# BusinessObjects Enterprise XI 3.1
# Publisher's Guide

BusinessObjects Enterprise XI 3.1

Windows

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# About this documentation

This guide provides you with information and procedures for accessing and using the BusinessObjects EnterprisePublishing feature. The appearance of BusinessObjects Enterprise can be customized to suit your company's needs. Even though your desktop may look different from the one in this guide, you can still apply many of the procedures described throughout. InfoView and the Central Management Console (CMC) are your main user interfaces for working with reports through BusinessObjects Enterprise. InfoView and the CMC run within your web browser and give you the ability to view, export, print, and schedule reports. Users who are familiar with BusinessObjects Enterprise can customize a personalized version of these user interfaces.

## Who should use this documentation?

This guide is intended for users who work with documents over the Web through BusinessObjects Enterprise. Your BusinessObjects Enterprise administrator is generally responsible for configuring, managing, and maintaining a BusinessObjects Enterprise installation, which includes InfoView and the CMC. For more information about the product, consult the *BusinessObjects Enterprise Administrator's Guide*, *What's New in BusinessObjects XI 3.1 Guide*, and the *BusinessObjects Enterprise Installation Guide*. The latest versions of these guides are available online.

*http://support.businessobjects.com/documentation/product_guides/default.asp*

# About Publishing

"Publishing" is the process of making documents such as Crystal reports, Web Intelligence documents, and Desktop Intelligence documents publicly available for mass consumption. The contents of these documents can be distributed automatically via email or FTP, saved to disk, or managed through the BusinessObjects Enterprise platform for web viewing, archiving, and retrieval, and automated through the use of scheduling. From within InfoView or the CMC, you can take documents and tailor them for different users or recipients; schedule a publication to run at specified intervals; and send it to a number of destinations, including recipients' Business Objects inboxes and email addresses.

**Note:**
"Publishing" is distinct from the Publishing Wizard. The Publishing Wizard is a Windows-based product that is designed to add documents to the Central Management Server (CMS). For information about the Publishing Wizard, see the *BusinessObjects Enterprise Administrator's Guide*.

# Publishing workflow

There are four categories of users for publications: document designers, publishers, administrators, and recipients.

Document designers do the following:

- Design documents (Crystal reports, Desktop Intelligence documents, or Web Intelligence documents) on which the publication is based.

  For more information, see these guides:

  - *Crystal Reports User's Guide*
  - *Desktop Intelligence Online Help*
  - *Web Intelligence Online Help*
- Design documents that are used as dynamic recipient sources.

  For more information, see *Dynamic recipients* on page 21.
- Add documents to the BusinessObjects Enterprise system.

  For more information, see the chapter *Adding Objects to the Repository* in the *BusinessObjects Enterprise Administrator's Guide*.

Publishers use Publishing to:

- Create publications for distribution.

  To create a publication, publishers follow a standard workflow:

  - They locate the documents on which the publication will be based.
  - They provide information to define the publication and personalize it for recipients.
  - They schedule the publication to run.

  For more information, see *Designing basic publications* on page 48.

- Select recipients for publications.

  For more information, see *Designing basic publications* on page 48.

- Apply profiles to publications to tailor the type of information each user group will see.

  For more information, see *How profiles work* on page 28.

- Redistribute instances of publications that have run successfully.

  For more information, see *To schedule a publication to run* on page 74.

Administrators have the authority to:

- Create profiles.

  For more information, see the chapter *Managing Profiles* in the *BusinessObjects Enterprise Administrator's Guide*.

- Manage mail server configuration.

  For more information, see the chapter *Managing and Configuring Servers* in the *BusinessObjects Enterprise Administrator's Guide* .

- Configure external destinations such as local disk or an FTP server.

Recipients use "Publishing" to:

- Receive publications.

  For more information, see *Viewing publication results* on page 75.

- Subscribe to and unsubscribe from publications.

  For more information, see *Subscription* on page 39 and *To subscribe to or unsubscribe from a publication* on page 74.

# Prerequisites for Publishing

Before you begin, you must ensure that all required system components are installed, configured, and running. You must also ensure that you have the appropriate knowledge prerequisites.

### System prerequisites

The following table summarizes the system components that you need before you create and distribute publications. For more information about BusinessObjects Enterprise servers and architecture, see the *BusinessObjects Enterprise Administrator's Guide*.

| Publishing task | Prerequisites |
|---|---|
| All Publishing tasks | The following servers must be installed, configured, and running:<br>• Publication Job Server, especially:<br>    • Publication Scheduling Service<br>• Adaptive Processing Server, especially:<br>    • Publishing Service<br>    • Publishing Post Processing Service<br>• Destination Job Server |
| Publishing Crystal reports publications | The following servers must be installed, configured, and running:<br>• Crystal Reports Job Server<br>• Report Application Server |
| Publishing Desktop Intelligence document publications | The following servers must be installed, configured, and running:<br>• Desktop Intelligence Job Server<br>• Desktop Intelligence Processing Server |
| Publishing Web Intelligence document publications | The following servers must be installed, configured, and running:<br>• Web Intelligence Processing Server<br>• Adaptive Job Server, especially:<br>    • Web Intelligence Scheduling and Publishing Service |

### Knowledge prerequisites

This guide provides most of the information that you need to create and distribute a publication. However, depending on your responsibilities, you may require information about tasks such as auditing publications, designing dynamic recipient sources, and checking the status of servers used for Publishing. For more information, consult these guides:

- *BusinessObjects Enterprise Administrator's Guide*
- *Crystal Reports User's Guide*
- *Desktop Intelligence Online Help*
- *Web Intelligence Online Help*

As a publisher, it is recommended that you understand how profiles and filters work so that you can personalize the content in publications for recipients. For more information, see the *BusinessObjects Enterprise Administrator's Guide*.

## Terms used in this guide

### Publication

A "publication" is a collection of documents intended for distribution to a mass audience. Before the documents are distributed, the publisher defines the publication using a collection of meta data. This meta data includes source documents, recipients, and the personalization applied.

### Recipient

A "recipient" is a user or group who receives the publication when it is processed and distributed. Recipients can be BusinessObjects Enterprise users, or they can be users outside of the BusinessObjects Enterprise system (for example, dynamic recipients). You can distribute a publication to both types of recipients simultaneously.

### Document

This term refers to dynamic content documents (Crystal reports, Desktop Intelligence documents, and Web Intelligence documents) and static documents that are stored in the BusinessObjects Enterprise system and processed and delivered during Publishing.

### Instance

An "instance" (or a "publication instance") is a personalized view of a dynamic content document. Instances are generated when the publication runs and is delivered to recipients.

#### Related Topics

- *What is a publication?* on page 16

# Introduction to Publishing

chapter 2

# What is a publication?

A "publication" is a collection of documents intended for distribution to a mass audience. Before the documents are distributed, the publisher defines the publication using a collection of metadata. This metadata includes the publication source, its recipients, and the personalization applied.

Publications can help you send information through your organization more efficiently:

- They allow you to easily distribute information to individuals or groups of users and personalize the information each user or group receives.
- They provide delivery of targeted business information to groups or individuals through a password-protected portal, across an intranet, an extranet, or the Internet.
- They minimize database access by eliminating the need for users to send process requests themselves.

You can create different types of publications based on Crystal reports, Desktop Intelligence documents, or Web Intelligence documents.

# Publication concepts

## Report bursting

During Publishing, the data in documents is refreshed against data sources and personalized before the publication is delivered to recipients. This combined process is known as "report bursting". Depending on the size of the publication and how many recipients it is intended for, you have several report bursting methods to choose from:

- **One database fetch for all recipients**

  When you use this report bursting method, the data is refreshed once for each document in the publication, and the documents are personalized and delivered to each recipient. This report bursting method uses the data source logon credentials of the publisher to refresh data.

This is the default option for Desktop Intelligence and Web Intelligence document publications. It is also the recommended option if you want to minimize the impact of Publishing on your database. This option is secure only when the source documents are delivered as static documents. For example, a recipient who receives a Desktop Intelligence document in its original format can modify the document and view the data associated with other recipients. However, if the Desktop Intelligence document was delivered as a PDF, the data would be secure.

**Note:**

- This option is secure for most Crystal reports regardless of whether the Crystal reports are delivered in their original format.
- The performance of this option varies depending on the number of recipients.

- **One database fetch for each batch of recipients**

  When you use this report bursting method, the publication is refreshed, personalized, and delivered to recipients in batches. This report bursting method uses the data source logon credentials of the publisher to refresh data. The batches are based on the personalization values you specified for the recipients. The batch size varies depending on the specified personalization value and is non-configurable.

  This is the default option for Crystal report publications. It is also the recommended option for high-volume scenarios. With this option, you can process batches concurrently on different servers, which can greatly decrease the processing load and time required for large publications. This option is also recommended for Desktop Intelligence document publications if you want to maximize security for publication instances.

  **Note:**
  This option is unavailable for Web Intelligence documents.

- **One database fetch per recipient**

  The data in a document is refreshed for every recipient. For example, if there are five recipients for a publication, the publication is refreshed five times. This report bursting method uses the data source logon credentials of the recipient to refresh data.

  This option is recommended if you want to maximize security for delivered publications.

**Note:**
Crystal reports that are based on universes or Business Views support **One database fetch per recipient** only to maximize security.

**Related Topics**

- *To specify a report bursting method* on page 72

## Delivery rules

**Note:**
This feature is unavailable for Web Intelligence documents.

"Delivery rules" affect how documents in publications are processed and distributed. When you set delivery rules on documents, you indicate that the publication will be delivered to recipients only if the content in the documents meets certain conditions. There are two types of delivery rules:

- Recipient delivery rule

  If the data in the recipient's instance meets the delivery rule, the instance is delivered to the recipient.

- Global delivery rule

  If the data in a designated document meets the delivery rule, the publication is delivered to all recipients.

  **Note:**
  The designated document for a global delivery rule can be different from the document or documents used in a publication. For example, you can set a global delivery rule on a Desktop Intelligence document used as a dynamic recipient source instead of a Desktop Intelligence document in the publication.

If a publication has recipient and global delivery rules, the global delivery rule is evaluated first to determine whether the publication will be processed. If the publication meets the global delivery rule, the system then evaluates the recipient delivery rules to determine which instances to process and distribute for each recipient.

How you set delivery rules depends on the document type that you want to publish. For Crystal reports, you specify a delivery rule based on a named alert that the report designer creates in the Crystal report. For Desktop

Intelligence documents, you specify a formula expression. You can also set a delivery rule based on whether the personalized publication contains any data.

The diagram “Global delivery rule met” illustrates how an alert-based global delivery rule works. Here the global delivery rule is set on a document in the publication. The Crystal report has a Revenue alert for values greater than 100,000. The publisher creates a global delivery rule based on the Revenue alert so that the Crystal report is only delivered to all recipients if revenue exceeds 100,000. In this case the delivery rule is met, so the Crystal report is delivered.

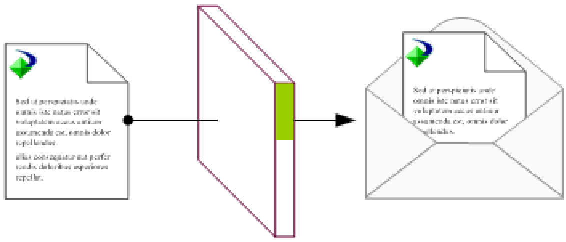

*Figure 2-1: Global delivery rule met*

The diagram “Recipient delivery rule unmet” illustrates how a recipient delivery rule works. The publisher sets a recipient delivery rule for the Crystal report so that the report is delivered to recipients only if the report contains data for that recipient. When the report is personalized for each recipient, Green Recipient does not have data in the Crystal report. This means that only Blue Recipient and Orange Recipient receive the publication.

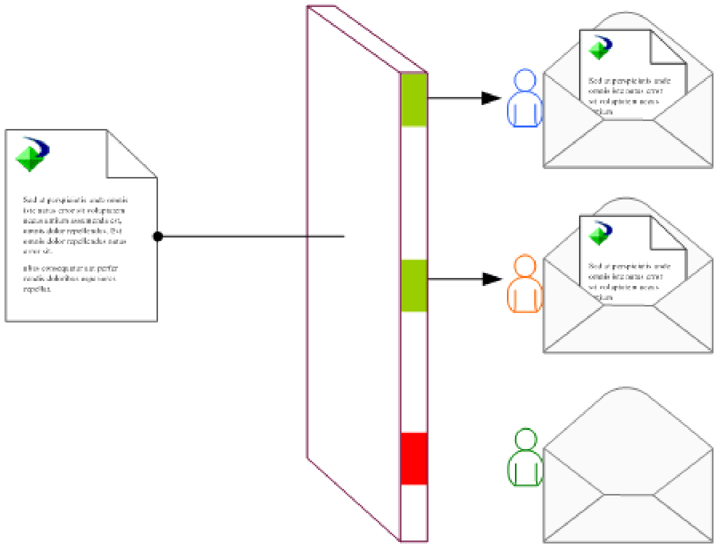

*Figure 2-2: Recipient delivery rule unmet*

For publications that contain multiple documents and objects, each document can have its own recipient delivery rule. When you do this, you have the following options for processing and delivery:

- If a document in the publication fails to meet its recipient delivery rule for a recipient, the entire publication will not be delivered for that recipient.
- If a document in the publication fails to meet its recipient delivery rule for a recipient, that document will not be delivered, but all other documents in the publication will be delivered for that recipient.

Delivery rules are useful because they allow publications intended for a large number of recipients to be processed and distributed more efficiently. Consider a situation in which a publisher at an insurance company creates a publication for its clients that contains the following objects:

- An insurance bill (personalized Crystal report).
- A monthly statement (personalized Crystal report).
- A payment methods brochure (PDF).

In the insurance bill, there is an Amount Due alert for values greater than zero. The publisher creates an Amount Due recipient delivery rule for the insurance bill so that the insurance bill is published and distributed only if a client owes the insurance company a payment. The publisher also specifies that the entire publication will not publish if the insurance bill fails to meet the delivery rule because he does not want clients to receive a monthly statement and a brochure when they do not have to pay a bill. When the publication is run, the publication is processed and distributed to clients who owe payments only.

**Note:**
If a Crystal reports publication is scheduled to print when the publication runs, the print job occurs regardless of whether a document in a publication fails to meet a delivery rule and is not delivered to a recipient. This is because print jobs are processed during personalization, and delivery rules are applied to publications after personalization.

**Related Topics**


- *To set a global delivery rule on a Crystal report* on page 85
- *To set a recipient delivery rule on a Crystal report* on page 85
- *To set a global delivery rule on a Desktop Intelligence document* on page 99
- *To set a recipient delivery rule on a Desktop Intelligence document* on page 100


# Dynamic recipients

"Dynamic recipients" are publication recipients who exist outside of the BusinessObjects Enterprise system. Dynamic recipients already have user information in an external data source, such as a database or an LDAP or AD directory, but do not have user accounts in BusinessObjects Enterprise.

To distribute a publication to dynamic recipients, you use a "dynamic recipient source". A dynamic recipient source is a document or custom data provider that provides information about publication recipients outside of the BusinessObjects Enterprise system. Dynamic recipient sources allow you to easily maintain information for dynamic recipients by linking directly to the external data source and retrieving the most recent data. They also decrease administrative costs because you do not have to create BusinessObjects Enterprise user accounts for dynamic recipients before you distribute publications to them.

Consider a situation in which a billing company distributes bills to customers who are not BusinessObjects Enterprise users. The customer information already exists in an external database. The publisher creates a document based on the external database and uses the document as a dynamic recipient source for a publication. The customers receive the billing publication, and the dynamic recipient source allows the publisher and the system administrator to maintain up-to-date contact information.

You can do the following with a dynamic recipient source:

- Deliver a single publication to dynamic recipients and BusinessObjects Enterprise users simultaneously.

  **Note:**

  - Only one dynamic recipient source can be used for each publication.
  - Dynamic recipients cannot unsubscribe themselves automatically from a publication.
- Preview the dynamic recipients list when you create a publication.
- Specify whether you want to deliver the publication to all dynamic recipients, or to include or exclude certain dynamic recipients.
- Deliver publications to external destinations such as email or an FTP server.

  **Note:**
  Business Objects inboxes are invalid destinations for dynamic recipients because they do not have BusinessObjects Enterprise user accounts.

To use a dynamic recipient source, you specify a column for each of the following values:

- Recipient ID (required)
- Full name of recipient
- Email address

The recipient ID column determines the number of dynamic recipients who will receive the publication. It is recommended that you sort the dynamic recipient source according to recipient ID.

For information about creating a dynamic recipient source in Crystal Reports, see the *Crystal Reports User's Guide*. For information about creating a custom-coded dynamic recipient source, see the *BusinessObjects Enterprise SDK Java Developer Guide*.

**Related Topics**

- *To specify dynamic recipients* on page 52
- *devlibrary.businessobjects.com*

## Destinations

Destinations are locations that you deliver publications to. A destination can be the BusinessObjects Enterprise location in which a publication in stored, an Business Objects inbox, a email address, an FTP server, or a directory on the file system. You can specify multiple destinations for a publication.

If you are publishing multiple Crystal reports, you can also merge them into a single PDF on a per destination basis.

If you want to publish a publication as a single ZIP file, you can choose to zip or unzip the instances on a per destination basis (for example, zip the instances for email recipients and leave them unzipped for Business Objects inboxes).

#### Related Topics

- *To specify a destination for the publication* on page 60
- *Possible destinations* on page 62
- *To embed content from a dynamic content source document in an email* on page 65

## Formats

Formats define the file types that a publication's documents will be published in. A single document can be published in multiple formats, and these instances can be delivered to multiple destinations. For publications with multiple documents, you can specify a different format for each. For publications that contain Desktop Intelligence or Web Intelligence documents, you can publish the whole document or a report tab within the document to different formats.

Any formats you choose for a document apply to all recipients of the publication. For example, you cannot publish a document as a Microsoft Excel file for one recipient and as a PDF for another. If you want the recipients to receive instances in those formats, each recipient will receive a Microsoft Excel file and a PDF.

#### Related Topics

- *To specify formats for a Crystal report* on page 54

- *To specify formats for a Desktop Intelligence or Web Intelligence document* on page 60

## Possible formats

| Document type | Format | Description |
|---|---|---|
| All document types | mHTML | This option publishes the document in mHTML format. You can also embed a document's content as mHTML in an email:<br>• For Crystal reports, you can embed the content of one report in an email.<br>• For Desktop Intelligence documents, you can embed the content of one report tab or all report tabs from a single document in an email.<br>• For Web Intelligence documents, you can embed the content of one report tab in an email. |
| | PDF (.pdf) | This option publishes a document as a static PDF. |
| | Microsoft Excel file (.xls) | This option publishes a document as a Microsoft Excel file and preserves as much of the original format of the document as possible. |

| Document type | Format | Description |
|---|---|---|
| Crystal reports | Data only Microsoft Excel file (.xls) | This option publishes a Crystal report as a Microsoft Excel file that contains data only. |
| | XML | This option publishes a Crystal report in XML format. |
| | Crystal report (.rpt) | This option publishes a Crystal report in its original format. |
| | Microsoft Word file (.doc) | This option publishes a Crystal report as a Microsoft Word file and preserves the original formatting of the Crystal report. This option is recommended if you expect recipients to view the publication without making many changes to it. |
| | Editable Microsoft Word file (.rtf) | This option publishes a Crystal report as a Microsoft Word file that you can edit more easily. This option is recommended if you expect recipients to view the publication and edit its content. |
| | Rich text (.rtf) | This option publishes a Crystal report in rich text format. |
| | Plain text (.txt) | This option publishes a Crystal report in plain text format. |
| | Paginated text (.txt) | This option publishes a Crystal report in plain text format and paginates the content of the publication. |
| | Tab-separated text (.txt) | This option publishes a Crystal report in plain text format and separates the content in each column using tabs. |
| | Character-separated values (.csv) | This option publishes a Crystal report as a character-separated values file. |

| Document type | Format | Description |
|---|---|---|
| Desktop Intelligence documents | Desktop Intelligence document (.rep) | This option publishes a Desktop Intelligence document in its original format. |
| | Rich text (.rtf) | This option publishes a Desktop Intelligence document in rich text format. |
| | Plain text (.txt) | This option publishes a Desktop Intelligence document in plain text format. |
| Web Intelligence documents | Web Intelligence document (.wid) | This option publishes a Web Intelligence document in its original format. |

## Personalization

"Personalization" is the process of filtering data in source documents so that only relevant data is displayed for publication recipients. Personalization alters the view of the data, but it does not necessarily change or secure the data being queried from the data source.

The diagram “Personalization” illustrates how personalization works. An unpersonalized report contains data types 1, 2, and 3. When the personalization is applied to the report, users only receive the data that is relevant to them: User 2 only receives data type 2, User 1 only receives data type 1, and User 3 only receives data type 3.

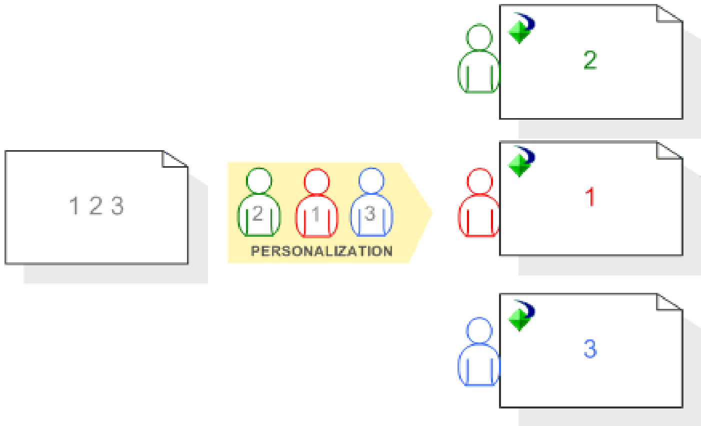


*Figure 2-3: Personalization*

To personalize source documents for recipients, you can do the following:

- If the recipients are Enterprise recipients, you can apply a profile when you design the publication.

  For more information, see the *BusinessObjects Enterprise Administrator's Guide*.

- If the recipients are dynamic recipients, you can map a data field or column in the source document to data in the dynamic recipient source. For example, you can map a Customer ID field in a source document to the Recipient ID field in the dynamic recipient source.

For Crystal report publications, you specify the personalization that is used in the "Personalization" section. If no personalization is specified and the report contains parameters, the Publishing feature uses the personalized parameter values; if these personalized parameter values do not exist, the Publishing feature uses the default parameter values. If none of these settings exist, personalization does not occur for a recipient.

**Related Topics**

- *How profiles work* on page 28
- *Personalizing dynamic content source documents* on page 54

## How profiles work

Profiles are objects in the BusinessObjects Enterprise system that let you classify users and groups. They work in conjunction with publications to personalize the content that users see. Profiles link users and groups to profile values, which are values used to personalize data within a report. Profiles also use profile targets, which describe how a profile is applied to a report. By assigning different profile values, the data within a report can be tailored to specific users or groups. Many different personalized versions of the report are then delivered to your users.

Often profiles reflect the roles of users and groups in an organizational structure. For example, you could have a Department profile that includes all employees in an organization. The users and groups each have profile values that reflect their roles in the organization (for example, “Finance”, “Sales”, and “Marketing”). When a publisher applies the Department profile to a publication, the employees receive data that is relevant to their department.

Profiles do not control users' access to data. Profiles are used to refine or filter a document's content. When you use profiles to display a subset of the data to a user, it is not the same as restricting the user from seeing that data. If users have the appropriate rights and access to the document in its original format, they may still see the complete data for the document by viewing it in InfoView or the CMC. Profiles filter the view of the data; they do not change or secure the data being queried from the data source.

### Profile targets and profile values

To use a profile to personalize a publication, you must set profile values and profile targets for the profile.

For more information about profiles, see the *BusinessObjects Enterprise Administrator's Guide*.

#### What are profile targets?

Profile targets are data sources that profile values filter and interact with to provide personalized publications. There are two types of profile targets:

- Local profile target

A local profile target can be a variable in a Desktop Intelligence document or Web Intelligence document, or a field or parameter in a Crystal report. When you use a local profile target, the source document that contains the local profile target is filtered for the publication recipients.

- Global profile target

  A global profile target can be a universe. You must also specify an object within that universe. This type of profile target can filter all source documents that use the universe.

  **Note:**
  You can use global profile targets for publications that contain Desktop Intelligence and Web Intelligence documents. You cannot use global profile targets with Crystal reports.

#### What are profile values?

Profile values are attributes detailed to specific users or groups when you assign these users and groups to a profile. When a profile is applied to a publication, the users and groups assigned to that profile receive versions of the publication that are filtered according to the profile values set for them.

**Note:**
If you assign profile values to both users and groups, note that inheritance works the same way for profiles as it does for security settings. For more information, see the *Setting Rights* chapter in the *BusinessObjects Enterprise Administrator's Guide*.

#### Why are profile targets and profile values useful?

Profile targets and profile values enable a profile to personalize a publication for recipients. The users and groups specified for a profile receive filtered versions of the same publication that only display the data most relevant to them.

Consider a situation where a global sales report is distributed to a company's regional sales teams in North America, South America, Europe, and Asia. Each regional sales team only wants to view the data that is specific to their region. The administrator creates a Regional Sales profile and adds each regional sales team to the profile as a group. The administrator assigns each regional sales team a corresponding profile value (for example, the North America Sales group is assigned “North America”). During Publishing, the publisher uses the Region field in the global sales report as a local profile target, and applies the profile to the report. The global sales report is filtered according to the profile values set for each regional sales team. When the global sales report is distributed, each regional sales team receives a personalized version that only displays regional sales data.

### Specifying profile values

You can use static values, expressions, or variables as profile values.

Static values are the most common profile value type and can be used to filter any source document type. You can also enter multiple static values for a user or group for one profile. For example, a manager interested in receiving data from several departments can have “Production”, “Design”, and “Marketing” as static profile values for a Department profile.

Expressions use syntax that is specific to certain source document types. You can use Crystal Reports, Web Intelligence, and Desktop Intelligence expressions to perform more complex personalization and filtering. Expressions are useful if you want to filter a range of values, or a range of values greater than or less than a given value, for a user.

If you want to use user information as profile values, you can use variables for user names, full names, and email addresses. These variables are mapped to user information and act as placeholders. When you apply the profile to a publication, the system retrieves the most recent information for users.

Profile value variables are useful because they decrease administrative costs and possible errors associated with entering information manually. Consider a situation where an administrator maps an AD user to the system and adds the user to two profiles. Instead of entering the information manually for each profile value and possibly making typographical errors, the administrator can specify which variables to use for the user's data.

For third-party users, if the user's information changes in an external system, the data in the BusinessObjects Enterprise system can be updated to reflect those changes when a publication is run.

**Tip:**
If you have a third-party user account with data that should not be overwritten by user attributes in an external directory, open the "Properties" dialog box for the user object and clear the **Import full name and email address** check box.

The following table summarizes the variables that can be used for the externalization of profiles.

| Variable | Description |
|---|---|
| `Title` | This variable is associated with the user's account name. |
| `User's full name` | This variable is associated with the user's full name. |
| `E-mail address` | This variable is associated with the user's email address. |

**Tip:**
These variables can also be used for groups. You can map the `E-mail address` variable to a common email address for the entire group. When you do this, the system resolves the variable and retrieves individual email addresses for each member of the group.

**Note:**

- Static-value profile values can filter string fields in source documents only. If you map the incorrect type of field to the profile, personalization will fail.
- For Desktop Intelligence documents, expression profile values are only compatible with the report bursting method **One database fetch for all recipients**.

### Resolving conflicts between profiles

You may encounter conflicts between profiles when users and groups have been assigned multiple profiles through inheritance. If a document is delivered to a user that has two profiles that conflict, the difference must be resolved.

For example, Tony is a product manager in the Mexico office. He is assigned a profile called Region that personalizes his documents to show only data from Mexico. He is also assigned a different Management profile that personalizes the data to display data for product managers.

If a document uses both of these profiles, which data will Tony see? According to one profile, he'll see data for Mexico. According to the other profile, he should see only data for product managers.

BusinessObjects Enterprise can resolve this conflict in two ways:

- Do not merge

  BusinessObjects Enterprise determines the different possible views of a publication that could be delivered and produces a unique view for each case. In the example, Tony would receive one publication personalized to show data for Mexico, and another publication that shows product manager data.

- Merge

  With this setting, BusinessObjects Enterprise again determines the different possible views of the data, but this time the non-conflicting profiles are merged. This type of profile resolution is designed for role-based security. In the example, Tony would receive a single publication personalized to show data for Mexican product managers.

**Note:**
This “do not merge/merge” scenario applies to inherited profile values only. If a user is assigned two profile values explicitly, the publication instances are always merged.

### Conflicts between profile values

Conflicts between profile values can arise when a user inherits two contradictory profile values as a result of group membership. In general, explicitly assigned profile values override profile values inherited from group membership. A profile value assigned to a user or a subgroup overrides the profile value inherited from group membership.

For example, David belongs to the North America Sales and Canada Sales groups. The Canada Sales group is a subgroup of the North America Sales group. These groups are both added to the Region profile. From the North America Sales group, David inherits a Region profile value of “North America”, and from the Canada Sales group, David inherits a Region profile value of “Canada”. In this case, the profile value that is assigned to the subgroup overrides the profile value that is assigned to the group, and David receives a publication with data for Canada.

Conflicts between profile values can also arise when a user is explicitly assigned a profile value that contradicts a profile value inherited from group membership. For example, Paula belongs to the North America Sales group, which has a Region profile value of “North America”. The administrator also assigns Paula a Region profile value of “Spain”. In this case, the profile value that is assigned to the member overrides the profile value that is inherited from the group, and Paula receives a publication with data for Spain.

However, sometimes a user can inherit different profile values from two different groups for one profile. Both groups are hierarchically equal; one group is not a subgroup of the other group, so one profile value does not override the other. In this case, both profile values are valid and the user receives a publication instance for each profile value.

As a result of this profile value conflict, sometimes duplicate report instances are included in different publication instances and sent to the same user. For example, Sandra is a manager in two North America offices and receives a publication via email that contains two reports. Report 1 is personalized using the Region profile, for which Sandra inherits the conflicting profile values “USA” and “Canada” from group membership. Report 2 is personalized using the Role profile, for which Sandra inherits the profile value “Manager”. If there is no profile value conflict, after personalization, Sandra receives one email with a merged Report 1 instance (USA and Canada data) and a Report 2 instance (Manager data). Instead, Sandra receives two emails: one email includes a Report 1 USA instance, the other email includes a Report 1 Canada instance, and both emails have the same Report 2 Manager instance.

**Tip:**
To avoid profile value conflicts that result in duplicate publication instances being sent, when possible, explicitly assign profile values to users instead of allowing users to inherit profile values from group membership.

## Publication extensions

A publication extension is a dynamically loaded library of code that applies business logic to publications. Publication extensions are useful for situations where you require additional automated customization of publications after processing or delivery.

For example, use publication extensions to perform the following tasks after processing:

- Merge documents of the same type (for example, merging multiple Excel spreadsheets into a single Excel workbook).
- Add password protection to or encrypt a document.
- Convert a document to a different format.
- Create custom log files for the publication job.

**Note:**
You can specify publication extensions only in the CMC. You cannot do this if you are designing a publication in InfoView.

For more information about publication extensions, see the *BusinessObjects Enterprise SDK Java Developer Guide*.

**Related Topics**

- *To specify publication extensions* on page 70
- *devlibrary.businessobjects.com*

## Scheduling

Scheduling is a process which allows you to run an object automatically at specified times. When you schedule an object, you choose the recurrence pattern that you want and specify additional parameters to control exactly when and how often the object will be run.

At the time you schedule an object, the system creates a scheduled instance. Although a scheduled instance appears in the "History" dialog box of a respective object (with a status of Recurring or Pending), it contains solely object and schedule information—it does not contain any data.

When the system runs the object, it creates an output instance for the object (for example, a report or program instance). A report instance contains actual data from the database. A program instance is a text file that contains the standard output and standard error produced when the program object was run. Output instances also appear in the "History" dialog box of an object and have a status of Success or Failed.

For end users to schedule and run objects, they must use a web-based client such as InfoView or a custom web application. InfoView is designed primarily to schedule objects and view reports, whereas the CMC enables you to manage and administer objects in addition to scheduling objects and viewing reports.

**Related Topics**

- *To specify scheduling information* on page 66

### Recurrence patterns

When scheduling an object, you can choose from the recurrence patterns summarized by the following table.

*Table 2-2: Recurrence patterns*

| Recurrence pattern | Description |
|---|---|
| Now | The object will be run as soon as the user clicks **Schedule**. |
| Once | The object will be run only once. It can be run now or in the future, or when a specified event has occurred. |
| Hourly | The object will be run every hour. You specify at what time it will start, as well as a start and end date. |
| Daily | The object will be run every day. It can be run once or several times a day. You can specify at what time it will run, as well as a start and end date. |
| Weekly | The object will be run every week. It can be run once a week or several times a week. You can specify on which days and at what time it will run, as well as and a start and end date. |
| Monthly | The object will be run every month or every several months. You can specify on which days of the month and at what time it will run, as well as a start and end date. |
| Day of Month | The object will be run on a certain day of every month. You can specify the day it will run, as well as a start and end date. |

| Recurrence pattern | Description |
|---|---|
| First Monday of Month | The object will be run on the first Monday of every month. You can specify a start and end date. |
| Last Day of Month | The object will be run on the last day of every month. You can specify a start and end date. |
| Day of Week of Month | The object will be run on a particular day of a particular week every month. You can specify the day and the week, as well as the start and end date. |
| Calendar | The object will be run on the dates specified in a calendar that has previously been created. |

## Run options and parameters

This section describes the Run parameters for scheduling an object. Not all parameters apply in all cases, but when they apply, their function is the same.

*Table 2-3: Run options*

| Run option | Description |
|---|---|
| X and N variables | Applies to certain Daily and Monthly recurrence patterns only. When you select a Run option that contains these variables, the system displays their default values. You can then change these values as needed.<br>For example, if you select the Daily recurrence pattern and the **Every N hour(s) and X minute(s)** Run option, you could specify to run the report every 4 (X) hours and 30 (N) minutes. If you don't change the X or N value, the system will run the report every hour. |
| Run Days | These options appear if you select the **Weekly** recurrence pattern. You can choose the days of the week on which you want your job to run by deleting the checkboxes of the appropriate days. |

| Run option | Description |
|---|---|
| Start Time | Applies to most, but not all recurrence patterns and Run options. The default is the current date and time. The system will run the object according to the schedule that you specified, as soon as it can, after the Start Time has passed.<br><br>For example, if you specify a start time that is three months into the future, the system won't run the object until the start date has passed, even if all the other criteria are met. After that, the system will run the report at the specified time. |
| End Time | Applies to most, but not all, recurrence patterns and Run options. The default is the current time and a date in the distant future, to ensure an object will be run indefinitely. Specify a different End Time if required. Once the End Time has passed, the system no longer runs the object. |
| Number of retries allowed | Always applies. The number of times the system attempts to process an object if the first attempt is not successful. By default, the number is zero. |

| Run option | Description |
| --- | --- |
| Retry interval in seconds | Always applies. The period, in seconds, that the system will wait before it attempts to process the object again if the first attempt is unsuccessful. |

## Subscription

A "subscription" allows users who were not specified as recipients of a publication to receive publication instances when the publication runs. Users can subscribe to a publication if they want to view the latest instance, or they can unsubscribe from a publication they no longer want to receive. If a user has the appropriate rights, the user can also subscribe and unsubscribe other users.

To subscribe to and unsubscribe from a publication, a user must have the following:

- Appropriate rights, including:
  - View right on the publication.
  - Subscribe to publications right on user accounts for Enterprise recipients.
- Access to InfoView or the CMC.
- A BusinessObjects Enterprise account.

**Note:**
Dynamic recipients cannot subscribe and unsubscribe themselves automatically.

**Related Topics**

- *To subscribe to or unsubscribe from a publication* on page 74

# Working with Publications

3

chapter

# About working with publications

This chapter contains the information that you need to design and schedule basic publications. It also contains information about additional Publishing features and tasks that you can perform after the design process.

The information in this chapter applies to all publication types. If you want information related to specific publication types, see these chapters:

- *Publishing Crystal Reports*
- *Publishing Web Intelligence Documents*
- *Publishing Desktop Intelligence Documents*

# Publication process

The publication process consists of various tasks that can be divided roughly into the following categories:

- Creating and designing basic publications.
- Improving performance with advanced features.
- Using design options for specific source document types.
- Post-design publication tasks.

**Creating and designing basic publications**

All publications require you to perform the following basic tasks:

1. Create a new publication object.
2. Select source documents to publish.
3. Specify recipients (Enterprise or dynamic).
4. Personalize the source content.
5. Specify formats and destinations.
6. Specify recurrence (scheduling) information.

For more information, see *Designing basic publications* on page 48.

**Improving performance with additional features**

After you have performed the basic publication design tasks, you can use additional features to improve the performance of your publication. These tasks are optional:

- Specify processing extensions for your publication.
- Specify a server group to process your publication.
- Set delivery rules.
- Specify a profile resolution method.
- Specify a report bursting method.

For more information, see *Using additional publication features* on page 67.

### Using design options for specific source document types

Depending on the type of publication you are designing, you also have these options available:

- For Crystal report publications, you can set print options, format merged PDFs, specify database logon and parameter information, and set delivery rules.

  For more information, see the chapter *Publishing Crystal Reports*.

- For Desktop Intelligence document publications, you can publish individual report tabs, specify prompt information, and set delivery rules.

  For more information, see the chapter *Publishing Desktop Intelligence Documents*.

- For Web Intelligence document publications, you can specify prompt information and publish individual report tabs.

  For more information, see the chapter *Publishing Web Intelligence Documents*.

### Post-design publication tasks

After you finish designing your publication, you can perform these tasks if necessary:

- Test the publication.
- Redistribute a successful publication instance.
- Retry a failed publication.
- View a publication result.
- Subscribe to or unsubscribe from a publication.

For more information, see *Post-design publication tasks* on page 72.

## Designing publications for use with Live Office

When you design publications that are intended for use with Live Office, keep the following considerations in mind:

- Dynamic content documents can consist of Crystal reports or Web Intelligence documents in their original formats only.
- Dynamic recipients are not supported.
- The only destination option that you can use is the default Enterprise location.
- If recipients receive multiple publication instances after personalization, only the first publication instance can be viewed from Live Office Client. This issue can occur if the recipient inherited multiple profile values from group membership. To work around this issue, you can assign profile values to a recipient explicitly instead.

**Related Topics**

- *Personalization* on page 26

## Rights required for Publishing

| Role | Task | Rights required |
|---|---|---|
| Document designer | Create the document on which the publication is based | None |
| Document designer | Add the document to the BusinessObjects Enterprise system | • View and Add rights on the folder or category to which the document will be added |
| Document designer | Create a document to be used as a dynamic recipient source | • View and Add rights on the folder or category to which the document will be added |
| Publisher | Create a publication | • Add right on the folder where the publication is saved<br>• View right on users and groups intended as recipients<br>• View right on the profile that is used for personalization<br>• View right on documents and other documents for the publications<br>• Schedule rights on the documents<br>• Subscribe to Publications rights on the Enterprise recipients |

| Role | Task | Rights required |
|---|---|---|
| Publisher | Schedule a publication | **Note:** It is recommended that only the publisher has these rights.<br>• View, Schedule, Add, and Modify Security rights on the publication<br>• Delete Instance right on the publication<br>• View right on users and groups intended as recipients<br>• View right on the profile that is used for personalization<br>• View and Schedule rights on the documents<br>• View and Refresh rights on the dynamic recipient source<br>• View and Refresh rights on the document on which a delivery rule is set<br>• Data Access right on any universes used by the publication's objects<br>• Data Access right on any universe connections used<br>• Add and View rights on recipients' Business Objects inboxes (when you schedule to inboxes)<br>• Subscribe to Publications rights on the recipients<br>• Print right on Crystal report source documents if the publisher wants to print publication instances<br>• **Schedule on behalf of other users** right on Enterprise recipients (if you use **One database fetch per recipient**) |
| Publisher | Retry a failed publication instance | • Same rights required to schedule a publication<br>• Edit right on the publication instance |

| Role | Task | Rights required |
|---|---|---|
| Publisher | Redistribute a publication instance | • View, Schedule, Add, and Modify Security rights on the publication<br>• Add and View rights on recipients' Business Objects inboxes<br>• View Instance and Edit rights on the publication instance |
| Recipient | View a publication | • View right on the publication<br>• View Instance right on the publication<br>**Note:**<br>You need these rights to view a publication object in the BusinessObjects Enterprise system. You do not need these rights to see content sent to a Business Objects inbox. |
| Recipient | Subscribe to or unsubscribe from a publication | • View right on the publication<br>• Subscribe to Publications rights on the Enterprise recipients |

## Publishers and recipients: Who has rights to view what?

Typically, the publisher (the user who owns and schedules the publication) can view all publication instances for all recipients; the recipients can view their personalized publication instances only. This rights setup ensures maximum security for publication data because it reserves the rights to schedule publications and to view all publication instances for the publisher only.

**Tip:**
If you are a publisher and want to add yourself to a publication as a recipient, use two user accounts for yourself, a Publisher account and a Recipient account. The Publisher account grants you the rights you require when you design and schedule publications, while the Recipient account grants you the rights of a typical recipient.

# Designing basic publications

To design a new publication, you first access the Publishing feature in BusinessObjects Enterprise. You can do this in the Central Management Console (CMC) or in InfoView depending on the rights that you have and your access to the web-based applications in BusinessObjects Enterprise.

At any point during the publication design process, you can save changes you made to the publication, close it, reopen it, and make further changes.

## To create a new publication in the CMC

This task lets you access the Publishing feature in the CMC and begin creating a publication.

1. Go to the "Folders" area of the CMC.
2. In the Tree panel, browse for the folder in which you want to create the publication.
3. Select the folder so that its contents are displayed in the Details panel.
4. Click **Manage** > **New** > **Publication**.

   The **New Publication** page appears.

On the **New Publication** page, you can specify all the information required for your publication, including source documents, recipients, delivery formats and destinations, and how those documents are personalized.

## To create a new publication in InfoView

This task lets you access the Publishing feature in InfoView and begin creating a publication.

1. Click **Document List**.
2. In the Tree panel, browse for the folder in which you want to create the publication.
3. Select the folder so that its contents are displayed in the Details panel.
4. Click **New** > **Publication**.

   The **New Publication** page appears.

On the **New Publication** page, you can specify all the information required for your publication, including source documents, recipients, delivery formats and destinations, and how those documents are personalized.

## To open an existing publication

Use this procedure to open an existing publication and edit its metadata.

1. Select the publication.
   - If you are in InfoView, click **Documents List** and browse for the publication.
   - If you are in the CMC, go to the "Folders" area and browse for the publication.
2. Open the publication's properties.
   - If you are in InfoView:
     a. Click **Actions** > **Properties**.
     b. On the navigation list, expand **Properties**.
   - If you are in the CMC:
     a. Click **Manage** > **Properties**.
     b. On the navigation list, expand **Properties**.

You can now edit the metadata for the publication.

## To enter general properties for a new publication

1. On the navigation list, click **General Properties**.
2. In the **Title** field, enter a title for the publication.

   **Note:**
   You must enter a title to proceed with the rest of the publication design process.

3. In the **Description** field, enter a description for the publication.
4. In the **Keywords** field, enter keywords that are associated with the publication's content.
5. If necessary, in the "Categories" area, choose a category in which you want to place the publication.

# Selecting documents for publication

## Publishing multiple documents

Publications are based on dynamic content documents and must include at least one Crystal report, Desktop Intelligence document, or Web Intelligence document. You can deliver multiple dynamic content documents and static documents as a single entity (for example, in a single email) in BusinessObjects Enterprise. You can also choose to zip the instances when they are delivered to recipients or, in the case of Crystal reports, to merge the instances into a single PDF with numbered pages.

If you design a publication with multiple documents in it, all dynamic content documents in that publication must be the same object type. For example, you can publish three Crystal reports in the same publication, but you cannot publish two Crystal reports and a Desktop Intelligence document.

A publication can also include static documents stored in the CMS repository such as the following:

- Microsoft Word/ Excel/ PowerPoint files
- Text files
- PDFs
- Agnostic documents

### To select source documents

After you enter general properties for the publication, you select source documents to include. Subsequent options vary depending on the dynamic content document type.

1. On the navigation list, click **Source Documents**.
2. Click **Add**.

   The "Select Source Documents" dialog box appears.

3. Browse for the source documents you want to include and select them.

   **Note:**
   Dynamic content documents must be the same document type.

**Tip:**
Use **CTRL** + **click** or **SHIFT** + **click** to select multiple source documents, or double-click a single source document to select it.

4. Click **OK**.

   The "Select Source Documents" dialog box closes. The source documents that you selected appear in the **Selected** list.

5. Select or clear the **Refresh At Runtime** check boxes that are next to the source documents.

   Your selections determine whether a particular source document is refreshed against the data source when the publication runs. If you do not need to refresh a source document, it is recommended that you clear the **Refresh At Runtime** check box for that document to improve publication performance.

If you plan to send the source documents as attachments or as a merged PDF, you can change the order in which the documents appear. To do this, select a document on the **Selected** list, and click **Move Up** or **Move Down**.

## Selecting recipients and personalizing recipient content

### To select Enterprise recipients

Perform this task if you want Enterprise recipients to receive the publication.

1. On the navigation list, click **Enterprise Recipients**.
2. In the "Available" area, browse for the users or groups that you want to include or exclude as recipients.
   a. On the navigation list, click **User List** to display a list of all users in BusinessObjects Enterprise, or click **Group List** to display a list of all groups.
   b. Select the users and groups in the details pane.

      **Tip:**
      Use **Shift** + **click** or **CTRL** + **click** to select multiple users or groups.

3. If you want to include the recipients you selected, move them to the **Selected** list.
4. If you want to exclude the recipients you selected, move them to the **Excluded** list.

## To specify dynamic recipients

To specify dynamic recipients, you must have a dynamic recipient source already designed and ready for use. The dynamic recipient source contains recipient data and can be a Crystal report, Desktop Intelligence document, Web Intelligence document, or custom-coded data provider.

For information about creating a custom-coded dynamic recipient source, see the *BusinessObjects Enterprise SDK Java Developer Guide*.

**Tip:**
It is recommended that you sort the recipient data according to the recipient ID field to enable more efficient processing of the publication.

Perform this task if you want recipients who are not BusinessObjects Enterprise users to receive the publication.

1. On the navigation list, click **Dynamic Recipients**.
2. On the **Choose the source for the dynamic recipients** list, choose the format of the dynamic recipient source.
3. In the right-hand pane, browse for the object you want to use as a dynamic recipient source, select it, and click **OK**.
4. If you chose to use a Web Intelligence or Desktop Intelligence document as a dynamic recipient source, on the **Select the datasource name for the document** list, select a query that appears in the document.

   **Note:**

   - Desktop Intelligence documents that are used as dynamic recipient sources and set to have their data purged must have **Refresh Document When Opening** enabled; otherwise, the document fails to provide dynamic recipient data. To enable this option, in Desktop Intelligence, open the document. Click **Tools** > **Options**. In the "Options" dialog box, click the **Save** tab and ensure the **Refresh Document When Opening** check box is selected. Re-export the document to the repository.

- Dynamic recipient data comes from the query and may not match the data that appears when you view the document. Depending on how the query is built, Web Intelligence and Desktop Intelligence dynamic recipient sources may contain values that do not correspond to data in the publication's source documents. For example, a filter in the report may exclude relevant values, or duplicate records may appear because the query has been set to retrieve duplicate rows. It is recommended that you review the full list of dynamic recipients during the publication design process.

5. On the **Recipient Identifier** list, select a field that contains the recipient identity values.
6. If necessary, on the **Full Name** list, select a field that contains the full names of recipients.
7. If you intend to deliver the publication to email addresses, on the **Email** list, select a field that contains the recipient email addresses.
8. Decide whether you want to distribute the publication to all dynamic recipients listed by the dynamic recipient source.
   - If you want to distribute the publication to all dynamic recipients, ensure **Use entire list** is selected.
   - If you want to include or exclude some dynamic recipients:
     a. Clear **Use entire list**.
     b. On the **Available** list, select the check boxes next to the recipients you want to include or exclude.
     c. If you want to include the recipients you selected, move them to the **Selected** list.
     d. If you want to exclude the recipients you selected, move them to the **Excluded** list.

After you specify dynamic recipients for the publication, you can personalize the publication for dynamic recipients by mapping a field in the source document to a column in the dynamic recipient source.

### Related Topics

- *Dynamic recipients* on page 21
- *To personalize a Crystal report by filtering fields* on page 83
- *To personalize a Desktop Intelligence document by filtering fields* on page 95
- *To personalize a Web Intelligence document by filtering fields* on page 105

- *Recommendations for using dynamic recipient sources* on page 109

### Personalizing dynamic content source documents

Dynamic content source documents can be Crystal reports, Desktop Intelligence documents, or Web Intelligence documents. The options in the "Personalization" section enable you to filter these source document types so that only relevant data is displayed for recipients. All dynamic content source documents can be personalized in two ways. How you personalize a dynamic content source document depends on the document type and the type of personalization that you want.

**Tip:**
To view a list of recipients who will receive unpersonalized publication instances after personalization, click **Advanced** on the navigation list and select **Display users who will receive the complete publication with no personalization applied**.

**Related Topics**
- *To personalize a Crystal report using parameter values* on page 82
- *To personalize a Crystal report by filtering fields* on page 83
- *To personalize a Desktop Intelligence document using a global profile target* on page 94
- *To personalize a Desktop Intelligence document by filtering fields* on page 95
- *To personalize a Web Intelligence document using a global profile target* on page 104
- *To personalize a Web Intelligence document by filtering fields* on page 105

## Specifying formats, destinations, and scheduling options

### To specify formats for a Crystal report

1. On the navigation list, click **Formats**.
2. On the **Title** list, select a Crystal report.

The "Format Options" area appears and lets you select the publication formats for the Crystal report you selected.

3. Select a format on the **Format Options** list, and click **Add**.

   The format you selected appears in the selected formats list underneath.

4. Select the format on the selected formats list.

   **Note:**
   Depending on the format option, the subsequent steps may not apply.

   Additional options appear that let you customize the format. For more information about some of these options, see *Additional customization options for Crystal reports formats* on page 55.

5. If you want to use the default export options defined in the source document, leave **Use the export options defined in the report** selected; otherwise, clear **Use the export options defined in the report**
6. Enter additional information to customize the appearance of the format you chose.
7. Repeat steps 4 to 6 for each format in which you want to publish the Crystal report.

After you finish, you must repeat steps 3 to 7 for each Crystal report in the publication.

#### Related Topics

- *Formats* on page 23
- *Possible formats* on page 24

## Additional customization options for Crystal reports formats

This section summarizes the formats for which additional customization options are available.

#### Microsoft Excel (97-2003)

The following options are available for Crystal reports that are published as Excel files:

- **Page Range**

  Click **All** to publish the entire report as an Excel file. Alternatively, click **Pages** and enter page range numbers in the **to** and **from** fields to publish specific report pages.

If you clear **Use the export options defined in the report**, the following options are also available:

- **Set Column Width**

  Click **Column width based on objects in the** and choose an option on the list to define column widths relative to objects in the report. Alternatively, click **Constant column width (in points)** and enter a numerical value in the field to define a constant width for all columns.

- **Export page header and page footer**

  Choose an option on the list to set how frequently headers and footers appear in the Excel file.

- **Create page breaks for each page**

  Select this option to create page breaks that reflect the page breaks in the report.

- **Convert date values to strings**

  Select this option to convert date values to text strings.

- **Show gridlines**

  Select this option to include gridlines in the Excel file.

#### Microsoft Excel (97-2003) (Data Only)

If you clear **Use the export options defined in the report** , the following options are available:

- **Set Column Width**

  Click **Column width based on objects in the** to define column widths relative to objects in the report, and choose an option on the adjacent list. Alternatively, click **Constant column width (in points)** to define a constant width for all columns and enter a numerical value in the adjacent field.

- **Export object formatting**

  Select this option to preserve object formatting.

- **Export images**

  Select this option to publish report images in the Excel file.

- **Use worksheet functions for summaries**

  Select this option to use the report summaries to create worksheet functions for the Excel file.
- **Maintain relative object position**

  Select this option to preserve the relative position of report objects.
- **Maintain column alignment**

  Select this option to preserve the column alignment from the report.
- **Export page header and page footer**

  Select this option to include headers and footers in the Excel file.
- **Simplify page headers**

  Select this option to simplify page headers.
- **Show group outlines**

  Select this option to show group outlines from the report.

#### Microsoft Word (97-2003)

The following options are available for Crystal reports that are published as Word files:

- **Page Range**

  Click **All** to publish the entire report as a Word file. Alternatively, click **Pages** and enter page range numbers in the **to** and **from** fields to publish specific report pages.

#### Microsoft Word - Editable (RTF)

The following options are available for Crystal reports that are published as editable Word files:

- **Page Range**

  Click **All** to publish the entire report as a Word file. Alternatively, click **Pages** and enter page range numbers in the **to** and **from** fields to publish specific report pages.

If you clear **Use the export options defined in the report**, the following options are also available:

- **Insert page break after each report page**

  Select this option to create page breaks that reflect the page breaks in the report.

#### PDF

The following options are available for source documents that are published as PDF files:

- **Page Range**

  Click **All** to publish the entire source document as a PDF file. Alternatively, click **Pages** and enter page range numbers in the **to** and **from** fields to publish specific pages.

If you clear **Use the export options defined in the report**, the following options are also available:

- **Create bookmarks from group tree**

  **Note:**
  If you plan to publish a Crystal reports publication as a merged PDF that contains a table of contents, you must select this option.

#### Rich Text Format (RTF)

The following options are available for Crystal reports and Desktop Intelligence documents that are published as rich text files:

- **Page Range**

  Click **All** to publish the entire source document as a PDF file, or click **Pages** and enter page range numbers in the **to** and **from** fields to publish specific pages.

#### Plain Text

If you clear the **Use the export options defined in the report** check box, the following options are available for Crystal reports and Desktop Intelligence documents that are published as plain text files:

- **Number of characters per inch**

  Enter a value to define how many characters appear per inch in the plain text file.

#### Paginated Text

If you clear the **Use the export options defined in the report** check box, the following options are available for Crystal reports that are published as paginated text files:

- **Number of Lines per Page**

  Enter a value to define how many lines will be on each page of the paginated text file.

- **Number of Characters per Inch**

  Enter a value to define how many characters appear per inch in the paginated text file.

#### Separated Values (CSV)

If you clear **Use the export options defined in the report**, the following options are available for Crystal reports that are published as comma-separated value files:

- **Delimiter**

  Enter the character you want to use as a delimiter.

- **Separator**

  Enter the character you want to use to separate values, or select **Tab**.

- **Mode**

  Select either standard or legacy mode. Standard mode lets you control how report pages and group headers and footers display in the CSV output and is the default option.

- **Report and page sections**

  Use the options in this area to set whether report and page sections are exported, and whether to isolate report and page sections.

- **Group sections**

Use the options in this area to set whether group sections are exported and whether to isolate group sections.

#### XML

If you clear **Use the export options defined in the report**, the following options are available for Crystal reports that are published in XML format:

- **XML Exporting Formats**

  Select an option on the list to specify the XML format.

### To specify formats for a Desktop Intelligence or Web Intelligence document

1. On the navigation list, click **Formats**.
2. On the **Document** list, select a document.
3. On the **Output Format** list, select the check boxes for the format or formats in which you want to publish the document.
4. With the format option highlighted on the **Output Format** list, in the "Output Format Details" area, choose whether to publish the entire document or one report tab in the document.
   - If you want to publish the entire document, leave **All reports** selected.
   - If you want to publish a single report tab, click **Select one report** and choose a report tab on the list.
5. Repeat step 4 for every format in which you want to publish the document.

After you finish this task for one document, you must repeat steps 2 to 5 for the other dynamic content source documents in the publication.

### To specify a destination for the publication

1. On the navigation list, click **Destinations**.
2. In the "Select Destinations" area, select the check box next to the destination that you want.

   **Tip:**
   If you do not want to keep publication instances on your system, deselect the default Enterprise location when you design the publication, and set

a low instance limit on the publication object. For more information about setting limits on objects, see the *BusinessObjects Enterprise Administrator's Guide*.

3. On the **Show options for selected destinations** list, click the destination option that you selected.

   Additional configuration options for the destination appear.

4. Enter additional information to customize the delivery of the publication to the destination.

   **Tip:**
   If you are sending a publication to the default Enterprise location and to recipient email addresses, you can embed a link to the Enterprise location in the email body. To do this, place your cursor in the **Message** field and click **Viewer Hyperlink** on the **Add placeholder** list that is under the **Message** field. The placeholder `%SI_VIEWER_URL%` is inserted into the email. This placeholder is replaced by a link when the publication is run. However, keep the following limitations in mind when you do this:

   - Dynamic recipients are unable to access the publication instance because they do not have BusinessObjects Enterprise accounts.
   - Enterprise recipients must have View rights on the publication to view publication instances.

**Related Topics**

- *Destinations* on page 23
- *Possible destinations* on page 62

### Possible destinations

<table>
<tr><th>Destination</th><th>Description</th></tr>
<tr><td>Default Enterprise location</td><td>The publication is accessible from the folder in which it was created. For the default destination, you have these options:<ul><li>Merge all PDF documents (Crystal reports only).</li><li>Package the publication as a ZIP file.</li></ul>Note:<br>If you distribute a publication to the default location or a shortcut to a recipient's Business Objects inbox, you must select a folder that is accessible to all recipients as the publication’s location.</td></tr>
<tr><td>Business Objects inbox</td><td>The publication is sent to the recipient's Business Objects inbox. For the Business Objects inbox destination, you have these choices:<ul><li>Deliver objects to each user.</li><li>Have the target name automatically generated, to enter a specific name for it, or to choose from a list of placeholders.</li><li>Have the publication sent as a shortcut or as a copy.</li><li>Merge all PDF documents (Crystal reports only).</li><li>Package the publication as a ZIP file.</li></ul></td></tr>
<tr><td>Email</td><td></td></tr>
</table>

| Destination | Description |
|---|---|
| | The publication is sent to recipients via email. For email recipients, it is recommended that you complete the **From** field. If you do not complete the **From** field, BusinessObjects Enterprise uses the email address associated with the publisher's account. If the publisher's account has no email address, BusinessObjects Enterprise uses the Destination Job Server's settings.<br><br>**Note:**<br>If there is no **From** value provided by the **From** field, the publisher's account, or the Destination Job Server, the publication will fail.<br><br>You also have these choices:<br>• Deliver objects to each user.<br>• Complete the **To** field or enter a placeholder for the email address.<br>• Complete the **Cc** field.<br>• Enter the subject or select a placeholder to use for this field.<br>• Enter text in the **Message** field to be delivered with your publication. You can also choose from a list of placeholders to use in the **Message** field and embed dynamic content document content in the body of the email.<br>• Attach source document instances to the email.<br>• Have the attachment name automatically generated, to enter a specific name for it, or to choose from a list of placeholders.<br>• Merge all PDF documents (Crystal reports only).<br>• Package the publication as a ZIP file.<br><br>**Note:**<br>• Before you use this destination, ensure that your email settings are configured properly on the Destination Job Server.<br>• If you are sending publications to recipients via email, ensure the placeholder %SI_EMAIL_ADDRESS% is in the **To** field and **Deliver objects to each user** is selected. |
| FTP server | |

<table>
<tr><th>Destination</th><th>Description</th></tr>
<tr><td></td><td>For FTP server, complete the Host field. If you do not complete the Host field, the option configured for the Destination Job Server will be used. You also have these choices:<ul><li>Specify a port number, a user name and password, and an account.</li><li>Enter a directory name.</li><li>Have the file name automatically generated, to enter a specific name for it, or to choose from a list of placeholders. If Specific name is selected, you can also choose to add a file extension.</li><li>Merge all PDF documents (Crystal reports only).</li><li>Package the publication as a ZIP file.</li></ul></td></tr>
<tr><td>Local disk</td><td>If you choose local disk as the destination, you must enter the directory for your publication. You also have these choices:<ul><li>Deliver objects to each user.</li><li>Have the file name automatically generated, to enter a specific name for it, or to choose from a list of placeholders. If you select a specific name, you can also choose to add a file extension.</li><li>Enter a user name and password to access the file location.</li><li>Merge all PDF documents (Crystal reports only).</li><li>Package the publication as a ZIP file.</li></ul></td></tr>
</table>

**Note:**

- **Deliver objects to each user** is selected by default for all destinations. However, in some cases, you may not want to deliver objects to each user. For example, three recipients have identical personalization values and thus receive the same data in their publication instances. If you clear **Deliver objects to each user**, one publication instance is generated and delivered to all three recipients. If you select **Deliver objects to each user**, the same publication instance is delivered three times (once for each recipient). Additionally, if you are sending the publication to an FTP server or local disk destination and some recipients share identical personalization values, you can clear **Deliver objects to each user** to decrease overall processing time.
- If you clear **Deliver objects to each user**, any placeholders that you use when you configure your destinations will contain the publisher's information and not the recipient's.

## To embed content from a dynamic content source document in an email

You can embed content from dynamic content documents in the body of an email. For Crystal reports, you can embed content from a report. For Desktop Intelligence and Web Intelligence documents, you can embed an entire document or a single report tab.

1. On the navigation list, click **Formats**.

   The "Formats" section appears.

2. Select the dynamic content document that you want to embed in the email.

| Document type | Selection method |
|---|---|
| Crystal report | On the **Title** list, select the Crystal report. |
| Desktop Intelligence document | On the **Document** list, select the Desktop Intelligence document. |
| Web Intelligence document | On the **Document** list, select the Web Intelligence document. |

3. Select mHTML as a publication format for the dynamic content document that you selected.

| Document type | Selection method |
|---|---|
| Crystal report | On the **Format Options** list, click **mHTML** and click **Add**. |
| Desktop Intelligence document | On the **Output Format** list, select the check box next to **mHTML**. |
| Web Intelligence document | On the **Output Format** list, select the check box next to **mHTML**. |

4. For Desktop Intelligence and Web Intelligence documents, choose whether to publish the entire document or one report tab in the document.
   a. Ensure **mHTML** is highlighted on the **Output Format** list.

   b. If you want to publish the entire document, leave **All reports** selected; if you want to publish a single report tab, click **Select one report** and choose a report tab on the list.

5. On the navigation list, click **Destinations**.

   The "Destinations" section appears.

6. In the "Select Destinations" area, select **Email**.
7. On the **Show options for** list, click **Email**.

   Additional configuration options for the email destination option appear.

8. In the **From** field, enter a name or email address.

   For example, you can enter Robert, Publisher, or publisher@businessobjects.com. If you enter a name, it will be appended to your email server (for example, Publisher@*emailserver*).

9. Enter a subject line and any text that you want the email to contain in the **Subject** and **Message** fields, respectively.
10. Place your cursor in the **Message** field where you want to embed the document content, and on the **Add placeholder** list under the **Message** field, click **Report HTML content**.

    `%SI_DOCUMENT_HTML_CONTENT%` appears in the **Message** field. When the publication is run, this placeholder is replaced by the personalized content of the dynamic content document you specified.

11. If your publication contains other source documents, ensure **Add Attachment** is selected and the options under it are configured properly.

    The other source documents in the publication will be added to the email as attachments when the publication runs.

## To specify scheduling information

Perform this task to specify scheduling information for the publication. The scheduling information you specify here can be changed when you schedule the publication to run.

1. On the navigation list, expand **Additional Options** and click **Recurrence**.
2. On the **Run object** list, choose a recurrence pattern for how often you want to run the publication.
3. If necessary, configure the run options and parameters for the recurrence pattern.

**Related Topics**

- *Scheduling* on page 34
- *Recurrence patterns* on page 34
- *Run options and parameters* on page 36

# Using additional publication features

The tasks in this section are optional and are not required to successfully design and schedule a publication. However, you can perform these tasks to improve the performance of your publication.

## To configure email notification for successful or failed publication jobs

If you want to use the Destination Job Server defaults for email notification, the Destination Job Server must have been configured properly.

Perform this task if you want to receive email notification after a publication job has run.

**Note:**
This feature is available in the CMC only.

1. On the navigation list, expand **Additional Options** and click **Notification**.
2. Expand **Email Notification: Not in use**.
3. If you want to receive email notification for successful publication jobs, select **A job has been run successfully** and configure the options that appear below.
   - Click **Use the Job Server's defaults** if you want to use the Destination Job Server defaults.
   - Click **Set the values to be used here** if you want to use your own settings and enter your settings in the appropriate fields.
     - In the **From** field, enter an email address or a name.
     - In the **To** field, enter an email address to which the email will be sent.
     - In the **Cc** field, enter email addresses for any users whom you want to receive email notification.
     - In the **Subject** field, enter a subject line for the email.

- In the **Message** field, enter a message that will accompany the notification email.

4. If you want to receive email notification for failed publication jobs, select **A job has failed to run** and configure the options that appear below.
   - Click **Use the Job Server's defaults** if you want to use the Destination Job Server defaults.
   - Click **Set the values to be used here** if you want to use your own settings and enter your settings in the appropriate fields.
     - In the **From** field, enter an email address or a name.
     - In the **To** field, enter an email address that the email will be sent to.
     - In the **Cc** field, enter email addresses for any users whom you want to receive email notification.
     - In the **Subject** field, enter a subject line for the email.
     - In the **Message** field, enter a message that will accompany the notification email.

## To enable auditing notification for publication jobs

Perform this task if you want to enable auditing notification for publication jobs. For more information about auditing, see the *BusinessObjects Enterprise Administrator's Guide*.

**Note:**
This feature is available in the CMC only.

1. On the navigation list, expand **Additional Options** and click **Notification**.
2. Expand **Audit Notification: Not in use**.
3. If you want to audit successful publication jobs, select **A job has been run successfully**.
4. If you want to audit failed publication jobs, select **A job has failed to run**.

## To specify events

Event-based scheduling provides you with additional control over scheduling publications: you can set up events so that publications are processed only after a specified event occurs.

Perform this task if your publication job runs after an event occurs, or if your publication job triggers other events upon completion.

For more information about events, see the *BusinessObjects Enterprise Administrator's Guide*.

1. On the navigation list, expand **Additional Options** and click **Events**.
2. If you want to specify file-based and custom events for your publication, move them from the **Available Events** list to the **Events to wait for** list.

   These events trigger the publication job to run.
3. If you want to specify schedule events for your publication, move them from the **Available Schedule Events** list to the **Events to trigger on completion** list.

   These events occur after the publication job has run.

## To set a server group option

Perform this task if you want to use a specific server to process the publication. For more information about server groups, see the *BusinessObjects Enterprise Administrator's Guide*.

**Note:**
You cannot schedule publications across sites in federations.

1. On the navigation list, expand **Additional Options** and click **Scheduling Server Group**.
2. Choose a server group option.

| Option | Description |
|---|---|
| **Use the first available server** | The publication job is processed by the first available server with sufficient capacity. This option is selected by default.<br><br>**Note:**<br>This is the only available option if no server groups exist in the CMC. |
| **Give preference to servers belonging to the selected group** | The publication job first tries to run using the servers in the server group you specify. If these servers have insufficient capacity, the publication then tries to run using the servers in other server groups. When you choose this option, you also must choose a server group on the list of available server groups. |
| **Only use servers belonging to the selected group** | The publication job only uses the servers in the server group you specify. When you choose this option, you also must choose a server group on the list of available server groups. |

## To specify publication extensions

Before you use a publication extension, the extension must be deployed on any machines that run the Adaptive Processing Server. The location varies depending on the operating system.

| Operating system | Location |
|---|---|
| Windows | `C:\Program Files\Business Objects\common\4.0\java\lib\publishingPlugins` |
| Unix | `INSTALLDIR/bobje/java/lib/publishingPlugins` |

After the extension is deployed, you must restart the Adaptive Processing Server and any other servers that host a Publishing Service.

For more information about publication extensions, see the *BusinessObjects Enterprise SDK Java Developer Guide*.

1. On the navigation list, expand **Additional Options** and click **Publication Extension**.
2. In the **Publication Extension Name** field, enter the name of the extension.
3. In the **Class Name** field, enter the fully qualified class name for the extension.
4. If necessary, enter a parameter in the **Parameter** field.
5. If you want the extension to be used after processing but before delivery, click the **Add** button above **Before Publication Delivery**.

   The extension is added to the **Before Publication Delivery** list.
6. If you want the extension to be used after delivery, click the **Add** button above **After Publication Delivery**.

   The extension is added to the **After Publication Delivery** list.
7. Repeat steps 2 to 6 for each extension that you want to add.

   **Tip:**
   Click **Move Up** or **Move Down** under each list to configure the order in which the extensions will be executed.

**Related Topics**
- *devlibrary.businessobjects.com*

# To specify a profile resolution method

The profile resolution method you specify determines whether instances will be merged or delivered as separate documents if a profile conflict occurs.

1. On the navigation list, expand **Additional Options** and click **Advanced**.
2. Under **Profile Resolution Method**, click **Merge** or **Do not merge**.

**Related Topics**
- *Resolving conflicts between profiles* on page 31

## To specify a report bursting method

The report bursting method you specify determines how the source documents are personalized, processed, and delivered.

**Note:**

- If your publication is intended for dynamic recipients only, **One database fetch per recipient** is unavailable.
- If your publication contains Desktop Intelligence documents for which **Refresh At Runtime** is disabled, you cannot use **One database fetch per recipient** or **One database fetch for each batch of recipients**.
- For Desktop Intelligence documents, expression profile values are only compatible with the report bursting method **One database fetch for all recipients**.

1. On the navigation list, expand **Additional Options** and click **Advanced**.
2. Click one of the options under **Report Bursting Method**.

**Related Topics**

- *Report bursting* on page 16

# Post-design publication tasks

The tasks in this section are optional and can be performed after the publication design process.

## Finalizing the publication

At any point during or after the design process, you can use the "Summary" page to view a summary of the publication's properties. The "Summary" page displays the publication's title, location, description, and source documents. It also shows you how many recipients will receive the publication according to recipient type (Enterprise or dynamic), how the publication is personalized, and the distribution format and destination.

To access the "Summary" page, click **Summary** on the navigation list. You can use the other options on the navigation list to change the properties, or save the publication and schedule it.

## To test a publication

Test mode allows you to test a publication by sending it to yourself before sending the publication to its actual recipients. You will receive the same information that recipients receive. The destinations are automatically updated so that your Business Objects inbox or your email address is used instead of those belonging to the publication recipients. You can also exclude some recipients from the original group of recipients for test mode.

1. On the navigation list, click **Test Mode**.
2. If necessary, modify the list of Enterprise recipients.
   a. On the navigation list, click **Enterprise Recipients**.
   b. Under "Email Recipients", in the **To** field, enter your own email address.

      This field only appears if your publication is intended for an email destination. BusinessObjects Enterprise sends all email publication instances generated during test mode to the email address you specify here.
   c. Move users or groups from the **Available** list to the **Selected** list or **Excluded** list.
3. If necessary, modify the list of dynamic recipients.
   a. On the navigation list, click **Dynamic Recipients**.
   b. Under "Email Recipients", in the **To** field, enter your own email address.

      This field only appears if your publication is intended for an email destination. BusinessObjects Enterprise sends all email publication instances generated during test mode to the email address you specify here.
   c. Ensure the columns that are mapped to recipient IDs, full names, and email address are correct.
   d. Select or clear **Use entire list**.
   e. If **Use entire list** is cleared, move the users or groups that you want to include or exclude from the **Available** list to the **Selected** list or **Excluded** list.
4. Click **Test**.

   The publication is run in test mode.

## To subscribe to or unsubscribe from a publication

Enterprise recipients with the appropriate rights can subscribe to or unsubscribe themselves from a publication. They can also do this with publication instances. For instance, if a publication is scheduled to run twice a week, recipients can subscribe to the first publication instance but not the second.

**Note:**
Dynamic recipients cannot subscribe and unsubscribe themselves automatically.

1. Browse for the publication and select it.
2. On the **Actions** menu, click **Subscribe** or **Unsubscribe**.

   If you clicked **Subscribe**, you are added to the publication as a recipient; if you clicked **Unsubscribe**, you are removed from the publication as a recipient.

**Tip:**
To subscribe to or unsubscribe from publication instances, select the publication and click **Actions** > **History**. Select the publication instance and click **Actions** > **Subscribe** or **Actions** > **Unsubscribe**.

## To schedule a publication to run

After you have designed a publication and saved it, you can schedule it to run.

When you schedule the publication, you can use the settings that you made in the "Recurrence" section, or you can enter new settings. You can also change the recipients each time you schedule a publication.

1. Close the publication design page.
2. Select the publication.
3. Click **Actions** > **Schedule**.
4. Ensure that the recurrence information is correct.
5. Click **Schedule**.

   The publication is run as specified.

**Tip:**
If you want to view the progress of the publication job as it is running, click **Actions** > **History**. In the **Status** column, click the status (Success, Failed, or Running), and then click the **View Log File** link at the bottom of the "Publication History" dialog box.

**Related Topics**

- *Recurrence patterns* on page 34
- *Run options and parameters* on page 36

## Viewing publication results

### Viewing publication results as a publisher

You can view the results of a publication in various ways. When the publication runs, you are taken to the publication history, which lists publication instances, the times at which the publication was run, and whether the publication succeeded or failed. In the **Instance Time** column, you can click the link for a publication instance to view the instances that were generated for all recipients when the publication was run at that time.

**Tip:**
To access the publication history at any time, select the publication and go to **Actions** > **History** in InfoView or the CMC.

### Viewing log files for publication jobs

Log files are useful if you need to troubleshoot a publication or identify which recipients did not receive publication instances. BusinessObjects Enterprise logs the publication job details as each batch of personalized publication instances is processed, and then consolidates these details into one or more log files. The maximum log file size is 10 MB and is non-configurable. If you run a high-volume publication with many details, the publication instance can have several log files.

You can view log files for a publication instance in two ways:

- To view the last log file in a series, click **Actions** > **History**. In the **Status** column, click the status (Success, Failed, or Running), and then click the **View Log File** link at the bottom of the "Publication History" dialog box.

**Tip:**
You can also do this as the publication is running.

- To view all log files, click **Actions** > **History**. In the **Instance Time** column, click the link for a publication instance. The log files are listed after the personalized instances.

Log files are updated with new details every two minutes. If your publication job has been running less than two minutes, the log file may have a status of Pending.

#### Viewing publication results as a recipient

The ways in which you can view a publication are summarized in the following table.

| Destination | How to view the publication result |
| --- | --- |
| Default Enterprise location | As a recipient, you can view only your personalized publication instance in BusinessObjects Enterprise. You cannot view publication instances that have been personalized for other recipients.<br><br>**Note:**<br>Dynamic recipients cannot log into BusinessObjects Enterprise to view publication results.<br><br>1. Launch the CMC.<br>• In Windows, go to **Start** > **Programs** > **BusinessObjects XI 3.1** > **BusinessObjects Enterprise** > **BusinessObjects Enterprise Central Management Console**.<br>• Alternatively, open your web browser and type the following:<br>http://`servername`:`connectionport`/CmcApp<br>Here `servername` represents your CMS name and `connectionport` represents the connection port number that was specified during installation. The default connection port number is 8080.<br><br>2. Enter your logon credentials.<br>• In the **System** field, ensure the CMS name and CMS port are correct.<br>• Enter your user name and password.<br>• On the **Authentication** list, select the authentication type.<br><br>3. Click **Log On**.<br>4. Go to the "Folders" area, navigate to the publication, and select it.<br>5. Click **Actions** > **History**.<br>6. Click the link in the **Instance Time** column.<br>7. Double-click the instance that you want to view. |
| Business Objects inbox | |

<table>
<tr><th>Destination</th><th>How to view the publication result</th></tr>
<tr><td></td><td>
Note:<br>
Dynamic recipients cannot log into InfoView to view publication results.
<ol>
<li>Launch InfoView.
<ul>
<li>In Windows, go to Start > Programs > BusinessObjects XI 3.1 > BusinessObjects Enterprise > BusinessObjects Enterprise Java InfoView or BusinessObjects Enterprise .NET InfoView.</li>
<li>Alternatively, open your web browser and type the following:
<ul>
<li>Java InfoView<br><br>http://servername:connectionport/InfoViewApp<br><br>Here servername represents your CMS name and connectionport represents the connection port number that was specified during installation. The default connection port number is 8080.</li>
<li>.NET InfoView<br><br>http://servername/InfoViewApp/logon.aspx</li>
</ul></li>
</ul></li>
<li>Enter your logon credentials.
<ul>
<li>In the System field, ensure the CMS name is correct.</li>
<li>Enter your user name and password.</li>
<li>On the Authentication list, select the authentication type.</li>
</ul></li>
<li>Click Log On.</li>
<li>Click My Inbox.</li>
<li>Double-click the instance that you want to view.</li>
</ol>
</td></tr>
<tr><td>Email</td><td>Log on to your email to view the embedded publication content or download the attachment or attachments.</td></tr>
<tr><td>FTP server</td><td>Log on to your FTP host.</td></tr>
<tr><td>Local disk</td><td>Navigate to the location that was specified when the publication was designed.</td></tr>
</table>

## To redistribute a publication instance

You can redistribute successful publication instances to Enterprise and dynamic recipients that were specified for the original publication run. This feature is useful if you want to resend an instance to a recipient but you do not want to rerun the entire publication.

1. Browse for the publication and select it.
2. Click **Actions** > **History**.

   The history of the publication is displayed.
3. Select a successful publication instance.
4. Click **Actions** > **Redistribute**.
5. Choose the recipients who will receive redistributed instances.

   **Note:**
   Only recipients that were specified when the publication was run originally can receive redistributed instances.

   - If you want to redistribute an instance to an Enterprise recipient:
     a. Expand **Enterprise Recipients**.
     b. Move the Enterprise recipient from the **Available** list to the **Selected** list.
   - If you want to redistribute an instance to a dynamic recipient:
     a. Expand **Dynamic Recipients**.
     b. Ensure the columns that are mapped to recipient IDs, full names, and email addresses are correct.
     c. If you want to redistribute the publication to all dynamic recipients, select **Use entire list**; otherwise, clear it.
     d. Move the dynamic recipient from the **Available** list to the **Selected** list.
6. Click **Redistribute**.

   The history of the publication is displayed, and the instance that you chose to redistribute has a status of Running. The date displayed in the **Instance Time** column is updated to reflect the redistribution time.

## To retry a failed publication

Before you begin, it is recommended that you view the log file for the failed publication instance, address any errors, and reschedule the publication.

1. Select the publication that has the failed publication instance.
2. Click **Actions** > **History**.

   The publication history is displayed.
3. Select the failed publication instance.
4. Click **Actions** > **Retry**.

   The instance status changes to Running.

If your publication fails again, refer to the new log file and fix any errors that occurred.

# Publishing Crystal Reports

chapter 4

# About publishing Crystal reports

The tasks in this section apply to Crystal report publications. You can do the following with Crystal reports in publications:

- Personalize Crystal reports based on parameters, profiles, or values in a dynamic recipient source.
- Set delivery rules for conditional processing of a publication.
- Merge Crystal reports into a PDF and format it.
- Set print options for when the publication runs.
- Configure parameters and database logon information for Crystal reports.

For information about general publication tasks, see the *Working with Publications* chapter.

# Personalizing Crystal reports

## To personalize a Crystal report using parameter values

**Note:**
To perform this task, the Crystal report must already contain parameters.

The "Personalization" section lets you personalize a Crystal report for recipients based on the predefined parameter values for each recipient.

Personalizations that are based on parameter values may be overridden by other personalization methods. For example, if a profile is mapped to a parameter, and the profile value for an Enterprise recipient conflicts with the parameter value, the profile value will override the parameter value when the publication runs. Similarly, if a personalization value in the dynamic recipient source conflicts with a parameter value for a dynamic recipient, the parameter value will be overridden when the publication runs.

**Note:**
It is recommended that you personalize Crystal reports with local profile targets when possible. Parameter-based personalization requires one database fetch per recipient when the parameter is used in a record selection

formula, command, table or stored procedure. This can increase publication processing time.

1. On the navigation list, click **Personalization**.
2. In the "Parameters" area, ensure the default values for the listed parameters are correct.

   If you want to change a default value, click the **Edit** button that is next to the parameter value. Select or enter the parameter value, and click **OK**.
3. If you want to override the default parameter personalization with Enterprise recipients' profile values, choose a profile from the list in the **Enterprise Recipient Mapping** column.

   **Note:**

   - This option only appears if your publication is intended for Enterprise recipients.
   - If you are only using default parameter values to personalize a report, it is recommended that you set **Enterprise Recipient Mapping** to **Default**.
4. If you want to override the default parameter personalization with dynamic recipients' personalization values, choose a dynamic recipient source column from the list in the **Dynamic Recipient Mapping** column.

   **Note:**

   - This option only appears if your publication is intended for dynamic recipients.
   - If you are only using default parameter values to personalize a report, it is recommended that you set **Dynamic Recipient Mapping** to **Not Specified**.

## To personalize a Crystal report by filtering fields

Perform this task if you want to personalize a Crystal report by filtering a field in the Crystal report. When you use filters, a ViewTime selection formula is added to the report to filter data. This formula is applied when the publication runs and is not saved in the report. You can filter multiple fields in a Crystal report.

**Note:**
Static-value profile values can filter string fields in Crystal reports only. To filter other types of fields, use expression profile values. If you map the incorrect type of field to the profile, personalization will fail.

1. On the navigation list, click **Personalization**.
2. In the "Filters" area, choose a Crystal report field from the list in the **Report Field** column.

   The list of available fields includes all database fields and recurring formulas in the main report or non-on-demand subreports.
3. Choose a profile from the list in the **Enterprise Recipient Mapping** column.

   This setting maps the report field to the profile values that are defined for Enterprise recipients.

   **Note:**
   This option only appears if your publication is intended for Enterprise recipients.
4. Choose a dynamic recipient source column from the list in the **Dynamic Recipient Mapping** column.

   This setting maps the report field to a column in the dynamic recipient source that contains corresponding values.

   **Note:**
   This option only appears if your publication is intended for dynamic recipients.
5. Repeat steps 2 to 4 for every report field that you want to filter.

**Related Topics**

- *Personalization* on page 26
- *How profiles work* on page 28
- *Profile targets and profile values* on page 28

# Setting delivery rules on Crystal reports

## To set a global delivery rule on a Crystal report

**Note:**
The Crystal report that you want to set a global delivery rule for must contain an alert.

Global delivery rules determine whether a publication will be processed and delivered for all recipients. You can set a global delivery rule on any Crystal report in the BusinessObjects Enterprise system.

1. On the navigation list, expand **Additional Options** and click **Delivery Rules**.
2. In the "Global Delivery Rule" area, click **Browse**.

   A dialog box appears and lets you select the Crystal report on which the global delivery rule will be set.
3. Browse for the Crystal report, select it, and click **OK**.

   The dialog box closes.
4. On the **Condition** list, select the alert value that the report must have for the global delivery rule to be met.

**Related Topics**

- *Delivery rules* on page 18
- *To set a recipient delivery rule on a Crystal report* on page 85

## To set a recipient delivery rule on a Crystal report

Recipient delivery rules determine whether a publication is delivered to a particular recipient after processing and personalization.

1. On the navigation list, expand **Additional Options** and click **Delivery Rules**.
2. In the "Recipient Delivery Rule" area, click **Deliver individual document when condition is met** or **Deliver all documents only when all conditions are met**.

3. On the list next to each report, specify a condition that must be met for the publication to be delivered.

   The default delivery rule settings are summarized in the following table. If a report contains alerts, options that are based on alert values are also available.

| Delivery rule option | Description |
|---|---|
| **Always deliver** | The report is always delivered to the recipient. |
| **Never deliver** | The report is never delivered to the recipient. This option is useful if you want to exclude a Crystal report from a particular publication run without redesigning the entire publication. |
| **Deliver only if report contains data** | The report is delivered to the recipient only if it contains data for that recipient after personalization. This option is useful if you want to decrease the processing load for large publications. |

### Related Topics

- *Delivery rules* on page 18
- *To set a global delivery rule on a Crystal report* on page 85

# PDF merging for Crystal reports

You can merge PDF instances of Crystal reports and static PDF documents into a single PDF for the convenience of your recipients. Static source documents that are not PDF files are excluded from the merged PDF. All static PDF source documents are included in the merged PDF.

You can also do the following with a merged PDF:

- Add and format a table of contents.
- Insert running page numbers.
- Add user and owner passwords that are required to view and edit the PDF.
- Set restrictions on what recipients can do with the PDF.

## To format the merged PDF

Before you begin, ensure the following:

- The Crystal reports that you want to include in the merged PDF have titles. To set the title for a report, open the report in Crystal Reports and go to **File** > **Summary Info**. On the **Summary** tab, in the **Title** field, enter a title for the report. Save the report and re-export it to the repository.
- In the "Source Documents" section, the Crystal reports and PDFs that you want to merge appear in the correct order.
- In the "Formats" section, **PDF** is selected as a format for each Crystal report that you want to include in the merged PDF.
- In the "Destination" section, **Merge Exported PDF** is selected for each destination to which you want to send the merged PDF.

The options in the **Merged PDF Options** section let you customize the merged PDF instance generated from a Crystal report publication.

1. On the navigation list, expand **Additional Options** and click **Merged PDF Options**.
2. Create and format a table of contents for the merged PDF.

   **Note:**
   To enable this format option, in the "Formats" section, select a Crystal report on the **Title** list. Clear **Use the export options defined in the report** and select **Create bookmarks from group tree**. If you do not do this, the Crystal report does not appear in the table of contents for the merged PDF.

   a. Select **Create Table of Contents**.

      The format options for the table of contents are available.

   b. In the **Title** field, enter a title for the table of contents.
   c. Format the font, font size (in points), and font color that the title and the items in the table of contents will have.

3. Set the page number format options for the merged PDF.
   a. Select **Apply Running Page Numbers**.

      The format options for page numbers are available.

   b. In the **Number Format** field, enter the format in which you want the page numbers to appear.

By default, the format is set to Page &p of &P. You can change this format, but you must use &p as a placeholder for the current page number and &P as a placeholder for the total number of pages.

   c. On the **Number Location** list, choose the page number orientation for the merged PDF.
   d. Format the font, font size (in points), and font color that the page numbers will have.
   e. If you want the table of contents to have page numbers, select **Apply page numbers to Table of Contents pages**.

4. Set recipient logon credentials and permissions for recipient actions.
   a. In the **User Password** field, enter a password that recipients must enter to view the merged PDF.
   b. In the **Owner Password** field, enter a password that recipients must enter to edit the merged PDF.
   c. Set permissions for user actions by selecting or clearing the appropriate check boxes.

   These permissions are summarized in the following table.

| Option | Description |
|---|---|
| **Allow Printing** | Select this option to allow recipients to print the PDF. |
| **Allow Modification of Contents** | Select this option to allow recipients to modify the PDF. |
| **Allow Copy and Paste** | Select this option to allow recipients to copy and paste PDF contents. |
| **Allow Modification of Annotations** | Select this option to allow recipients to modify annotations in the PDF. |

# Other Crystal report publication design tasks

## To set print options for a Crystal report in a publication

If you plan to use the default printer, ensure that the printer is installed and configured properly.

**Note:**
The Crystal Reports Job Server must run under an account that has sufficient privileges to access the printer you specify. See the “Managing and Configuring Servers” chapter in the *BusinessObjects Enterprise Administrator's Guide* for more information.

You can choose to print instances in Crystal reports format each time the publication runs using the Crystal Reports Job Server's default printer or a different printer. BusinessObjects Enterprise prints the instances after the publication is personalized but before delivery.

1. On the navigation list, expand **Additional Options** and click **Print Settings**.
2. On the **Title** list, select a Crystal report that you want to print when the publication is run.
3. Select **Print Crystal reports**.

4. Leave **Default printer** selected if you want to print to the Job Server's default printer; otherwise, select **Specify a printer**.
5. Enter a printer's path and name.
   - If your job server is using Windows, in the **Specify a printer** field, type:

     *printserver**printername*

     Here *printserver* is the name of your printer server, and *printer name* is the name of your printer.
   - If your job server is running on UNIX, in the **Specify a printer** field, type the print command that you normally use. For instance, type:

     lp -d *printername*

     **Note:**
     Ensure that the printer you are using (on UNIX) is “shown” and not “hidden”.
6. Select the number of copies and choose the print page range.
7. Set the collation and page scaling options.
8. If you want to center report content on the page, select **Center the page**.
9. If the Crystal report is wide and you want it to fit on one page when it prints, select **Fit horizontal pages into one page**.

## To configure database logon information for a Crystal report

Before you begin, it is recommended that you ensure the database settings for the Crystal report are correct. In the "Folders" area of the CMC, select the Crystal report and go to **Manage** > **Default Settings** > **Database Configuration** to check the database information or enter new information.

In some cases, you may need to modify the data source information that a Crystal report references in the Crystal report itself. To do this, open the Crystal report in Crystal Reports and go to **Database** > **Set Datasource Location**. In the "Set Datasource Location" dialog box, select a connection or create a new connection.

This task lets you modify the database logon information that recipients require to log on to the database and refresh the data in the Crystal report.

1. On the navigation list, expand **Additional Options** and click **Database Logon**.
2. On the **Title** list, select a Crystal report .

   The database information for that Crystal report appears below the **Title** list.
3. Ensure the information that appears in the **Database Server** and **Database** fields is correct.
4. In the **User** field, enter a user name that recipients must use to log on.
5. In the **Password** field, enter a password.

# Publishing Desktop Intelligence Documents

chapter 5

# About publishing Desktop Intelligence documents

The tasks in this chapter apply to Desktop Intelligence document publications only. You can do the following with Desktop Intelligence documents in publications:

- Personalize the data that recipients see using global or local profile targets.
- Set delivery rules to conditionalize processing and delivery.
- Change the default prompt value for a Desktop Intelligence document.

For information about general publication tasks, see the *Working with Publications* chapter.

# Personalizing Desktop Intelligence documents

## To personalize a Desktop Intelligence document using a global profile target

**Note:**
To use this personalization option, the profile that you specify must have a global profile target.

The "Global Profiles" area of the "Personalization" section lets you personalize a Desktop Intelligence document for Enterprise recipients by filtering a global profile target.

1. On the navigation list, click **Personalization**.
2. In the "Global Profiles" area, choose a profile from the list in the **Enterprise Recipient Mapping** column.

   This setting maps the Desktop Intelligence document to the universe field (the global profile target) that is filtered for Enterprise recipients.

**Related Topics**

- *Personalization* on page 26
- *How profiles work* on page 28

- *Profile targets and profile values* on page 28

## To personalize a Desktop Intelligence document by filtering fields

Perform this task if you want to personalize a Desktop Intelligence document by filtering a field in the document.

**Note:**
Static-value profile values can filter string fields in source documents only. To filter other types of fields, use expression profile values. If you map the incorrect type of field to the profile, personalization will fail.

1. On the navigation list, click **Personalization**.
2. Click **Add**, and type a field name in the field in the **Report Field** column.

   **Note:**
   You must type the field name exactly as it appears in the Desktop Intelligence document; otherwise, personalization will fail.

3. Choose a profile from the list in the **Enterprise Recipient Mapping** column.

   This setting maps the field to the profile values that are defined for Enterprise recipients.

4. Choose a dynamic recipient source column from the list in the **Dynamic Recipient Mapping** column.

   This setting maps the field in the Desktop Intelligence document to a column in the dynamic recipient source that contains corresponding values.

5. Repeat steps 2 to 4 for every field that you want to filter.

**Related Topics**

- *Personalization* on page 26
- *How profiles work* on page 28
- *Profile targets and profile values* on page 28
- *Filtering Desktop Intelligence documents at the query level or cube level* on page 96

## Filtering Desktop Intelligence documents at the query level or cube level

The settings you enter in the "Personalization" section and the report bursting method you choose in the "Advanced" section work together to personalize the Desktop Intelligence document on the cube level or query level. These setting and method combinations are summarized in the following table.

| Filter level | Report bursting method | Personalization section setting | Other details |
|---|---|---|---|
| Cube | **One database fetch for all recipients** | In the field in the **Report Field** column, enter a variable name or an object. | The data source logon credentials of the publisher are used for the data refresh. One data refresh occurs. There are no possible universe connection overloads. |
| Query | **One database fetch for each batch of recipients** | In the field in the **Report Field** column, enter `class_name.object_name` if the document uses one universe, or `universe_name.class_name.object_name` if the document uses multiple universes.<br><br>Here `universe_name` represents the universe, `class_name` represents the class, and `object_name` represents the object. | The data source logon credentials of the publisher are used for the data refresh. Multiple data refreshes occur. There are no possible universe connection overloads. |
| Query | **One database fetch per recipient** | In the field in the **Report Field** column, enter `class_name.object_name` if the document uses one universe, or `universe_name.class_name.object_name` if the document uses multiple universes.<br><br>Here `universe_name` represents the universe, `class_name` represents the class, and `object_name` represents the object. | The data source logon credentials of the recipient are used for the data refresh. Multiple data refreshes occur. Universe connection overloads are possible. |

### Related Topics

- *Personalization* on page 26

* *Report bursting* on page 16
* *To personalize a Desktop Intelligence document by filtering fields* on page 95

## Supported operators for Desktop Intelligence expression profile values

You can use expression profile values with any report bursting method to personalize Desktop Intelligence documents. The following table lists operators that can be used in expression profile values for Desktop Intelligence documents. For more information about creating and managing profiles, see the *BusinessObjects Enterprise Administrator's Guide*.

**Note:**
Complex operators such as AND or OR are not supported in Desktop Intelligence expression profile values if you use **One database fetch for each batch of recipients** or **One database fetch per recipient**. However, they are supported if you use **One database fetch for all recipients**.

| Operator | Description |
|---|---|
| > | Greater than |
| >= | Greater than or equal to |
| < | Less than |
| <= | Less than or equal to |
| <> | Different from |

| Operator | Description |
|---|---|
| = | Equal to |
| InList | Inlist operator |
| Between | Between operator |

# Setting delivery rules on Desktop Intelligence documents

## To set a global delivery rule on a Desktop Intelligence document

Global delivery rules determine whether a publication will be processed and delivered for all recipients. You can set a global delivery rule on one of the Desktop Intelligence source documents in the publication or on a Desktop Intelligence document that is not part of the publication (for example, a dynamic recipient source). For more information about Desktop Intelligence syntax, see the *Desktop Intelligence Online Help*.

1. On the navigation list, expand **Additional Options** and click **Delivery Rules**.
2. In the "Global Delivery Rule" area, click **Browse**.

   A dialog box appears that lets you select a Desktop Intelligence document on which the global delivery rule will be set.
3. Browse for the Desktop Intelligence document, select it in the right-hand pane, and click **OK**.

   The dialog box closes.
4. In the **Condition** field, enter a Desktop Intelligence formula expression that must be valid for the global delivery rule to be met.

**Related Topics**

- *Delivery rules* on page 18
- *To set a recipient delivery rule on a Desktop Intelligence document* on page 100

### To set a recipient delivery rule on a Desktop Intelligence document

Recipient delivery rules determine whether a publication is delivered to a particular recipient after processing and personalization. You can set recipient delivery rules on multiple Desktop Intelligence documents. For more information about Desktop Intelligence syntax, see the *Desktop Intelligence Online Help*.

1. On the navigation list, expand **Additional Options** and click **Delivery Rules**.
2. In the **Condition** field, enter a Desktop Intelligence formula expression that must be valid for the global delivery rule to be met.

**Related Topics**

- *Delivery rules* on page 18
- *To set a global delivery rule on a Desktop Intelligence document* on page 99

## Other Desktop Intelligence document publication design tasks

### To change the prompt value for a Desktop Intelligence document

**Note:**
The Desktop Intelligence document must already contain a prompt value.

This task is optional. You can keep the predefined prompt value that the Desktop Intelligence document contains. If the prompt value is empty and the Desktop Intelligence document is delivered in its original format, recipients will be prompted to enter a prompt value when they view the report.

1. On the navigation list, expand **Additional Options** and click **Prompts**.

   **Note:**
   Only Desktop Intelligence documents that contain prompts appear.

2. Click **Modify**.

   The "Prompts" dialog box appears.
3. Click **Refresh Values**.

   A list of possible prompt values appears in the list on the left.
4. Move the prompt value or values from the list on the left to the list on the right.
5. Click **Apply**.

   The "Prompts" dialog box closes, and the list of prompt values is updated.

# Publishing Web Intelligence Documents

chapter

6

# About publishing Web Intelligence documents

The tasks in this chapter apply to Web Intelligence document publications only. You can do the following with Web Intelligence documents in publications:

- Personalize the data that recipients see using local or global profile targets.
- Change the default prompt value for a Web Intelligence document.

For information about general publication tasks, see the *Working with Publications* chapter.

# Personalizing Web Intelligence documents

## To personalize a Web Intelligence document using a global profile target

**Note:**
To use this personalization option, the profile that you specify must have a global profile target.

The "Global Profiles" area of the "Personalization" section lets you personalize a Web Intelligence document for Enterprise recipients by filtering a global profile target.

**Tip:**
If you use the personalization options in the "Global Profiles" area, it is not necessary to use the personalization options in the "Filters" area.

1. On the navigation list, click **Personalization**.
2. In the "Global Profiles" area, choose a profile from the list in the **Enterprise Recipient Mapping** column.

   This setting maps the Web Intelligence document to the universe field (the global profile target) that is filtered for Enterprise recipients.

**Related Topics**


- *Personalization* on page 26
- *How profiles work* on page 28
- *Profile targets and profile values* on page 28


## To personalize a Web Intelligence document by filtering fields

Perform this task to personalize a Web Intelligence document by filtering a field in the document.

**Note:**
Static-value profile values can filter string fields in source documents only. To filter other types of fields, use expression profile values. If you map the incorrect type of field to the profile, personalization will fail.

1. On the navigation list, click **Personalization**.
2. In the "Local Profiles" area, choose a field from the list in the **Report Field** column.
3. Choose a profile from the list in the **Enterprise Recipient Mapping** column.

   This setting maps the report field to the profile values that are defined for Enterprise recipients.
4. Choose a dynamic recipient source column from the list in the **Dynamic Recipient Mapping** column.

   This setting maps the field in the source document to a column in the dynamic recipient source that contains corresponding values.
5. Repeat steps 2 to 4 for every field that you want to filter.

**Related Topics**


- *Personalization* on page 26
- *How profiles work* on page 28
- *Profile targets and profile values* on page 28

# Other Web Intelligence document publication design tasks

## To change the prompt value for a Web Intelligence document

**Note:**
The Web Intelligence document must already contain a prompt.

This task is optional. You can keep the predefined prompt value that the Web Intelligence document contains or edit the list of prompt values.

1. On the navigation list, expand **Additional Options** and click **Prompts**.

   **Note:**
   Only Web Intelligence documents that contain prompts appear.

2. Click **Modify**.

   The "Prompts" dialog box appears.

3. Click **Refresh Values**.

   A list of possible prompt values appears in the list on the left.

4. Move the prompt value or values from the list on the left to the list on the right.
5. Click **Apply**.

   The "Prompts" dialog box closes, and the list of prompt values is updated.

# Recommendations and Troubleshooting for Publications

7

chapter

# Recommendations for adding source documents

This section contains recommendations for adding dynamic content documents in publications.

**Use publication log files to troubleshoot errors in failed publications.**

When you schedule publications to run, log files are generated that record any errors that may occur when the publications are processed. To view all log files for a publication instance, click **Actions** > **History**. On the "History" page, click the link in the **Instance Time** column for the instance.

**If you are using parameter-based personalization for Crystal reports, set parameters to default.**

Parameter-based personalization may lead to slower publication performance. It is highly recommended that you personalize Crystal report publications by mapping fields to Enterprise recipient profiles or to dynamic recipient personalization values. However, if you need to personalize Crystal reports using parameters, in the "Personalization" section, set parameters to **Default**.

**View and schedule dynamic content documents individually before you add them to a publication.**

If you can view and schedule dynamic content documents successfully, the data source connection is working properly and the source document data can be refreshed when the publication is scheduled. If you cannot view and schedule dynamic content documents, ensure the data source connection settings are correct. The following table summarizes how to check the settings.

| Document type | How to check data source connection settings |
|---|---|
| Crystal report | In the CMC, select the Crystal report and go to **Manage** > **Default Settings**. In the "Default Settings" dialog box, click **Database Configuration** on the navigation list. |
| Desktop Intelligence document | In the CMC, select the Desktop Intelligence document and go to **Manage** > **Default Settings**. In the "Default Settings" dialog box, click **Report Universes** on the navigation list. |
| Web Intelligence document | In the CMC, select the Web Intelligence document and go to **Manage** > **Default Settings**. In the "Default Settings" dialog box, click **Report Universes** on the navigation list. |

In some cases, you may have to open the dynamic content document in the appropriate designer to configure the data source connection and re-export the file to the CMS repository to overwrite the previous copy. For more information about configuring data source connections for dynamic content documents, see these guides:

- *Crystal Reports Online Help*
- *Desktop Intelligence Online Help*
- *Web Intelligence Rich Client Online Help*

**Avoid unnecessary data refreshes.**

If a data refresh is unnecessary for a dynamic content document, in the "Source Documents" section, clear the **Refresh At Runtime** check box for that document. This will improve overall publication performance.

# Recommendations for using dynamic recipient sources

This section contains recommendations for using dynamic recipient sources.

**Sort dynamic recipient sources according to the recipient ID column.**

In general, it is recommended that you sort dynamic recipient sources according to the recipient ID column. This is especially important when you are running a high-volume publication or when you enable **One database fetch for each batch of recipients** because it can reduce the number of deliveries for recipients who have multiple personalization values.

**For Crystal report dynamic recipient sources, ensure the database configuration information is correct.**

In the CMC, select the dynamic recipient source and go to **Manage** > **Default Settings** to ensure the following:

- In the "Database Configuration" section, the database logon information is correct and **Use same database logon as when report is run** is selected.
- In the "Parameters" section, all parameters have parameter values, and all **Prompt when viewing** check boxes for parameters are cleared.

**If you use Crystal report dynamic recipient sources, consult your administrator to ensure the Report Application Server (RAS) is configured correctly.**

The RAS must be configured to read at least the same number of database records as the number of recipients in the dynamic recipient source. For instance, to process a dynamic recipient source with data for 100,000 recipients, the RAS must be set to read more than 100,000 database records. For more information, see the “Improving Performance” chapter in the *BusinessObjects Enterprise Administrator's Guide*.

# Recommendations for sending and receiving email publication instances

This section contains recommendations for email publication instances.

**If possible, view embedded content email publication instances in Outlook 2003.**

Embedded content in email publication instances may have formatting issues when viewed in Outlook 2007 or in web email accounts such as Hotmail or Gmail.

**Consult your administrator to ensure that the email settings are configured properly for the Destination Job Server.**

Publications that are intended for email destinations may fail because email has not been configured properly as a destination for the Destination Job Server. For more information, see the “Improving Performance” chapter in the *BusinessObjects Enterprise Administrator's Guide*.

# Improving performance

You can improve the performance of publications so that they are processed and delivered faster:

- For high-volume Crystal report publications, set the report bursting method to **One database fetch for each batch of recipients** to enable concurrent processing of smaller batches of recipients.
- When possible, personalize Crystal reports using filters instead of parameters.
- Consider publishing dynamic content documents in static document formats (for example, as PDFs) instead of publishing them in their original formats. This can improve performance for Desktop Intelligence or Web Intelligence document publications, or for publications that use **One database fetch for all recipients**.

### Resolving “Out of memory” errors

If you receive the error message `java.lang.OutOfMemoryError: unable to create new native thread` when you run a high-volume publication, it is because the Adaptive Processing Server and Publishing Service have insufficient stack memory to handle the number of Publishing threads that are generated. This error can occur if the administrator designates stack memory as Java heap space. Consult your administrator if this error occurs. For more information about resolving this error, see the “Improving Performance” chapter in the *BusinessObjects Enterprise Administrator's Guide*.

# Get More Help

A

appendix

### Online documentation library

Business Objects offers a full documentation set covering all products and their deployment. The online documentation library has the most up-to-date version of the Business Objects product documentation. You can browse the library contents, do full-text searches, read guides on line, and download PDF versions. The library is updated regularly with new content as it becomes available.

To access the online documentation library, visit *http://help.sap.com/* and click **Business Objects** at the top of the page.

### Additional developer resources

*https://boc.sdn.sap.com/developer/library/*

### Online customer support

The Business Objects Customer Support web site contains information about Customer Support programs and services. It also has links to a wide range of technical information including knowledgebase articles, downloads, and support forums.

*http://www.businessobjects.com/support/*

### Looking for the best deployment solution for your company?

Business Objects consultants can accompany you from the initial analysis stage to the delivery of your deployment project. Expertise is available in relational and multidimensional databases, in connectivities, database design tools, customized embedding technology, and more.

For more information, contact your local sales office, or contact us at:

*http://www.businessobjects.com/services/consulting/*

### Looking for training options?

From traditional classroom learning to targeted e-learning seminars, we can offer a training package to suit your learning needs and preferred learning style. Find more information on the Business Objects Education web site:

*http://www.businessobjects.com/services/training*

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*mailto:documentation@businessobjects.com*

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### Business Objects product information

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