the potential penalties for not meeting the SLA, the external company planned thorough tests and didn’t accept any difference. The risk of such an approach is that the validation will take too much time, but you do get a factual validation.

With in-house validation and testing by the business departments, the validation team will use more ‘common sense’ and can better judge the impact of a difference and can decide to accept a difference to reduce the conversion time and cost. To illustrate this, consider the following 2 examples. Migrating documents from V6.5 to XI R2.3 resulted in the following comments:

- More than 25% of the documents showed differences in the area of text wrapping.
- More than 10% of the documents showed differences in bold face / normal face.

In my opinion, you get the best result by either migrating completely in house or – when resources are not available – by setting up a team with internal business users, assisted by a few external consultants. This guarantees a combination of technical expertise, business knowledge, and common sense. A bank company decided that business users were responsible for the conversion from Desktop Intelligence to Web Intelligence. With the assistance of one senior external consultant they managed to finish the conversion in three months.
When talking to other customers about their migration and conversion efforts, it can be dangerous to rely on the empirical data for your budgeting. There are no general rules to calculate the total effort. Many factors influence the time-line and costs for the migration and conversion:

- Which release was involved? With every new release or service pack more items are migrated with fewer issues.
- The migration issues depend on the complexity and the features that were used in the report.
- Are the original authors available for the conversion process? Desktop Intelligence reports are quite difficult to maintain for aspects such as identifying the synchronizations and calculations used.
- The level to which the key personnel are devoted to the project.
- Acceptance rate for differences: If a report is not 100% exactly the same as in the original version, what differences are accepted and what must be changed?
- Scope creep: Not identifying up front the exact scope and sticking to the plan can create a sliding scope of content.
- Inexperience with both Desktop Intelligence and Web Intelligence as well as the Report Conversion Tool.
Upgrade

Upgrade is defined as moving from one XI version to a higher XI version or higher Service Pack. Companies benefit from upgrades. Although upgrades require effort from IT, business users get added value from these upgrades.

The upgrade of existing Web Intelligence documents is an easy process through the use of the Report Conversion tool.

Every new release or service pack in XI introduced a large set of new features and support for additional features from Desktop Intelligence. The table below illustrates a few of them.

<table>
<thead>
<tr>
<th>Desktop Intelligence Feature</th>
<th>XIR2</th>
<th>XI 3.0</th>
<th>XI 3.1</th>
<th>XI 3.1 SP2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Edit SQL</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Offline Capability</td>
<td></td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Personal Data Providers</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>MultiCube (ForceMerge) Function</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Document Autosave and Recovery</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>Support Large Datasets</td>
<td></td>
<td>✔</td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>Query on Query</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>Fold / Unfold</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Input Controls</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
</tbody>
</table>

Upgrades or patch installations can be fast after the move from Desktop Intelligence to Web Intelligence. This was confirmed by several companies.

An Education company, active in Higher Learning, reported: "There is a reduction in desktop installation issues. We are able to move more quickly for patches and upgrades, because we were constrained by the need to ensure that Desktop Intelligence versions were aligned with the server".

A manager of a software company said: "Upgrades and patching are centralized after moving away from Desktop Intelligence. We only need to maintain servers, no clients anymore".
**Training**

Training is important to get the most benefit from any new release or new platform. It is obvious that new users must be trained in the tools; but too often the existing users do not get any upgrade training. When existing users are not introduced to the new functionality, they continue working like before; they use the new tool the same way as they used the old tool.

Users will search for:

- How is a given feature implemented in the new release?
- Which features or workflows are not available?
- What must be done in a different way and how easily can I discover that workaround?

All these questions provide an answer to the question: “How can I continue the work that I did in the past”.

Users forget the most important questions:

- What is the added feature set?
- Which improvements are implemented to make the tool more intuitive and easier to use?
- How can the tool help me to increase my productivity and to deliver better content?

Existing users ignore new options, additional buttons and icons, and even entire features in the new tool. The most trivial examples are found in the query panel: In Web Intelligence users can drag and drop multiple objects into the Result Objects Pane, or drag objects from the Result Objects pane into the Query Filters pane. Existing users know that this is impossible in Desktop Intelligence, accept these limitations to the point of internalizing the workarounds they must do on a daily basis. Clearly, it is unlikely that they will test to see what is possible in Web Intelligence on their own volition. Besides the numerous productivity and usability features, these users will rarely discover and exploit new features like track changes or query drill.

**Quote from a Health Care company:** “Desktop Intelligence users found within six months that Web Intelligence is better. Their gut feeling is that they get a better ROI with Web Intelligence. Reports get more involved and complex, as users discover the functionality of Web Intelligence. The initial goal was reached: more self-serve of information”

Efforts should be made to reveal the possibilities that Web Intelligence offers rather than focusing on the surface level deltas.

At the highest level, it is critical that the BusinessObjects support team has an in depth knowledge of the new architecture and the new platform. We recommend to our clients that they attend the following SAP BusinessObjects training sessions:

- Enterprise XI 3.0: Administration and Security
- Enterprise XI 3.0: Administering Servers

A company in the Utilities sector recognized the need for rapidly acquired and detailed knowledge to support the conversion project. Besides training, they also hired an external consultant for coaching one or two days each month. They insisted on building an internal expertise and completed this with the help of the coach who had experience working through the process with different companies. This process was especially useful in leveraging the new capabilities that the XI 3.0 security model enabled.
In many cases, one underlying goal for moving to Web Intelligence is to enable web-based roll-out to a broader user base than Desktop Intelligence allowed. For such new users, a more traditional curriculum can be offered. This can vary from company to company. Some examples include:

- Two days of Web Intelligence training for all users: A first day on a fictitious universe and the second day on their own data. These sessions offer a general overview of the possibilities and users will discover all details themselves ‘on the job’.
- Different training sessions for different user levels. These offer an in depth explanation of all features:
  - A two day session for report viewers (These user are not authorized to build queries, but they may modify the report layout).
  - A three day session for report authors (these users build queries and report layouts).
  - A one day (extra) session for advanced users (mainly concentrating on calculation contexts).

For existing Desktop Intelligence users, it is important to give an adapted training session. These users know how to build a query, how to create a ranking, how to build a filter etc. For these users it is important to learn the new features and to show them where to find the functionality and capabilities they rely on. Additionally, the training should offer them opportunities to change the way they perceive of report creation and to leverage new functionality.

We offer in house, one day sessions for existing users. (Detailed information about the content can be found in Appendix 2). This session contains three major parts:

- User interface changes: Topics include what has changed in the query panel, how to define a sort, and how to define properties of a cell, a table, a report.
- Changed functionality: This part explains the extensions such as linking data providers through merged dimensions, new calculation modes for ranking, the extensions to alerting, and the changed syntax for functions, formulas, and variables.
- New functionality: This includes completely new features like data tracking or synchronized drill actions.

One financial company offers a self-driven training environment to existing Desktop Intelligence users who convert to Web Intelligence, enabling them to develop some experience with the new environment and surface any questions they have prior to the formal training.

Training can also be used as a means to create evangelists to “sell” the project internally. A car manufacturer organizes training sessions for BI project leaders. These project leaders know Business Objects, and in a two days session they get training on advanced reporting topics as well as information about the XI platform and the architecture of the implementation. This intense training helps the project leaders to sell Business Objects to users in their projects.
Appendix 1: Assessment Moving from Desktop Intelligence to Web Intelligence

- **Current Desktop Intelligence deployment**
  - Current version (or versions)
  - Size
    - # Desktop Intelligence authors (users that build queries)
    - # Desktop Intelligence consumers
    - # Projects, # Documents, # Universes
  - How will the deployment change in 6, 18 months

- **Current Web Intelligence deployment**
  - Current version (or versions)
  - Size
    - # Web Intelligence authors (users that build queries)
    - # Web Intelligence consumers
    - # Projects, # Documents, # Universes
  - How will the deployment change in 6, 18 months

- **Status on move to Web Intelligence**
  - Do you have enough information about the possibilities of Web Intelligence?
  - Have you attended info sessions on the XI platform and Web Intelligence?
  - What was the compelling event to consider moving to Web Intelligence? What is the deadline and how flexible is the deadline?
  - How many people are impacted? How are they informed? How can they get support?
  - Have you considered moving your Desktop Intelligence deployment to Web Intelligence?
    - If not, please explain
    - If yes, please describe the level of involvement and role of the users involved in the project to move from Desktop Intelligence to Web Intelligence
      - IT / Development
      - BI Project owners
      - Report Authors
      - BI Analysts
      - Business end-users
      - External resources
  - Do you have information about your current Desktop Intelligence deployment:
    - Can you categorize the existing documents into crucial, useful, redundant, …
    - Who is using the information?
    - Do you use the following features in your current Desktop Intelligence deployment:
      - Personal data providers
      - VBA
      - Free hand SQL
      - …
  - Do you have a global plan for sourcing the move to Web Intelligence (IT / Business users / External resource)?
  - Do you have a training plan?
  - What is the status / timing for your move from Desktop Intelligence to Web Intelligence? Select the option that best describes your situation and add some comment
    - Have investigated but won’t move any content to Web Intelligence due to planning, process or resource issues
    - Have investigated but won’t move any content to Web Intelligence due to missing features
    - In the process of moving some projects to Web Intelligence, although many Desktop Intelligence reports remain
    - In the process of moving most projects to Web Intelligence, although some Desktop Intelligence reports remain
• In the process of moving all projects to Web Intelligence, abandoning Desktop Intelligence
• Completed the move to Web Intelligence, no Desktop Intelligence reports remain

• **Perceived Benefits**
  • What are the perceived benefits of moving to Web Intelligence for each user type?
    • IT / Administration
    • Power users: report authors
    • Power users: analysts
    • Interactive business users
    • Content consumers

• **Perceived Blockers**
  • Compared to Web Intelligence, what are the key remaining blocking features or capabilities that Desktop Intelligence has across different user groups? (Add comments for more detail)
    • IT / Administration
    • Power users: report authors
    • Power users: analysts
    • Interactive business users
    • Content consumers
Appendix 2: Course Topics: Moving to Web Intelligence for Desktop Intelligence Users

This one-day session is targeted at existing Desktop Intelligence (or BusinessObjects V5/V6) users. The contents of this session:

- **User Interface**
  - Less windows. Examples include: creation of a subquery, managing filters, defining a scope of analysis.
  - Query panel
    - Classes, Objects and Filters are placed together
    - Drag and drop multiple objects into the Result Objects window
    - Drag and drop objects from the Result Objects window to the Filters window
    - Tip Text info
    - Result Objects window and Filters window have their own specific icons set
    - Icons to remove all objects from the Result Objects window or Filters window
  - Consistency. Examples include priority definition for sorts, alerters and report breaks
  - Defining a scope of analysis
  - Combined queries

- **Extensions / Improvements to existing features**
  - Small modifications often provide a standard solution in Web Intelligence, where Desktop Intelligence requires a complex workaround.
    - Filter conditions with PROMPT; optional prompts
    - Report filters: AND / OR operators
    - Free style input combined with LOV input for sorts and report filters
    - Copy queries
    - Drill path selection on objects that are defined in multiple hierarchies
    - Change universe in a document
    - Syntax of functions
    - New functions and options (e.g. Percentage, Top/Bottom, IncludeEmpty)

- **Changed functionality**
  - Merged Dimensions: Support for inner and outer joins
  - Ranking: Accumulated totals, accumulated percentages, ranking without definition of a dimension object
  - Synchronized drill: Drill down on multiple report blocks
  - Query drill: Query performance improvements
  - Alerters: Combined conditions, using functions in the result of an alerter

- **New features**
  - Data Tracking: Compare a report with the results of a previous refresh. Use the values from a previous report refresh to define calculations in the current version
  - Instances of a report, scheduling, history
  - Web Intelligence Rich Client: Combine the best of Web Intelligence and Desktop Intelligence in 1 tool
    - Look and feel from Web Intelligence
    - Full feature set of Web Intelligence
    - Working connected, offline or standalone
    - Personal data (for instance ".xls", ".csv", ".txt")
    - Local processing
Managing unavailable features

Some features from Desktop Intelligence seem to be unavailable in Web Intelligence. The most referenced one is the Grouping icon. With every new release or service pack the number of 'missing' items in Web Intelligence decreases. Often workarounds exist to build the same functionality in the current release of Web Intelligence. This is illustrated for the following items:

- Hiding columns
- Grouping icon
- Free hand SQL
- Conditions with calculations
- Subtotals in Ranking
- Sort on query definition
- Data Manager
- VBA
- Templates
- Charts
- Multi-column reports
Related Content

Product Guides
Recorded Webinar on "Why You Should Migrate to BusinessObjects Web Intelligence" (registration required)
*Convincing Reasons to Move from Desktop Intelligence to Web Intelligence*
Drop your Objections to Web Intelligence
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