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Index
Welcome to AquaLogic Pages

This book describes how to manage AquaLogic Pages content and security and how to maintain Pages. Pages administrators should read this book to understand how Pages can best be utilized by your company, to determine what custom data you want to make available through Pages.

How to Use This Book

Audience

This guide is written for the users responsible for managing and maintaining Pages.
Organization

This guide includes the following chapters:

- This chapter provides information on how to use this guide and describes other resources available to help manage and maintain Pages.

- Chapter 2, “Getting Started with AquaLogic Pages,” briefly describes Pages, the objects you can create in Pages, how to work in the user interface, and provides a use case scenario.

- Chapter 3, “Integrating AquaLogic Pages with the Portal,” describes how to access Pages through the Pages Launcher Portlet or through the portal menus and how to display a page component as a portlet in a portal page.

- Chapter 4, “LiveSpaces and Pages,” describes how to create pages and organize them into logical groupings, called LiveSpaces.

- Chapter 5, “Components,” describes the components you can add to pages and how to use them.

- Chapter 6, “DataSpaces and Records,” describes how to create and display data in Pages through DataSpaces, including creating your own custom data sources and surfacing data from external data sources, and how to work with records in DataSpaces.

- Chapter 7, “Securing AquaLogic Pages,” describes how to secure Pages functionality and objects through special Pages portal groups and through roles granted to portal users and groups on LiveSpaces and DataSpaces.

- Chapter 8, “Documents,” describes how to incorporate existing documents into Pages and how to manage those documents from within Pages.
**Typographical Conventions**

This book uses the following typographical conventions.

<table>
<thead>
<tr>
<th>Convention</th>
<th>Typeface</th>
<th>Examples/Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Items you need to take action on (such as files or screen elements)</td>
<td><strong>bold</strong></td>
<td>• Upload Procedures.doc to the portal.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• To save your changes, click <strong>Apply Changes</strong>.</td>
</tr>
<tr>
<td>• User-defined variables</td>
<td><em>italic</em></td>
<td>• The migration package file is located in install_dir\serverpackages.</td>
</tr>
<tr>
<td>• New terms</td>
<td></td>
<td>• Portlets are Web tools embedded in your portal.</td>
</tr>
<tr>
<td>• Emphasis</td>
<td></td>
<td>• The URI must be a unique number.</td>
</tr>
<tr>
<td>• Object example names</td>
<td></td>
<td>• The example Knowledge Directory displayed in Figure 5 shows the Human Resources folder.</td>
</tr>
<tr>
<td>• Text you enter</td>
<td>computer</td>
<td>• Type Marketing as the name of your community.</td>
</tr>
<tr>
<td>• Computer generated text (such as error messages)</td>
<td></td>
<td>• This script may generate the following error: ORA-00942 table or view does not exist</td>
</tr>
<tr>
<td>• Code samples</td>
<td></td>
<td>• Example:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&lt;setting name=&quot;SSOCookieIsSecure&quot;&gt;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&lt;value xsi:type=&quot;xsd:integer&quot;&gt;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&lt;/value&gt;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&lt;/setting&gt;</td>
</tr>
<tr>
<td>• Environment variables</td>
<td>ALL_CAPS</td>
<td>• The default location of BEA_HOME is C:\bea.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
BEA Documentation and Resources

This section describes other documentation and resources provided by BEA.

Table 1-2  BEA Documentation and Resources

<table>
<thead>
<tr>
<th>Resource</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Installation Guide</td>
<td>This guide describes the prerequisites (such as required software) and procedures for installing AquaLogic Pages. It is available on edocs.bea.com/pages/docs10.</td>
</tr>
<tr>
<td>Installation and Configuration Worksheets</td>
<td>These worksheets enable you to record prerequisite information necessary for installing and configuring AquaLogic Pages. Both worksheets are included in one file. It is available on edocs.bea.com/pages/docs10.</td>
</tr>
<tr>
<td>Release Notes</td>
<td>The release notes provide information about new features, issues addressed, and known issues in the release. They are available on edocs.bea.com/pages/docs10 and on any physical media provided for delivering the application.</td>
</tr>
<tr>
<td>Online Help</td>
<td>The online help is written for all levels of Pages users. It describes the user interface for Pages and gives detailed instructions for completing tasks in Pages. To access online help, click the help icon in the upper right of the Dashboard or any object in page view. You can also access help by clicking the More Help link in the editors.</td>
</tr>
<tr>
<td>Deployment Guide</td>
<td>This guide is written for business analysts and system administrators. It describes how to plan your AquaLogic User Interaction deployment. It is available on edocs.bea.com/alui/deployment/index.html.</td>
</tr>
<tr>
<td>Developer Guides, Articles, API Documentation, Blogs, Newsgroups, and Sample Code</td>
<td>These resources are provided for developers on the BEA dev2dev site (dev2dev.bea.com). They describe how to build custom applications using AquaLogic User Interaction and how to customize AquaLogic User Interaction products and features.</td>
</tr>
</tbody>
</table>
The ALUI and ALBPM Support Center is a comprehensive repository for technical information on ALUI and ALBPM products. From the Support Center, you can access products and documentation, search knowledge base articles, read the latest news and information, participate in a support community, get training, and find tools to meet most of your ALUI and ALBPM-related needs. The Support Center encompasses the following communities:

**Technical Support**
Submit online service requests, check the status of your requests, search the knowledge base, access documentation, and download service packs and hotfixes.

**User Group**
Participate in user groups; view webinars, presentations, the CustomerConnection newsletter, and the Upcoming Events calendar.

**Product Center**
Download product updates, service packs, and patches; view the Product Interoperability matrix (supported third-party products and interoperability between products).

**Developer Center**
Download developer tools, view code samples, access technical articles, and participate in discussions.

**Education Services**
Review the available education options, then choose courses by role and delivery method (Live Studio, Public Classroom Training, Remote Classroom, Private Training, or Self-Paced eLearning).

**Profile Center**
Manage your implementation details, local user accounts, subscriptions, and more.
If you do not see the Support Center when you log in to [http://support.plumtree.com](http://support.plumtree.com), contact ALUISupport@bea.com or ALBPMsupport@bea.com for the appropriate access privileges.

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**Table 1-2  BEA Documentation and Resources**

<table>
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<th>Description</th>
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<tr>
<td>AquaLogic User Interaction (ALUI) and AquaLogic Business Process Management (ALBPM) Support Center</td>
<td>The ALUI and ALBPM Support Center is a comprehensive repository for technical information on ALUI and ALBPM products. From the Support Center, you can access products and documentation, search knowledge base articles, read the latest news and information, participate in a support community, get training, and find tools to meet most of your ALUI and ALBPM-related needs. The Support Center encompasses the following communities: Technical Support Submit online service requests, check the status of your requests, search the knowledge base, access documentation, and download service packs and hotfixes. User Group Participate in user groups; view webinars, presentations, the CustomerConnection newsletter, and the Upcoming Events calendar. Product Center Download product updates, service packs, and patches; view the Product Interoperability matrix (supported third-party products and interoperability between products). Developer Center Download developer tools, view code samples, access technical articles, and participate in discussions. Education Services Review the available education options, then choose courses by role and delivery method (Live Studio, Public Classroom Training, Remote Classroom, Private Training, or Self-Paced eLearning). Profile Center Manage your implementation details, local user accounts, subscriptions, and more. If you do not see the Support Center when you log in to <a href="http://support.plumtree.com">http://support.plumtree.com</a>, contact <a href="mailto:ALUISupport@bea.com">ALUISupport@bea.com</a> or <a href="mailto:ALBPMsupport@bea.com">ALBPMsupport@bea.com</a> for the appropriate access privileges.</td>
</tr>
</tbody>
</table>
Technical Support

If you cannot resolve an issue using the above resources, BEA Technical Support is happy to assist. Our staff is available 24 hours a day, 7 days a week to handle all your technical support needs.

E-mail: ALUISupport@bea.com or ALBPMSupport@bea.com

Phone Numbers:
USA, Canada +1 866.262.7586 or +1 415.263.1696
EMEA +44 1494 559127
Asia Pacific +61 2.9931.7822
Australia/NZ +61 2.9923.4030
Singapore +1 800.1811.202

Table 1-2  BEA Documentation and Resources

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<tbody>
<tr>
<td>Technical Support</td>
<td>If you cannot resolve an issue using the above resources, BEA Technical Support is happy to assist. Our staff is available 24 hours a day, 7 days a week to handle all your technical support needs. E-mail: <a href="mailto:ALUISupport@bea.com">ALUISupport@bea.com</a> or <a href="mailto:ALBPMSupport@bea.com">ALBPMSupport@bea.com</a> Phone Numbers: USA, Canada +1 866.262.7586 or +1 415.263.1696 EMEA +44 1494 559127 Asia Pacific +61 2.9931.7822 Australia/NZ +61 2.9923.4030 Singapore +1 800.1811.202</td>
</tr>
</tbody>
</table>
CHAPTER 2

Getting Started with AquaLogic Pages

This chapter briefly describes Pages, the objects you can create in Pages, how to work in the user interface, and provides a use case scenario.

Overview of AquaLogic Pages

Pages is a web page authoring system and application builder that provides even non-technical end-users a simple way to create web pages, blogs, wikis, and other web applications. Because of its ease of use, anyone with the proper permissions can create ad-hoc, collaborative workspaces without having to rely on an IT or portal administrator to do it for them. Because objects in the system are versioned, you can allow everyone (with the proper permissions) to confer their knowledge and ideas directly to the Pages system, enabling much more rapid and complete knowledge transfer and collaboration.

Plus, unlike traditional wikis, Pages allows you to surface data from existing enterprise systems via RSS, web services, or by creating custom data sets. This allows you to reuse existing data and quickly collect new data, all of which users can contribute to by adding comments, page components, or document attachments.
Pages Objects

Web pages created through AquaLogic Pages are grouped into logical collections called LiveSpaces. For example, you might create a LiveSpace for a sales team with separate pages for new products, sales tools, leads, promotions, and reports. Each page is made up of components such as rich text, images, lists, or tables. The lists and tables are backed by DataSpaces. A DataSpace is a set of data (in the form of records) from an external source or from a custom data model stored in the Pages repository. For example, you might create a products DataSpace that includes a record for each product.

Note: For more information on an object, see the associated chapter in this guide.

Accessing Pages Content

There are several ways to access Pages content:

- You can access the Dashboard, a particular LiveSpace, or a particular DataSpace through the Pages Launcher Portlet. For information on using the Pages Launcher Portlet, see “The Pages Launcher Portlet” on page 3-1. For a description of the Dashboard, see “The Dashboard” on page 2-3.

- You can access the Dashboard, a particular LiveSpace, or a particular DataSpace through the LiveSpaces or DataSpaces menus in the portal navigation. For information on enabling the LiveSpaces menu, see “LiveSpaces and DataSpaces Menus in Portal Navigation” on page 3-2. For a description of the Dashboard, see “The Dashboard” on page 2-3.

- You can view content from page components in portlets placed on My Pages or community pages. For information on creating page component portlets, see “Page Component Portlets” on page 3-6.

- You can access any LiveSpace, DataSpace, or page with their URLs. When you create a LiveSpace, DataSpace, or page, you can use the default URL or specify a custom URL that enables users to access the object directly.

- When you display the Dashboard or another LiveSpace or DataSpace, you can also access the Organizer, which provides a generalized interface for browsing, searching for, and managing LiveSpaces, pages, documents, and DataSpaces. For more information on the Organizer, see “The Organizer” on page 2-3.

Note: For more information on navigating Pages, see the online help.
The Dashboard

The Dashboard is the home page (default page) for the Pages application. It provides a list of most-recently created or modified LiveSpaces, DataSpaces, pages, and documents. The Dashboard also provides links to create new LiveSpaces or DataSpaces and provides access to the Organizer.

The Dashboard displays objects, sorted by last modified date, grouped into the following categories:

- **Recent Activity**: displays LiveSpaces, DataSpaces, pages, and documents that have been recently created or modified.
- **Spaces**: displays LiveSpaces and DataSpaces that have been recently created or modified.

To view or edit an object, click the object name. The object opens in *page view* (described later), in which you can view the object, and, if you have appropriate access, edit the object (for example, change settings or add text or images).

The Dashboard provides the following functionality to help you find what you are looking for:

- Text search
- Filter by object type
- Pagination

**Note:** For more information on the Dashboard, see the online help.

The Organizer

The Organizer displays objects grouped by type: LiveSpaces, pages, documents, and DataSpaces. You can click an object to view it, or perform an action on the object such as viewing information and settings for the object, editing the object, or deleting the object. The Organizer also enables you to search and filter the objects.

To view or edit an object, click the object name. The object opens in *page view* (described later), in which you can view the object, and, if you have appropriate access, edit the object (for example, change settings or add text or images).

The Organizer provides the following functionality to help you find what you are looking for:

- Description and title search
- Filter by object type, last modified date
• Group by object type or associated space

• Sort by rank, title, creation date, or last modified date

**Note:** For more information on the Organizer, see the online help.

**Page View**

When you click an object, the object opens in *page view* (there are a few exceptions noted below). Basically, Pages automatically creates a page and displays the object. This enables you to add additional content to the object just like any other page. For example, you can add a comment, an image component, rich text, or a document attachment. The page for the object is not saved unless you publish the page. If you publish the page, the additional content appears whenever anyone opens the object in page view. For example, if you are viewing a DataSpace and click a record, the record opens in page view. If you add an image to the page and publish the page, anyone who views the record in page view will see the image.

**Notes:**

• A LiveSpace cannot be viewed in page view. When you navigate to a LiveSpace, the home page is displayed.

• A page component cannot be viewed on its own in page view, only as part of a page.

• Records do not always open in page view. In a Master/Detail table or a Spreadsheet table the record details display in the table rather than in page view. Therefore, you cannot view components, comments, or documents associated with a record that you access from a Master/Detail table or a Spreadsheet table.

• Documents in page view work differently than other objects; see Chapter 8, “Documents,” and the online help.

• For information on who can perform actions on pages, see “Pages Roles” on page 7-2.

• For more information on pages (including objects in page view), see “Pages” on page 4-3 and the online help.
Page Components
You can add content to an object in page view by dragging components from the palette onto the page. The following components are available:

<table>
<thead>
<tr>
<th>Component</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Image</td>
<td>Enables you to add an image to the page. You can use an uploaded image or point to a URL.</td>
</tr>
<tr>
<td>Record List</td>
<td>Enables you to add a list of records to the page. A record list enables users to search for and view records. With editable DataSpaces, users with the proper permissions can also edit, add, and delete records.</td>
</tr>
<tr>
<td>Rich Text</td>
<td>Enables you to add formatted text to a page.</td>
</tr>
<tr>
<td>Table</td>
<td>Enables you to add a table of records to the page. A table enables users to search for, sort, and view records. With editable DataSpaces, users with the proper permissions can also edit, add, and delete records.</td>
</tr>
</tbody>
</table>

Note: For more information on page components, see Chapter 5, “Components,” and the online help.

Comments
At the bottom of the page you can add comments, and engage in message-board style discussions, in the context of any object in page view. This provides a simple way for users to provide structured feedback on the page or comment on content (for example, commenting on a particular blog post).

Notes:
- For information on who can work with comments, see “Pages Roles” on page 7-2.
- For more information on comments, see the online help.
Documents

Although you can add content to pages using rich text and page components, you might also want to add existing content (for example, Word documents or PowerPoint presentations). You can add this existing content by attaching documents to objects in page view. After attaching a document, users can view the document or upload new versions of the document.

Notes:

- For information on who can work with documents, see “Pages Roles” on page 7-2.
- For more information on documents, see Chapter 8, “Documents,” and the online help.

Associated Objects

In page view, under This Space, you see objects associated with the LiveSpace or DataSpace you are viewing or associated with the parent LiveSpace or DataSpace:

- If you are viewing a LiveSpace, page, or a document attached to a LiveSpace, you see the three most-recently modified pages in the associated LiveSpace and the three most-recently modified documents attached to the associated LiveSpace.

- If you are viewing a DataSpace, record, or a document attached to a DataSpace, you see the three most-recently modified documents attached to the DataSpace and the three most-recently modified records in the associated DataSpace.

However, you can also search for a particular object, display all the objects of a particular type, or display recently-modified objects associated with any space.

Note:  For more information on the This Space area, see the online help.

Versions

Each time a page view is published, a new version is stored in the system. These versions are displayed in the page view making it easy for users to view a previous version, and, with the proper permissions, revert to the version or delete the version. Because each change is saved as a version and it is easy to revert to a previous version, users can feel free to make changes without having to worry about inadvertently causing issues on the page.

Note:  For more information on versions, see “Page Versions” on page 4-6, Chapter 8, “Documents,” and the online help.
Use Case

This is a simple example of how Pages can be used to improve the ability for a customer support team to respond to a critical support situation.

1. A support engineer creates a new “Support Issues” DataSpace, which displays a list of support incidents for a single customer. The list is pulled directly from a customer support management system, using a custom DataSpace template created by IT.

2. An account manager, who is largely responsible for customer satisfaction for this individual account, creates a new “Issue Tracking” LiveSpace for assembling all the information related to this specific customer and this specific issue. The information will be assembled by an extended team of participants related to the account or related to resolving the issue.

3. The account representative opens the LiveSpace, clicks Write, and types a list of “action items” and owners for each action needed for the support team to address.

4. A customer service representative opens the LiveSpace, clicks Design, and adds a “Support Team” Table component to the page. She points this component to the existing “Employee Contacts” DataSpace, which pulls a list of records from an internal LDAP system.

5. A product engineer creates a “Customer Issue Resolutions” DataSpace, which displays an RSS feed listing blog entries from the support department’s knowledge base, related to resolving similar issues.

6. Another product engineer opens the LiveSpace, clicks Design, and adds a “Best Practices” Record List component to the page, pointing it to the existing “Customer Issues Resolutions” DataSpace from step 5.

7. The support engineer opens the LiveSpace, clicks Design, and adds a “Customer Issues” Record List component to the page, pointing it to the existing “Support Issues” DataSpace from step 1.

At this point, our simple “Issue Tracking” LiveSpace has several components:

- Action items listed in free-form text
- Table of support team members and their contact information
- List of the customer’s issues and prior resolution status
- List of best practices from the company knowledge base
8. After some research, the product engineer opens the LiveSpace, clicks the associated item in the Best Practices list to display the issue resolution record and adds some unstructured notes under the record, specifying specific resolution steps.

9. The support engineer sends the resulting resolution steps to the customer to resolve the issue.
Integrating AquaLogic Pages with the Portal

This chapter describes how provide an integrated experience between Pages and portal. It includes the following sections:

- **The Pages Launcher Portlet** - describes how to access Pages through the Pages Launcher Portlet
- “LiveSpaces and DataSpaces Menus in Portal Navigation” on page 3-2 - describes how to display LiveSpaces and DataSpaces menus in the portal navigation
- “Page Component Portlets” on page 3-6 - describes how to display a page component as a portlet in a portal page
- “Navigation in Pages” on page 3-7 - describes how to customize the navigation that displays in Pages

**The Pages Launcher Portlet**

The Pages Launcher Portlet displays links to the Dashboard, available LiveSpaces, and available DataSpaces. This portlet is created in the Pages Objects folder when you import the Pages migration package (as described in the *Installation Guide for AquaLogic Pages*).

**Note:** Only LiveSpaces and DataSpaces to which the user has access appear in the portlet.

To provide access to Pages, add this portlet to a community page, tell users to add the portlet to their My Pages, or make the portlet mandatory for some groups so that it automatically shows up on the users’ My Pages. You must have at least Select access to a portlet to add it to a My Page.
Integrating AquaLogic Pages with the Portal

or community page. By default users in the Pages Users and Pages Administrators groups have Select access to the Pages Launcher Portlet.

**Note:** For information on changing access privileges, making a portlet mandatory, or adding a portlet to a My Page or community page, refer to the portal online help.

### LiveSpaces and DataSpaces Menus in Portal Navigation

You can add menus (just like the My Communities menu) to display available LiveSpaces and DataSpaces in the portal navigation.

**Note:** Only LiveSpaces and DataSpaces to which the user has access appear in the menus.

You must perform the following steps to display the LiveSpaces and DataSpaces menus:

1. Add the LiveSpaces and DataSpaces navigation tags to a custom header. There is a sample header code file installed with Pages: `install_dir/pages\1.0\header_with_pagestags.html` (for example, C:\bea\alui\pages\1.0\samples\header_with_pagestags.html). For information on creating your own custom header using the Pages navigation tags, see the *AquaLogic User Interaction Development Documentation Adaptive Tags: Pages*.

2. Create a remote portlet web service that points to the custom header you created. For instructions on creating a remote portlet web service, see the *Administrator Guide for AquaLogic Interaction* and the portal online help.

3. Create a portlet based on the remote portlet web service. For instructions on creating a portlet, see the *Administrator Guide for AquaLogic Interaction* and the portal online help.

4. Create an experience definition that uses the custom header portlet. For instructions on creating an experience definition, see the *Administrator Guide for AquaLogic Interaction* and the portal online help.

5. Create an experience rule that displays the experience definition. For instructions on creating an experience rule, see the *Administrator Guide for AquaLogic Interaction* and the portal online help.

**Note:** You probably want experience rule to apply to the following groups: DataSpace Creators, LiveSpace Creators, Pages Administrators, and Pages Users. Also, if there are any other experience rules defined, you might need to move the experience rule you just created up in the list so that the rule will apply. For information on how experience rules are applied, see the portal online help.

6. Verify that the LiveSpaces and DataSpaces menus are displaying properly. Log off and log back in as a user that should see the LiveSpaces and DataSpaces menus.
LiveSpaces and DataSpaces Menus in Portal Navigation

**Note:** The LiveSpaces menu should always display because the Dashboard is a LiveSpace. However, the DataSpaces menu will only display after you have created at least one DataSpace in Pages.

**Troubleshooting LiveSpaces and DataSpaces Menus**

If the LiveSpaces or DataSpaces menus are not showing up, perform the following steps:

1. Start AquaLogic Interaction Logging Spy and confirm that logging is enabled.
2. Log out of the portal.
3. Clear the AquaLogic Interaction Logging Spy log.
4. Log back in to the portal.
   
   **Note:** If you just refresh the page without logging out and logging back in, the page will use cached data, and any errors that occur when the navigation tags execute the request to the Pages server will not display in AquaLogic Interaction Logging Spy.
5. Look in the log under Portal application for any errors from the PagesIntegration component.
   
   If there are no errors from the PagesIntegration component, check the settings described in **Verifying Navigation Settings**. (You will probably see two other tag errors regarding not being able to find data tags, this is due to the Pages tags not functioning properly.)
   
   If there are errors from the PagesIntegration component, refer to “Typical Errors” on page 3-5.

**Verifying Navigation Settings**

If your LiveSpaces and DataSpaces menus are not displaying in the portal navigation and AquaLogic Interaction Logging Spy does not display any PagesIntegration component errors:

- Verify that you are really logged in as a user that views the Tag Navigation Experience Definition. You should see a blue banner. If you see a white banner with the AquaLogic liquid image, you are logged in as a user that views the Pluggable Navigation. Review the Experience Definition Rules to ensure that the Tag Navigation Experience Definition is being used for the user you used to log in.

- Verify that the Pages navigation tags were added to your custom header. Open your custom header file and search for `pt:pages.livespacesdata` and `pt:pages.dataspacesdata`. If you do find these entries, continue with the next step.
If you do not find these entries, the Pages navigation tags were not added to your custom header. See the AquaLogic User Interaction Development Documentation Adaptive Tags: Pages.

- Verify that the experience definition you are viewing uses header.html. Add some random text to the top of header.html, save the file, and reload the portal page.
  
  If you see the random text at the top of the page, remove the random text from header.html, save the file, and continue with the next step.
  
  If you do not see the random text, the experience definition you are viewing is not using header.html as its header portlet. Verify that there is not a higher priority experience definition that is being used for the user. If there is a higher priority experience definition, move the rule that uses the Tag Navigation Experience Definition higher up in the rules list. If there is not a higher priority experience definition, continue with the next step.

- Verify that the Pages tags are being transformed. View the source for the portal page, and search for pt:pages.livespacesdata and pt:pages.dataspacesdata.
  
  If you do not find these entries, the Pages tags are being transformed. Skip to step 1.
  
  If you do find these entries, the Pages custom tags were not properly deployed to the portal. Verify that the Pages Portal Extensions component was installed on the portal. If it was installed, continue with the next step. If it was not installed on the portal, refer to the Installation Guide for AquaLogic Pages for instructions.

- Verify that the custom tag libraries are properly deployed.
  - On a Java portal, look for taglibPages.jar in install_dir/ptportal/6.1/lib/java and look for the WEB-INF/lib folder reference in install_dir/ptportal/6.1/webapp/portal.war. Use WinZip or WinRAR to view the contents of the .war file. If you run the portal on BEA WebLogic, you also need to open portal.ear and verify the content of portal.war inside the .ear file. With portal on WebLogic server, ensure that you updated the portal deployment after installing the Portal extensions.
  
  - On a .NET portal, look for taglibPages.dll in install_dir/ptportal/6.1/bin/assemblies and install_dir/ptportal/6.1/webapp/portal/web/bin.

- Verify that the Pages tag library is defined as a custom tag library. Open install_dir/settings/portal/CustomTags.xml. Verify that it contains the following entry:

  <libfile name="taglibPages"/>
Typical Errors

Typical errors include:

- Portlet exceptions: These are usually due to the Pages server being unavailable. Verify that the BEA AquaLogic Pages service is running.

- IDK exceptions: These are usually due to the ALI API service not running or not being configured correctly in the portal. Verify that the BEA ALI API service is running. To verify that it is configured correctly in the portal:
  a. Log in to portal as an administrator.
  b. Click Administration.
  c. In the Select Utilities menu, click Portal Settings.
  d. In the Portal Settings Editor, on the left, under Edit Utility Settings, click Portal URL Manager.
  e. Copy the Soap Server URL value and paste it into a web browser. The page that appears should be titled QueryInterfaceAPI. If this is not the case, correct the URL in the Portal Settings Editor.

- OpenKernel exceptions: These are usually due to the adaptive tags not being able to find a setting in install_dir/Settings/configuration.xml. Verify that the Configuration Manager was installed properly and that the configuration.xml file exists.

- ObjectManager exceptions: These are usually due to problems with the Pages objects that were imported into the portal from the migration package. To correct the problems:
  a. Log in to the portal as an administrator.
  b. Click Administration.
  c. Open the Pages Objects folder. If it does not exist, refer to the Installation Guide for AquaLogic Pages for instructions on importing the migration package.
  d. Expand the web services, and open the Pages LiveSpaces Web Service.
  e. In the Web Service Editor, on the left, under Edit Standard Setting, click Properties and Names, and write down the UUID.
  f. Open the Pages DataSpaces Web Service and write down its UUID.
  g. Open install_dir/settings/configuration.xml in a text editor.
h. Search for LiveSpacesListWebServiceUUID and verify that the value matches the Pages LiveSpace Web Service UUID you wrote down. If it does not match, correct the value in the file and save the file.

i. Search for DataSpacesListWebServiceUUID and verify that the value matches the Pages DataSpace Web Service UUID you wrote down. If it does not match, correct the value in the file and save the file.

Page Component Portlets

You can create a portlet from an existing page component, allowing you to display content from a page component in a portal page.

Notes:

- Only users who have permission to see the page component will be able to see the content in the portlet. Users must have at least the Guest role on the associated LiveSpace.
- Rich text components and image components will not display correctly.
- If the page component is deleted, the portlet will display an error.

1. Click Administration.

2. Open the administrative folder in which you want to create the portlet.

3. Click Create Object → Portlet.

4. In the Choose Template or Web Service dialog box, select Pages Components Selector and click OK.

5. Next to Configure this Portlet, click Edit.

6. In the Portlet Wizard:
   a. Select the LiveSpace which includes the page component you want to use.
      
      Note: You can only choose from LiveSpaces you have permission to see.
   b. Select the page component you want to use.
   c. Click Finish.

7. In the Portlet Editor, click Finish.

8. In the Save Object dialog box, type a name for the portlet and click Save.
9. In the Object Saved dialog box, click **Close**.

You can now add the portlet to a portal page.

**Navigation in Pages**

By default, Pages uses the same navigation as the portal though Pages displays only a portion of that navigation. Pages displays only the horizontal drop-down menus (not the links at the top of the page or the banner). If you use a left vertical navigation scheme or custom navigation with a header portlet that does not display horizontal navigation, you **must** customize the navigation for Pages. If you want Pages to display different navigation than the portal, you also need to customize the navigation.

To use a different standard navigation scheme for Pages:

1. Create an experience definition that uses a supported navigation scheme. In the Experience Definition Editor, on the Edit Navigation Options page, select the navigation scheme to use for Pages. The following standard navigation schemes are supported in Pages: Horizontal Combo Box Drop-Down Navigation, Mandatory Links Only, No Navigation, and Horizontal Drop-Down Navigation.

2. Create an experience rule for Pages that uses the experience definition you created. Add a URL condition with the following value: 
   
   *Pages_host:Pages_port/pages* (for example, *pages.company.com:11990/pages*).

To customize the navigation for Pages using a header portlet:

1. Create a header portlet that displays horizontal navigation. For information on creating a custom header portlet, see the *AquaLogic User Interaction Development Documentation Adaptive Tags: Implementing Custom Navigation*.

   **Note:** Left vertical navigation schemes are not supported in Pages. The top bar and banner sections of header portlets are not displayed in Pages.

2. Create an experience definition that uses the header portlet you created. In the Experience Definition Editor, on the Choose Header, Footer & Style page, select the header portlet you created. On the Edit Navigation Options page, select Portlet-Ready Navigation.

3. Create an experience rule for Pages that uses the experience definition you created. Add a URL condition with the following value: 
   
   *Pages_host:Pages_port/pages* (for example, *pages.company.com:11990/pages*).

   For information on creating experience definitions or experience rules, see the *Administrator Guide for AquaLogic Interaction* or the portal online help.
Integrating AquaLogic Pages with the Portal

**Note:** Experience definition rules applied to a community do not apply to Pages, even if the user navigates to Pages from that community.
LiveSpaces and Pages

This chapter describes how to create pages and organize them into logical groupings, called LiveSpaces.

LiveSpaces

A LiveSpace is a logical collection of individual pages. For example, you might have a Marketing LiveSpace that included the following pages: Collateral, Events, and Writing and Design Resources.

LiveSpace Security

Only users that are members of the LiveSpace Creators portal group can create LiveSpaces. LiveSpace Creators see the Create a New LiveSpace link in the Dashboard. This link is the only way to create a new LiveSpace.

Each LiveSpace includes security so you can control which users can view or edit the pages and any other objects associated with the LiveSpace. Users who are allowed to edit the pages can add or edit content enabling rapid knowledge transfer. Because each page is versioned, and you can easily revert to a previous version, you can be a bit more relaxed with who is allowed to edit content.

You set security by assigning roles to portal users and groups. These roles apply to every object associated with the LiveSpace (pages, documents, and components). For a description of the available roles and what privileges these roles provide, see “Pages Roles” on page 7-2.
**Creating a LiveSpace**

Before you create a LiveSpace, think about the purpose of the LiveSpace and the pages you might include. Consider which users and groups should be allowed to view, comment on, create, edit, and delete the LiveSpace and all the objects associated with the LiveSpace.

To create a LiveSpace:

1. Navigate to the Dashboard.
2. Click **Create a New LiveSpace**.
3. On the General Settings page, type a name and description for the LiveSpace and edit the default URL if desired. Then click **Next**.
4. On the Security page, assign roles to portal users and groups based on the security decisions you made before creating the LiveSpace.
5. Click **Finish**.
6. Design your home page (the default page for the LiveSpace) and any additional pages you want to include in this LiveSpace.

For more information on the LiveSpace Editor and creating LiveSpaces, see the online help.

**Viewing a LiveSpace**

When you navigate to a LiveSpace, the home page appears. You can navigate to a LiveSpace several different ways:

- Click the LiveSpace in the Dashboard.
- Click the LiveSpace in the Organizer.
- Click the LiveSpace in the LiveSpaces portal menu.
- Click or enter the URL to the LiveSpace.

**Editing a LiveSpace**

Use one of the following methods to edit a LiveSpace:

- Navigate to the LiveSpace, click **LiveSpace settings**.
- From the Organizer, select the LiveSpace and click **Info & Settings**.
Deleting a LiveSpace

When you delete a LiveSpace, it deletes all objects associated with the LiveSpace, including all the pages in the LiveSpace and any components and documents added to those pages. There is no way to recover the LiveSpace or any associated objects after deleting it.

Use one of the following methods to delete a LiveSpace:

- Navigate to the LiveSpace, click **LiveSpace settings**, then, in the LiveSpace Editor, click **Delete**.
- From the Organizer, select the LiveSpace and click **Delete**.

Pages

Users of all experience levels can design a page simply by dragging different types of page components (for example an image or a table) onto the page and add text by typing in a rich text editor.

Access to each page is controlled by the associated LiveSpace security. Users who are allowed to edit the pages can add or edit content enabling rapid knowledge transfer. Because each page is versioned, and because it is so easy to edit anything, users are compelled to contribute, participate, and when necessary, correct others' contributions.

Creating a Page

Before you create a page, think about what content you want to include on the page, how you want the content to be laid out, and whether the content should all be on the same page or on several different pages.

To create a page:

1. Navigate to the associated LiveSpace.
2. Click **Create a new page**.
3. On the General Settings page, type a name and description for the page and edit the default URL if desired. Then click **Next**.
4. On the Page Template page, select the basic column layout for the page:
   - **Basic Template**: a one-column page
   - **Two Column (Wide Narrow) Template**: a two-column page with a wide column on the left and a narrow column on the right
   - **Two Column (Narrow Wide) Template**: a two-column page with a narrow column on the left and a wide column on the right
   - **Two Column Template**: a two-column page with two equal columns
   - **Three Column Template**: a three-column page with a narrow column on the left, a wide column in the middle, and another narrow column on the right

   The Page Template tab does not display when you are editing a page, so you cannot change the template after creating the page; therefore, make sure you choose a template that is appropriate for the content you want to include on the page.

   **Note**: For information on how column layout affects page component placement, see “Component Placement” on page 5-2.

5. Click **Finish**.

6. Add text and page components to the page.

**Notes:**
- For more information on the Page Editor and creating pages, see the online help.
- For more information on adding text and components to pages, see Chapter 5, “Components,” and the online help.

**Viewing a Page**

You can navigate to a page several different ways:

- Navigate to the associated LiveSpace and click the page name in the This Space area.
- Click or enter the URL to the page.

When you are viewing a page, you can perform actions that do not alter the actual contents of a given page. For example, you can add comments, attach documents, create new pages, and work with content in record lists and tables.
Notes:

- For information on who can perform actions on a page, see “Pages Roles” on page 7-2.
- For more information on comments, see “Comments” on page 2-5 and the online help.
- For more information on documents, see “Documents” on page 2-6, Chapter 8, “Documents,” and the online help.
- For more information on working with content in record lists and tables, see “Record List Components” on page 5-5, “Tables” on page 5-7, and the online help.

Editing a Page

When you are viewing a page or an object in page view, there are several ways you can edit the page:

- You can click Write to add, edit or delete rich text on the page.
  
  When you enter write mode, the cursor is automatically placed in a text component on the page. Write mode allows you to type rich text (including formatting and links) directly onto the page.

- You can click Design to add, edit, delete, or move components on the page.
  
  Note: You can also enter design mode by selecting the page in the Organizer and clicking Edit.

  When you enter design mode, you can drag components onto the page to the location you want. When you drop the component where you want it, a dialog box prompts you for a title and description for the component. If the component relies on a DataSpace, you must also create a new DataSpace or select an existing DataSpace.

- You can add comments to the bottom of the page by clicking Add a Comment.

- You can attach documents to the page by clicking Attach a document.

Notes:

- When you add components to an object in page view, you can only add them below the object. For example, if you are adding components to a record, the record always appears at the top of the page and any additional components appear beneath the record.

- For information on who can edit a page, see “Pages Roles” on page 7-2.

- For more information on editing a page, see Chapter 5, “Components,” and the online help.
Saving a Page

When you make a change to a page or an object in page view (by adding, editing, deleting, or moving a component or text) you must publish the page if you want other users to be able to see your changes. When you publish the page a new version is created.

Deleting a Page

When you delete a page, it deletes all objects associated with the page, including any components and documents added to the page. There is no way to recover the page or any associated objects after deleting it.

Note: DataSpaces associated with components on the page will not be deleted.

Use one of the following methods to delete a page:

- Navigate to the page, click Page settings, then, in the Page Editor, click Delete.
- From the Organizer, select the Page and click Delete.

Note: You cannot delete the home page (default page) for a LiveSpace.

Page Versions

Note: For information on document versions, see Chapter 8, “Documents.”

Each time you publish a page or an object in page view a new version is created (versions are listed under Recent Changes). This allows you to easily see what changes were made and revert to a previous version if necessary.

What is Saved with a Version

The following changes/settings are saved with a version:

- Page settings
- Component settings
- Component placement
- Text (in a rich text component)
- Version comment (when you publish a page you are prompted to enter a version comment that can help other users understand what changes you made)
The following changes/settings are not saved with a version:

- Comments
- Documents (documents are versioned independently)
- Data in record lists and tables

**Viewing a Previous Version**

To view a previous version of a page or an object in page view, you click the version number. When viewing a previous version you can revert to that version or delete the version.

**Reverting to a Version**

When viewing a previous version of a page or an object in page view, you can revert to that version. When you revert to a previous version, the previous version is saved as a new version, so you do not lose any version history. For example, if you revert from Version 10 to Version 6, Version 6 gets saved as Version 11. If you later discover that you should not have reverted the page, you can revert back to Version 10.

**Deleting a Version**

When viewing a previous version of a page or an object in page view, you can delete that version. When you delete a version there will be a hole in your revision history. For example, if you delete Version 3, the list of versions will display: Version 5, Version 4, Version 2, and Version 1. This enables users to see that a given version, which may have had a specific purpose or meaning, was deleted.
CHAPTER 5

Components

This chapter describes the components you can add to pages and how to use them.

Page components are user interface elements that can be added to pages. A page component can display data stored in the Pages repository or an external data source, static content, or content keyed off of the preferences assigned to the component. You create page components by selecting from a palette of component types and then completing a wizard to define the component instance.

The following components are available by default:

<table>
<thead>
<tr>
<th>Component</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Image</td>
<td>Enables you to add an image to the page. You can use an uploaded image or point to a URL. For more information on image components, see “Image Components” on page 5-4.</td>
</tr>
<tr>
<td>Record List</td>
<td>Enables you to add a list of records to the page. A record list enables users to search for and view records. With editable DataSpaces, users with the proper permissions can also edit, add, and delete records. For more information on record list components, see “Record List Components” on page 5-5.</td>
</tr>
<tr>
<td>Rich Text</td>
<td>Enables you to add formatted text to a page. For more information on rich text components, see “Rich Text” on page 5-6.</td>
</tr>
<tr>
<td>Table</td>
<td>Enables you to add a table of records to the page. A table enables users to search for, sort, and view records. With editable DataSpaces, users with the proper permissions can also edit, add, and delete records. For more information on table components, including descriptions and examples of the three types of tables, see “Tables” on page 5-7.</td>
</tr>
</tbody>
</table>
Adding a Page Component to a Page

You add a component to a page by dragging the appropriate component icon to the location you want. As you drag the component a blue box serves as a placeholder for the component, and other components move to make room for the new component. When you drop the component where you want it, a dialog box prompts you for a title and description for the component. If the component relies on a DataSpace, you must also create a new DataSpace or select an existing one.

Component Placement

When you place components next to each other in a row, the row height is based on the height of the tallest component in the row. The horizontal space allotted for each component is divided equally between the components in the row. Components are top and left aligned within their horizontal space in the row. Here is an example:

Figure 5-1  Example of component placement
All three golf ball images are the exactly the same, and the two record lists are exactly the same. However, you can see how the sizes of the components change depending on whether there are two or three components in the row. You can also see that the height of the first row is based on the height of the golf ball image, whereas the height of the second row is based on the height of the record list.

If you want a component to span more than one row, you need to place that component in another column. Here is an example:

Figure 5-2 Example of how column layout affects component placement

This example is the same as the previous example, but with the addition of another column with a longer record list in it. Because the longer record list is in a different column, it does not affect the height of the rows in the other column (the column containing the golf ball images and shorter record lists).
Editing a Page Component

After placing a component on a page, you can change it by moving it to a new location or changing its settings:

- To move a component, place your pointer over the component's title bar and drag it to a new location.

- To change the settings for a component, click.

Deleting a Page Component

If you delete a component from a page, any underlying DataSpace and its data remains available in Pages. If you need to retrieve a deleted component, you can revert to a previous version of the page that included the component.

- To delete a component, click.

Image Components

The image component enables you to add an image to the page. You can point to a URL, use an uploaded image, or use an image attached to the page. For example, when viewing a record of a customer issue, you might want to display a screenshot of the issue experienced by the customer.

There are several ways to include an image:

- You can use an image available on the internet by specifying the URL to the image.

- You can use an image from your computer, by uploading the image. Uploaded images are stored in the Pages repository and treated as attachments to pages (just like other documents).

- You can use an image that is already attached to the page.

Note: For more information on image components, see the online help.
Record List Components

The record list component enables you to add a list of records from a DataSpace to the page. A record list enables users to search for and view records. With editable DataSpaces, users with the proper permissions can also edit, add, and delete records.

**Note:** For information on working with records, see “Records” on page 6-9.

Here is an example record list:

![Record List Example](image)

Note: For more information on record list components, see the online help.

Record lists are a good way to display data from DataSpaces with a significant number of fields (since each field is not represented by a table column) or large amounts of data in some or all of the fields (since the data for each field is not displayed in a single table cell).

**Note:** For more information on record list components, see the online help.
Rich Text

The rich text component enables you to add formatted text to the page. After adding a rich text component, you type your text and then use the formatting toolbar to change the formatting.

**Note:** Rich text fields in custom DataSpaces use the rich text formatting toolbar. However, not all functions are available in rich text fields, as noted in the table.

<table>
<thead>
<tr>
<th>Option</th>
<th>Avail. in Rich Text Fields</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paragraph formats</td>
<td>No</td>
<td>Enables you to apply the following paragraph formats: Normal, Normal (DIV), Formatted, Address, Heading 1, Heading 2, Heading 3, Heading 4, Heading 5, or Heading 6.</td>
</tr>
<tr>
<td>Font size</td>
<td>No</td>
<td>Enables you to select from the following text sizes: xx-small, x-small, small, medium, large, x-large, or xx-large.</td>
</tr>
<tr>
<td>Font formats</td>
<td>Yes</td>
<td>Enables you to apply the following font formats: bold, italic, underline, and strike-through.</td>
</tr>
<tr>
<td>Paragraph alignment</td>
<td>Yes</td>
<td>Enables you to apply the following paragraph alignment: left, center, right, justify.</td>
</tr>
<tr>
<td>Lists</td>
<td>Yes</td>
<td>Enables you to apply the following list formats: bulleted/unordered or numbered/ordered.</td>
</tr>
<tr>
<td>Paragraph indents/outdents</td>
<td>No</td>
<td>Enables you to indent or outdent a paragraph.</td>
</tr>
<tr>
<td>Horizontal rule</td>
<td>No</td>
<td>Enables you to add a horizontal rule.</td>
</tr>
<tr>
<td>Foreground/background color</td>
<td>No</td>
<td>Enables you to change the foreground and background color.</td>
</tr>
<tr>
<td>Insert Links</td>
<td>Yes</td>
<td>Enables you to insert links to other pages created in AquaLogic Pages or to URLs.</td>
</tr>
</tbody>
</table>

**Note:** For more information on rich text components, see the online help.
Tables

The table component enables you to add a table of records from a DataSpace to the page. The table automatically includes a column for each field in the associated DataSpace. A table enables users to search for, sort, and view records. With editable DataSpaces, users with the proper permissions can also edit, add, and delete records.

Note: For information on working with records, see “Records” on page 6-9.

There are three table modes, all of which enable similar functionality, but in slightly different interfaces. To learn about and see examples of the different table modes, see “Table Modes” on page 5-8.

Tables are a good way to display data from DataSpaces with a minimal number of fields (since each field is represented by a column) or small amounts of data in the fields (since the data for each field is displayed in a single table cell).
Table Modes

There are three table modes: Master/Detail, Spreadsheet, and Simple. Each table enables users to search for, sort, and view records. With editable DataSpaces, users with the proper permissions can also edit, add, and delete records. The difference between the tables is the user interface.

**Note:** For information on working with records, see “Records” on page 6-9.

<table>
<thead>
<tr>
<th>Table Mode</th>
<th>Description</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Master/Detail</td>
<td>A Master/Detail table displays the list of records as well as the record details and new record form in the table interface. When a user adds a new record or clicks a record to view or edit the details, the record fields appear below the table. Because the record details appear within the table interface rather than in page view, users will not be able to add additional content (page components, comments, or documents) to records or see additional content that has been added to a record. If you want users to be able to view and add additional content, choose Simple mode. Use this mode for users who are comfortable filling in fields in a form and when you do not want users to be able to view or add additional content.</td>
<td></td>
</tr>
</tbody>
</table>
Note: For more information on table components, see the online help.
Components
CHAPTER 6

DataSpaces and Records

This chapter describes how to create and display data in Pages through DataSpaces, including creating your own custom data sources and surfacing data from external data sources; it also describes how to work with records in DataSpaces.

DataSpaces

A DataSpace defines a set of data, made up of records. You can create a custom DataSpace that stores data in the Pages repository, or you can point to an external system from which you want to surface data.

Each DataSpace is based on a template that defines the configurable properties of the DataSpace (for example, whether the DataSpace relies on the native Pages repository or an external repository). Pages includes the following templates:

- Blank/Custom: This template enables you to create a DataSpace in which you can define your own fields.
- Blog: This template enables you to create a blog.
- RSS: This template enables you to display data from an RSS data feed (for example, latest news stories). Fields are automatically created according to the information provided by the RSS data feed. RSS data feed DataSpaces are read-only.
DataSpaces and Records

- Web Service: You can display data from an external data source in your pages via SOAP. For example, you might want to display customer support issues or sales information from a customer relationship management (CRM) system, display inventory information from an enterprise resource planning (ERP) system, or connect to a free web service on the internet.

  Note: Your portal administrator must create a custom DataSpace template to enable you to display data from an external data source. For information on creating a custom DataSpace template, see “Creating a Web Service DataSpace Template” on page 6-6.

**DataSpace Security**

Only users that are members of the DataSpace Creators portal group can create DataSpaces. DataSpace Creators see the **Create a New DataSpace** link in the Dashboard. DataSpace creators can also create a new DataSpace when they configure a page component that relies on a DataSpace.

Each DataSpace includes security so you can control which users can view or edit the records in the DataSpace. Users who are allowed to edit the records can add or edit content enabling rapid knowledge transfer.

You set security by assigning roles to portal users and groups. These roles apply to every object associated with the DataSpace (records, documents, and components added to the DataSpace or records in page view). For a description of the available roles and what privileges these roles provide, see “Pages Roles” on page 7-2.

**Custom DataSpaces**

Custom DataSpaces enable you to define your own data fields to fit your needs. For example, you might want to create a custom DataSpace to track job postings, marketing campaigns, or facilities requests.

Data collected in a custom DataSpace is stored in the Pages repository and is therefore editable. For information on how users work with records, see “Records” on page 6-9.

Creating a custom DataSpace is simple because you choose from a list of available field types and then specify the properties for each field.
The following field types are available:

**Table 6-1  Field Types**

<table>
<thead>
<tr>
<th>Field Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Text</td>
<td>Enables users to enter small amounts of text.</td>
</tr>
<tr>
<td>Long Text</td>
<td>Enables users to enter longer blocks of text.</td>
</tr>
<tr>
<td>Rich Text</td>
<td>Enables users to enter formatted text. For information on the formatting options available in a rich text field, see “Rich Text” on page 5-6; not all rich text features are available in rich text fields.</td>
</tr>
<tr>
<td>Drop-Down</td>
<td>Enables users to select a value from a list.</td>
</tr>
<tr>
<td>Dynamic Drop-Down</td>
<td>Enables users to select a value from a list populated by a DataSpace. The list is populated with the values from the title field of the specified DataSpace. For example, you might point to a DataSpace of customer contact info, so users can select from the list of customers.</td>
</tr>
<tr>
<td>HyperLink</td>
<td>Enables users to enter text hyperlinks.</td>
</tr>
</tbody>
</table>

For each field, you define the following properties:

**Table 6-2  Field Properties**

<table>
<thead>
<tr>
<th>Field Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field Title</td>
<td>This value is displayed as the field label in record entry forms and as the column header in the DataSpace, record lists, and tables.</td>
</tr>
<tr>
<td>Field Type</td>
<td>Enables you to change the type of field.</td>
</tr>
<tr>
<td>Values</td>
<td>Enables you to specify the list of values for a drop-down field.</td>
</tr>
<tr>
<td><strong>Note:</strong></td>
<td>This property displays only when you select Drop-Down as the field type.</td>
</tr>
<tr>
<td>Current DataSpace</td>
<td>Enables you to specify the DataSpace that should be used to populate the list of values for a dynamic drop-down field.</td>
</tr>
<tr>
<td><strong>Note:</strong></td>
<td>This property displays only when you select Dynamic Drop-Down as the field type.</td>
</tr>
</tbody>
</table>
Blog DataSpaces

Blog DataSpaces enable you to create a blog. A blog is an online journal or chronological publication of comments and information. Blogs are generally updated frequently and can be an efficient communication tool for small groups or to disseminate knowledge to a group. For example, you might want to create a blog so that your CEO can keep the company appraised of important company news.

Blog DataSpaces, like custom DataSpaces, store data in the Pages repository and are therefore editable. For information on how users work with records, see “Records” on page 6-9.

To create a blog DataSpace, you need only specify a title (and, optionally, customize the URL and specify a description). The fields are pre-defined to fit a standard blog entry: a text field for the title and a rich text field for the post.

When you view a blog DataSpace in page view, it looks a bit different than the standard DataSpace page view. It is formatted to look like a standard blog, displaying the 10 most recent posts, but it also includes an archive list that displays links to previous blog posts.

A blog DataSpace record (a post) in page view also looks different than the standard record page view. It is also formatted to look like a standard blog post.

RSS DataSpaces

RSS DataSpaces enable you to display content from an external RSS feed. For example, you might want to display recent news articles discussing your product or company.

Because RSS DataSpace data comes from external systems, it is read-only. However, after you create an RSS DataSpace and its records have been fetched at least once (by a user viewing the DataSpace), the records become part of the search collection and users can add components, text, and document attachments to the records. Pages updates the cached records when a record is viewed by a user. For information on how users work with records, see “Records” on page 6-9.

Table 6-2  Field Properties

<table>
<thead>
<tr>
<th>Field Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use this field value for the record title?</td>
<td>Enables you to specify that the value in this field be used as the title for the record (for example, in search results or dynamic drop-down lists).</td>
</tr>
<tr>
<td>Display Order</td>
<td>Enables you to change the order in which the fields are displayed.</td>
</tr>
</tbody>
</table>
To create an RSS DataSpace, you need only specify a title (and, optionally, customize the URL and specify a description), the URL for the given feed, and, if the feed is secured, a user name and password. The fields are automatically created based on the data from the RSS feed.

Once this information is supplied, users can navigate to a List view or a Display view. The List view, like with the blog DataSpace type, is custom to RSS. Also, RSS is read-only, so there is no “Entry” view. There is nothing particularly worth noting about the RSS view overrides other than that they are slightly different to allow easier browsing/reading of the RSS data. At any time you view a feed or an item, the RSS feed is requested. This means, it's expected that the feed or a given post should display real-time data. Users can update the RSS URL at any time. If a user changes the URL for an RSS feed, and if an Object as Page exists for a given post item, those Objects as Pages will be left around for posterity.

**Web Service DataSpaces**

Web service DataSpaces enable you to surface data residing in external systems via SOAP-based web services. For example, you might want to display sales information from a CRM system, or display inventory information from an ERP system, or connect to a free web service on the internet.

Because web service DataSpace data comes from external systems, it is read-only. However, after you create a web service DataSpace and its records have been fetched at least once (by a user viewing the DataSpace), the records become part of the search collection and users can add components, text, and document attachments to the records. Pages updates the cached records when a record is viewed by a user. For information on how users work with records, see “Records” on page 6-9.

To create a web service DataSpace, you specify a title (and, optionally, customize the URL and specify a description) and the parameters specific to the type of external system (for example, for a Google search, specify the term you want to search for). The fields are automatically created based on the data from the external system.

A sample DataSpace template is installed with Pages. You can use this sample template to help you create new enterprise DataSpace templates to surface data from other SOAP-based web services. For information on creating a custom DataSpace template, see Creating a Web Service DataSpace Template.

**Note:** For a web service DataSpace to be valid, it must expose a primary key field, which is a unique identifier that represents a given record (like a customer ID field for a list of customers from a CRM system).
Creating a Web Service DataSpace Template

To create a new web service DataSpace template:

1. On the computer on which you installed Pages, open the \record-set-templates\soap\ folder (for example, c:\bea\alui\pages\1.0\record-set-templates\soap\).

2. Create a new folder for your new template.

3. Copy the sample template, record-set-descriptor.xml (for example, c:\bea\alui\pages\1.0\record-set-templates\soap\google-search-template\ record-set-descriptor.xml), into your new folder.

4. Open the new copy of the file in a text editor and change the following values:

   a. **name**: a unique identifier for this DataSpace template
   b. **id**: a unique identifier for this DataSpace template (use the same value you used for name)
   c. **title**: the title that users see when interacting with this template

      **Note:** If you want to use display titles based on the user’s selected language, use `localizedTitles`, using the files in the \settings\i18n\ folder as examples.

   d. **recordSource**: soap; this value must be `soap` for the system to register the template as one pointing to a SOAP endpoint
   e. **recordSetURI**: the URL to the WSDL you want to use

      **Note:** Open up the WSDL in a browser to help you with the next few settings.
   f. **operationName**: the name of the operation you want to invoke on the WSDL whenever an instance of this DataSpace template is instantiated
   g. **inputMessageName**: the name of the input message; SOAP operations require input messages
   h. **portTypeName**: the name of the port type for the given WSDL
   i. **bindingName**: the name of the binding for the given WSDL
   j. **serviceName**: the name of the service for the given WSDL
   k. **recordSetXPath**: the XPath expression that returns the collection of items from the web service (Pages will treat these items as records)
1. **inputMessageParts**: the list of input parts to include in the SOAP message sent to the WSDL

   Create a messagePart entry for each input part. The name must exactly match the name of the input message part defined by the WSDL. If desired, specify a default value for a part. Specify whether the value of the part is configurable by users, and if so, specify the field label for the part.

   **Note:** A form is automatically generated and displayed in the DataSpace Editor for the message parts you expose to users.

m. **recordTypeDefinition**: a description of the data that is returned by the WSDL operation

   Create an entry for each piece of data (which Pages will treat as a field in the record), specifying the appropriate field class. Specify a title for the field, whether the field value should be used as the title for the record, whether the field requires a value, whether the field should be displayed, and if so, in what order the field should be displayed.

   **Note:** If you want to use display field names based on the user’s selected language, use localizedTitles, using the files in the \settings\i18n\ folder as examples.

   The record type definition is used any time a record from a DataSpace created from this template is displayed in the user interface.

5. Save the file.

6. Restart Pages.

7. To verify that the template is working properly, navigate to the Dashboard, click **Create a New DataSpace**, select the new template (listed under Web Service), create a DataSpace, and view the DataSpace.

   **Note:** Changes to a DataSpace template do not apply to DataSpaces created from that template.

---

### Creating a DataSpace

Before you create a DataSpace, think about what type of DataSpace you need to create, and, if you are creating a custom DataSpace, what fields the DataSpace should include. Consider which users and groups should be allowed to view, comment on, create, edit, and delete the DataSpace and all the objects associated with the DataSpace.
To create a DataSpace:

1. Use one of the following methods to open the DataSpace Editor:
   - Navigate to the Dashboard and click **Create a New DataSpace**.
   - Create or navigate to the page on which you want to display the DataSpace. Add a record list or table component to the page. Enter a name for the component, then click **Configure DataSpace**.

2. On the Template page, select the type of DataSpace you want to create, and click **Configure DataSpace**.

3. On the General Settings page, type a name and description for the DataSpace and edit the default URL if desired. Then click **Next**.

4. If you are creating a custom DataSpace, on the Data Fields tab, add fields and define the field properties, then click **Next**.

5. If you are creating an RSS DataSpace, on the Feed tab, type the URL to the **RSS Feed Location**, and, if necessary, specify a user name and password, then click **Next**.

6. On the Security page, assign roles to portal users and groups based on the security decisions you made before creating the DataSpace.

7. Click **Finish**.

For more information on the DataSpace Editor and creating DataSpaces, see the online help.

**Viewing a DataSpace**

You can navigate to a DataSpace several different ways:

- Click the DataSpace in the Dashboard.
- Click the DataSpace in the Organizer.
- Click the DataSpace in the DataSpaces portal menu.
- Click or enter the URL to the DataSpace.
- Navigate to a page that includes a record list or table that displays the DataSpace.
Editing a DataSpace

Use one of the following methods to edit a DataSpace:

- Navigate to the DataSpace, click **DataSpace settings**.
- From the Organizer, select the DataSpace and click **Info & Settings**.

Deleting a DataSpace

When you delete a DataSpace, it deletes all objects associated with the DataSpace, including all the records in the DataSpace, any pages that were created for any of the records, and any components and documents added to those pages. There is no way to recover the DataSpace or any associated objects after deleting it.

Use one of the following methods to delete a DataSpace:

- Navigate to the DataSpace, click **DataSpace settings**, then, in the DataSpace Editor, click **Delete**.
- From the Organizer, select the DataSpace and click **Delete**.

Records

A record is a group of related fields that store data about a subject or activity (for example, a record can be one row in a table or one entry in a blog). A collection of records is stored in a DataSpace (which stores data in the native repository or points to an external repository of data).

**Note:** Data stored in an external repository (for example, data from RSS or web service DataSpaces) is read-only; therefore you cannot add, edit, or delete records. Data stored in the native repository (for example, data from custom and blog DataSpaces) is editable.

Creating a Record

**Note:** You can only add records to custom or blog DataSpaces and only if you have the proper permissions. For information on permissions, see “Pages Roles” on page 7-2.

You add records different ways depending on the interface that displays the records:

- You create a new record in a Master/Detail table by clicking **Add New Record**, filling in the fields at the bottom of the table, and clicking **Create**.
- You create a new record in a Spreadsheet table by typing your data in the blank row at the bottom of the table, then moving your cursor out of the row to save the record.
You create a new record in a Simple table by clicking **Add New Record**, filling in the fields in the form page, and clicking **Create**.

You create a new record in a DataSpace by navigating to the DataSpace, clicking **Create a new record** (in a blog, click **Create New Post**), filling in the fields in the form page, and clicking **Create**.

You create a new record in a record list by clicking **Add Record**, filling in the fields in the form page, and clicking **Create**.

## Viewing Record Details

Record details are displayed in the table or record list, but, if there is additional content (for example, images, comments, or documents) associated with a record, you can view those details in page view. To view the record in page view, navigate to the DataSpace, Simple table, or record list that includes the record, and click the record.

**Note:** Because you cannot open a record in page view from a Master/Detail table or a Spreadsheet table, you cannot view components, comments, or documents associated with a record that you access from one of those tables.

## Searching for Records

You can search for records using the search box at the top of any table or record list. As you type, the list is dynamically filtered to display only those records that include your search text in one of the record fields.

## Sorting Records in a Table

You can sort the records in any table by clicking the name of the column by which you want to sort. The records will be sorted in ascending order. Click the column name again to sort the records in descending order.

**Note:** You cannot sort records in a record list.

## Adding Components, Comments, or Documents to a Record

You add components, comments, or documents to a record by opening the record in page view and editing the record just like any other page.

**Note:** For information on editing pages, see “Editing a Page” on page 4-5.
**Editing Record Data**

**Note:** You can only edit records stored in the Pages repository (in custom or blog DataSpaces) and only if you have the proper permissions. For information on permissions, see “Pages Roles” on page 7-2.

You edit records different ways depending on the interface that displays the records:

- You edit a record in a Master/Detail table by clicking the record, editing the data in the fields at the bottom of the table, and clicking **Save Record**.
- You edit a record in a Spreadsheet table by clicking the cell you want to edit, editing the data, then moving your cursor out of the row to save the record.
- You edit a record in a Simple table or a DataSpace by clicking the record (which opens the record in page view), editing the data in the form page, and clicking **Save Record**.
- You edit a record in a DataSpace or a record list by clicking **Edit Record** under the record you want to edit, editing the data in the form page, and clicking **Save Record**.

**Deleting a Record**

**Note:** You can only delete records to custom or blog DataSpaces and only if you have the proper permissions. For information on permissions, see “Pages Roles” on page 7-2.

You delete records different ways depending on the interface that displays the records:

- You delete a record in a table by selecting the record and clicking **Delete Records**.
- You delete a record in a DataSpace or record list by clicking **Delete Record** under the record you want to delete.
DataSpaces and Records
This chapter describes how to secure Pages functionality and objects through special Pages portal groups and through roles granted to portal users and groups on LiveSpaces and DataSpaces.

Pages Portal Groups

There are several portal groups created when you import the Pages migration package:

Table 7-1  Pages Portal Groups

<table>
<thead>
<tr>
<th>Group</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pages Users</td>
<td>Allows members to see the Pages user interface. Any user you want to use the Pages application needs to belong to this group.</td>
</tr>
<tr>
<td></td>
<td>When you create a new LiveSpace or DataSpace, the Pages Users group is granted the Guest role by default. To learn about roles, see “Pages Roles” on page 7-2.</td>
</tr>
<tr>
<td>Pages Administrators</td>
<td>Allows members access to all areas and full control of all objects in Pages. The Pages Administrators group is granted the Administrator role on all LiveSpaces and DataSpaces. To learn about roles, see “Pages Roles” on page 7-2.</td>
</tr>
<tr>
<td>DataSpace Creators</td>
<td>Allows members to create new DataSpaces. Allows members to see the Create a New DataSpace link in the Dashboard.</td>
</tr>
<tr>
<td>LiveSpace Creators</td>
<td>Allows members to create new LiveSpaces. Allows members to see the Create a New LiveSpace link in the Dashboard.</td>
</tr>
</tbody>
</table>
Pages Roles

You secure Pages objects at the LiveSpace and DataSpace level by assigning roles to users and groups. The roles apply to the LiveSpace or DataSpace as well as any associated objects (for example, pages in a LiveSpace or records in a DataSpace). The Administrator user and the Pages Administrators group are assigned the Administrator role for all LiveSpaces and DataSpaces; these role assignments cannot be changed. By default, the Pages Users group is assigned the Guest role to all LiveSpaces and DataSpaces, but you can change this role assignment if desired.

Note: The following privileges are additive, meaning that the Reviewer role includes the privileges granted to the Guest role as well as additional privileges.

Table 7-2 Pages Roles

<table>
<thead>
<tr>
<th>Role</th>
<th>Privileges</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guest</td>
<td>• View the LiveSpace or DataSpace and all associated objects in the Dashboard, in the Organizer, and in page view</td>
</tr>
<tr>
<td>Reviewer</td>
<td>• Add comments to and reply to comments on the LiveSpace or DataSpace and all associated objects</td>
</tr>
<tr>
<td></td>
<td>Note: Comments can be edited only by the user that wrote the comment or the Administrator. Comments can be deleted only by the user that wrote the comment, the user that created the object with which the comment is associated, or the Administrator.</td>
</tr>
<tr>
<td>Creator</td>
<td>• Create pages in the LiveSpace or records in the DataSpace (if the DataSpace is editable)</td>
</tr>
<tr>
<td></td>
<td>• Delete comments associated with objects they create</td>
</tr>
<tr>
<td></td>
<td>• Edit or delete any object they create</td>
</tr>
<tr>
<td></td>
<td>• Edit or delete objects associated with objects they create For example, if a user creates a record and another user adds an image to the record, the user that created the record could edit or delete the image.</td>
</tr>
<tr>
<td></td>
<td>Note: Editing includes: attaching, reverting, and deleting documents; adding components; and reverting to a previous version of the page view.</td>
</tr>
<tr>
<td>Publisher</td>
<td>• Edit any object associated with the LiveSpace or DataSpace (not the LiveSpace or DataSpace itself)</td>
</tr>
<tr>
<td></td>
<td>Note: Editing includes: attaching, reverting, and deleting documents; adding components; and reverting to a previous version of the page view.</td>
</tr>
<tr>
<td>Role</td>
<td>Privileges</td>
</tr>
<tr>
<td>--------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Editor</td>
<td>• Delete any object associated with the LiveSpace or DataSpace (including previous versions of page views, but not the LiveSpace or DataSpace itself)</td>
</tr>
<tr>
<td>Administrator</td>
<td>• Full control of the LiveSpace or DataSpace and all associated objects&lt;br&gt;• Edit or delete comments associated with the LiveSpace or DataSpace or comments associated with any associated objects&lt;br&gt;• Edit or delete the LiveSpace or DataSpace</td>
</tr>
</tbody>
</table>

*Note:* Editing includes: attaching, reverting, and deleting documents; adding components; and reverting to a previous version of the page view.
This chapter describes how to incorporate existing documents into Pages and how to manage those documents from within Pages.

Although you can add content to pages using rich text and page components, you might also want to add existing content (for example, Word documents or PowerPoint presentations). You can add this existing content by attaching documents to objects in page view. After attaching a document, users can view the document or upload new versions of the document.

### Attaching a Document to a Page

To attach a document to a page:

1. Navigate to the page.

2. Click **Attach a document**.

3. Click **Browse** to select the document. After selecting one document a new field appears, enabling you to select additional documents.

4. When you are done selecting documents, click **Upload**.

When you attach a document to an object it appears on the right, under **Attachments**, when you view the associated object in page view.

**Note:** You can link one page to another page using a rich text component. For more information, see “Rich Text” on page 5-6 or the online help.
Viewing a Document

There are two ways to view a document:

- Open the page, record, or DataSpace to which the document is attached, and, under Attachments, click the name of the document.

- Navigate to the Organizer and click the name of the document.

The document opens in page view. To view the document (or save it to your computer), click the document name.

Deleting a Document

To delete a document (and all its versions), navigate to the Organizer, select the document, and click Delete.

Uploading a New Version of a Document

There are two ways to upload a new version of a document:

- You can upload a new version of the document while viewing the document in page view. Click Upload new version, click Browse to select the new version, then click Upload.

  If the new version of the document has a different name than the existing version, the operative file name of the document changes to the new file name.

- You can also upload a new version of a document by selecting Attach a document in any page view, but the file names must match. If the file names do not match, Pages will treat the files as separate documents.

Viewing a Previous Version of a Document

To view a previous version of a document, open the document in page view, then click the name of the document next to the version number you want to view.
Reverting to a Previous Version of a Document

To revert to a previous version of a document, open the document in page view, then click Revert next to the appropriate version. The version you revert to is saved as a new version, so you do not lose any version history. For example, if you revert from Version 10 to Version 6, Version 6 gets saved as Version 11. If you later discover that you should not have reverted the document, you can revert back to Version 10.

Deleting a Version of a Document

To delete a previous version of a document, open the document in page view, and click Delete next to the appropriate version. When you delete a version there will be a hole in your revision history. For example, if you delete Version 3, the list of versions will display: Version 5, Version 4, Version 2, and Version 1. This enables users to see that a given version, which may have had a specific purpose or meaning, was deleted.
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