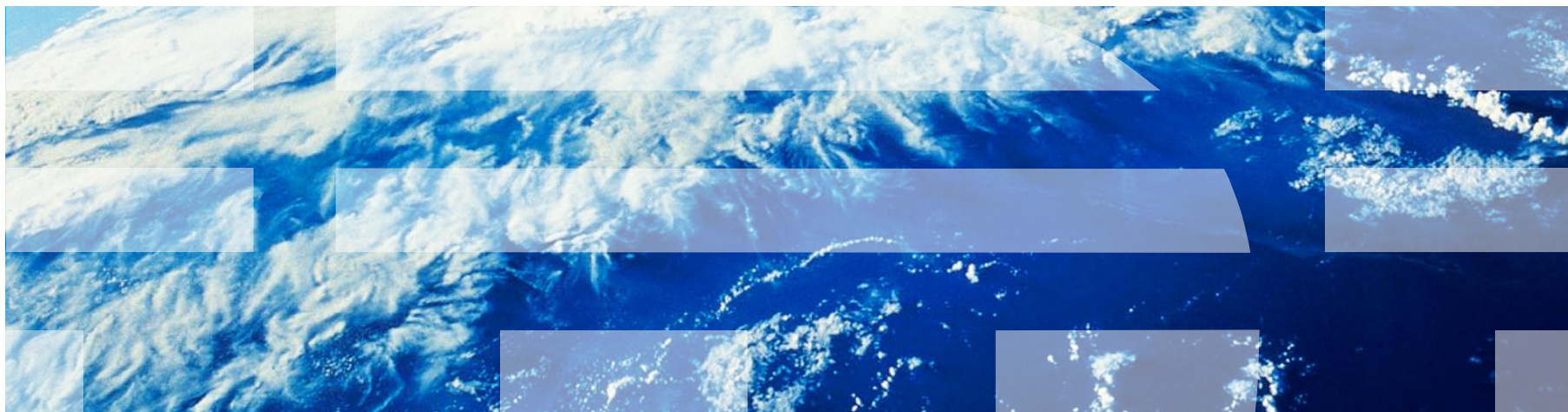


IBM Worklight Foundation V6.2.0 Getting Started

Accelerating application development by reusing resources



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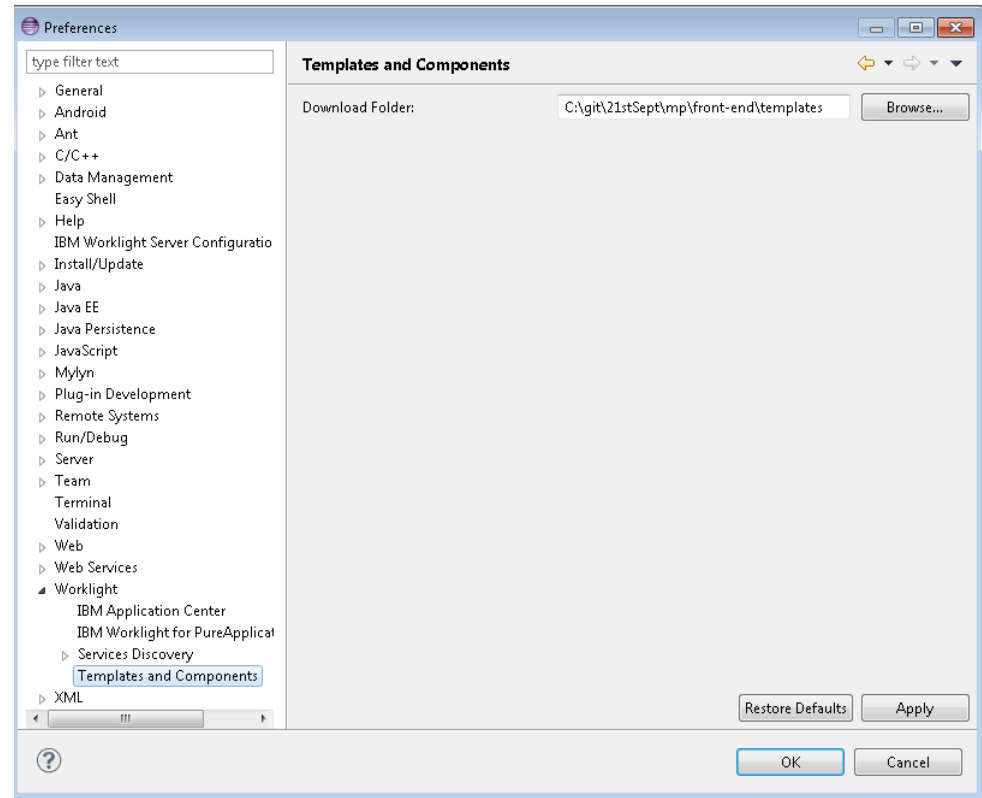
- See <http://www.ibm.com/ibm/us/en/>

Agenda

- Configuring application components and project template preferences
- Application components
 - Create application components
 - Add application components
 - Remove application components
- Worklight project templates
 - Create Worklight project templates
 - Add Worklight project templates
- Exercises

Configuring application components and project template preferences

- To add application components or IBM Worklight® project templates, you must identify a download folder.
- The download folder must only contain the application components or the Worklight project template archives.
- Set the download folder in **Preferences > Worklight > Templates and Components > Download Folder.**



Agenda

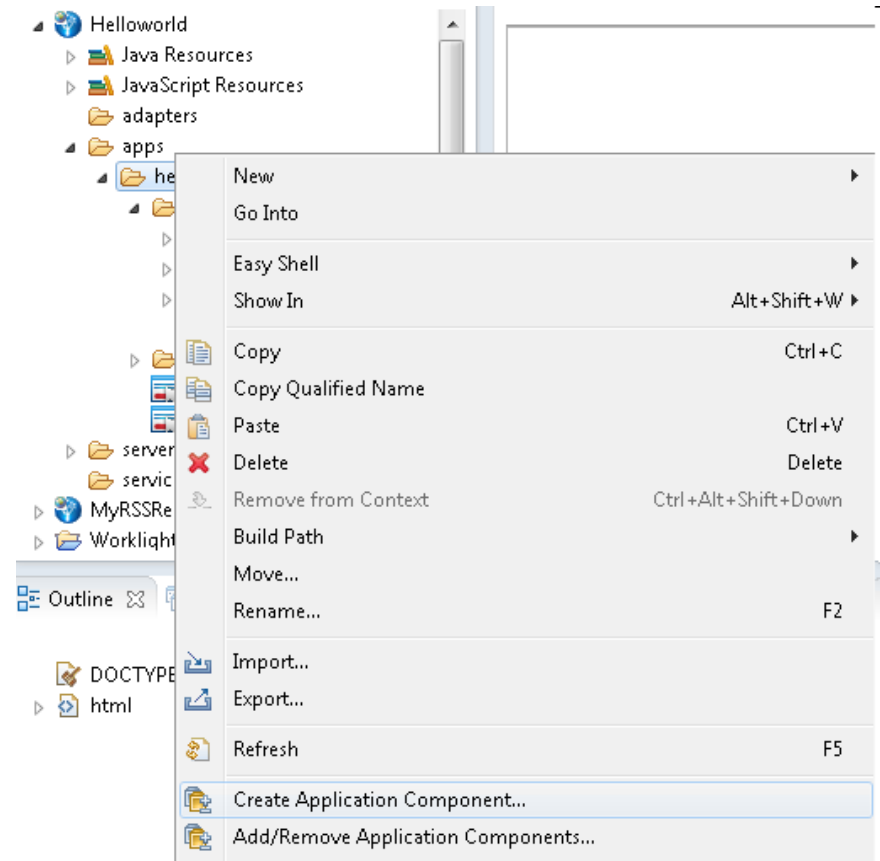
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Application components

- An application component is a reusable library that developers can add to their applications. It can be a client-side library or a server runtime block.
- Typical libraries might handle basic functions such as login or payments. They can also contain various elements such as non-visual runtime objects, visual components, integration adapters, and user interface screen packages.
- The application components must be downloaded in the **Download folder** as specified in the **Window > Preferences > Worklight** menu.
- The application components support only Worklight hybrid projects.

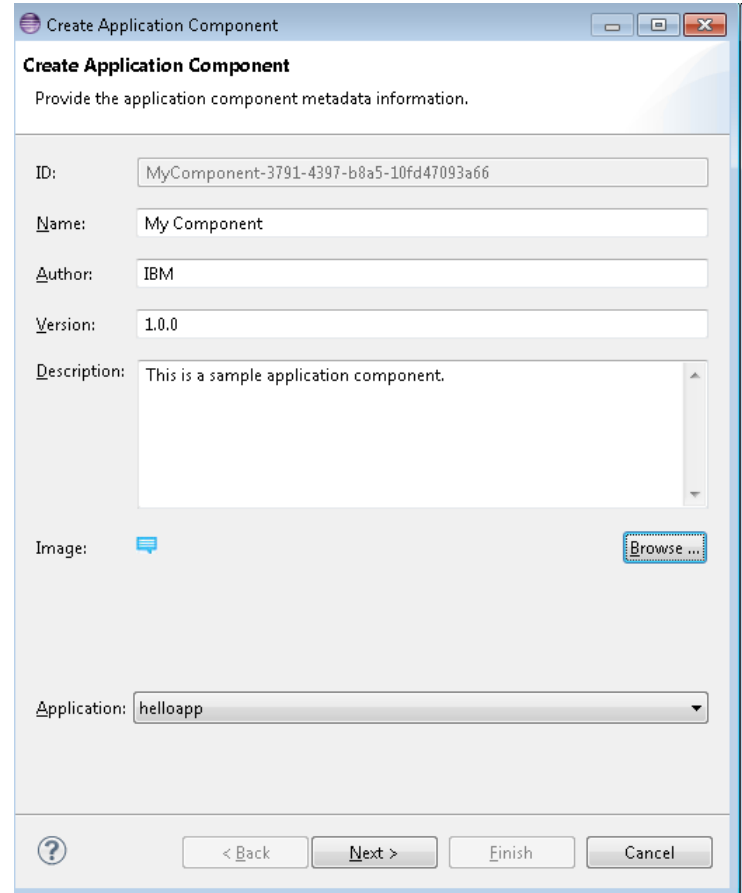
Create application components (1 of 3)

- You can use only a Worklight hybrid project to create application components.
- Based on the user's discretion, selected resources of the Worklight hybrid project can be included in the application component.
- The created application component is in archive format.
- Right-click the Worklight hybrid project and select **Create Application Component**.
- A wizard guides you through the process of creating the application component.
 - For more information about this wizard, see the user documentation.



Create application components (2 of 3)

- The first page of the wizard prompts for the application component metadata information that you must enter.



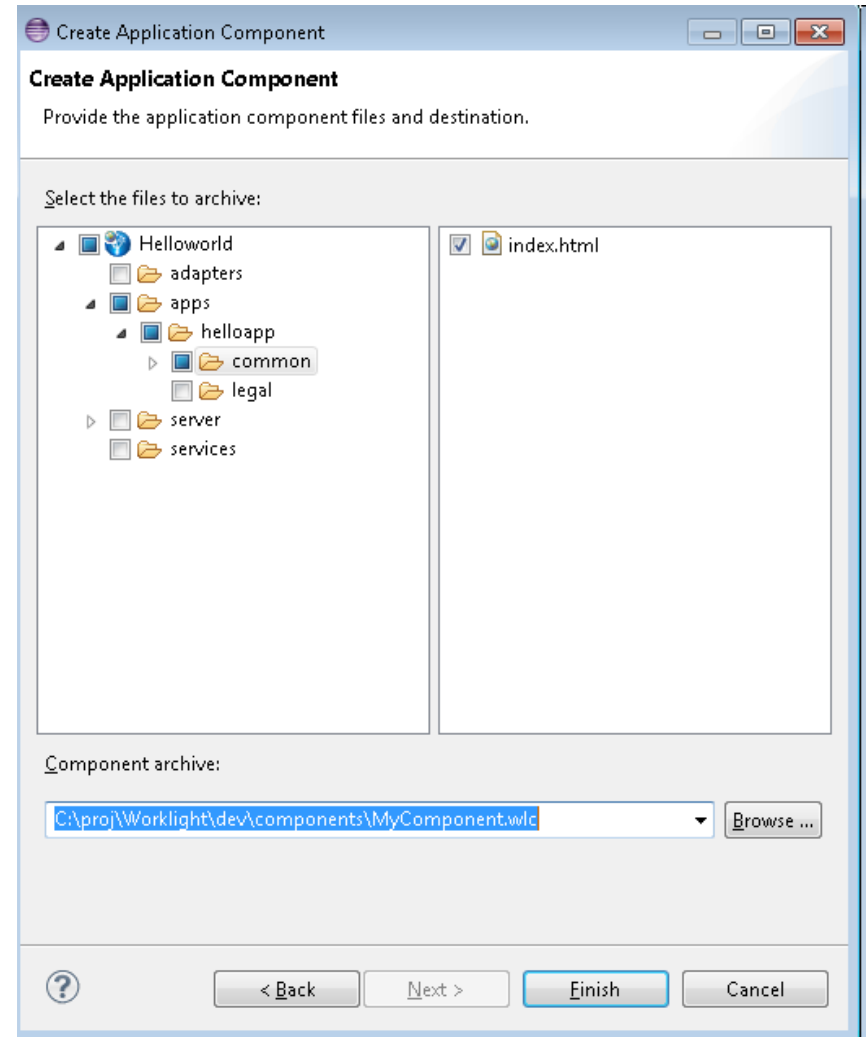
The screenshot shows a Windows-style dialog box titled "Create Application Component". The main heading is "Create Application Component" and the instruction is "Provide the application component metadata information." The form contains the following fields:

- ID:** MyComponent-3791-4397-b8a5-10fd47093a66
- Name:** My Component
- Author:** IBM
- Version:** 1.0.0
- Description:** This is a sample application component.
- Image:** A small blue icon with a speech bubble and a "Browse ..." button.
- Application:** helloapp

At the bottom, there is a help icon (question mark), and four buttons: "< Back", "Next >", "Finish", and "Cancel".

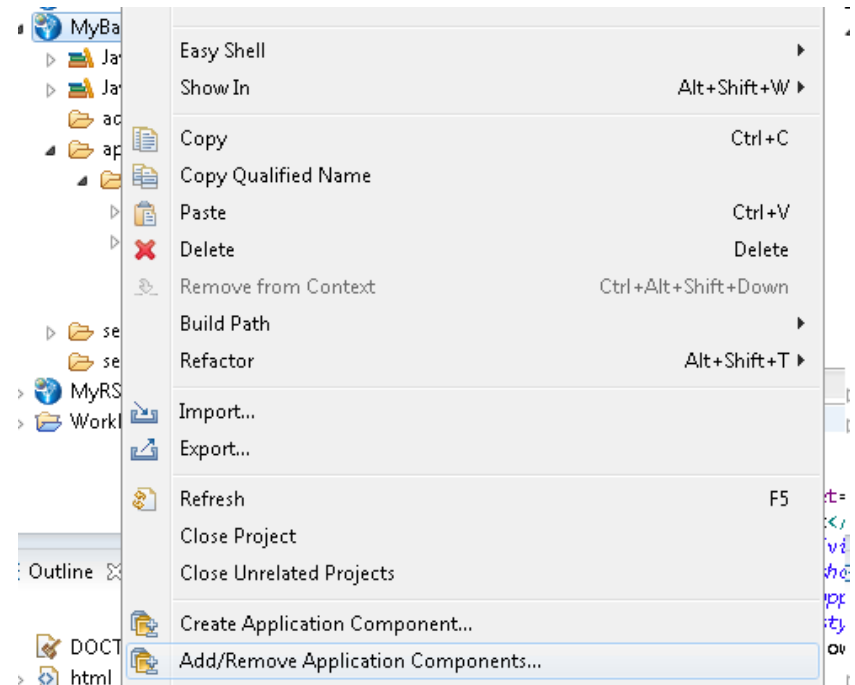
Create application components (3 of 3)

- The next page of the wizard prompts you to select the files that you want to include in the application component archive.
- After the creation of the application component archive, if you want to add additional optional hooks to enable automation when using the application component, refer to the section [Adding hooks to an application component](#) in the user documentation.



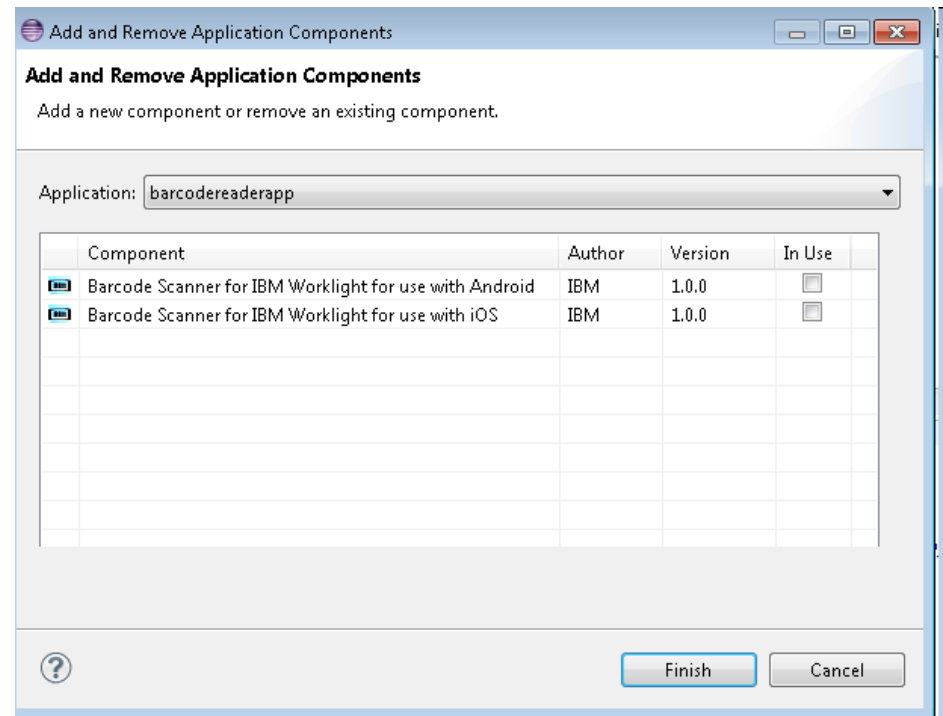
Add application components (1 of 4)

- You can add application components only to Worklight hybrid applications.
- A hybrid project must be created before adding any application component.
- The basic information about the application components is displayed.
- The application components are loaded from the configured **Download folder**.
- Right-click the Worklight hybrid project, and select **Add/Remove Application Components**.



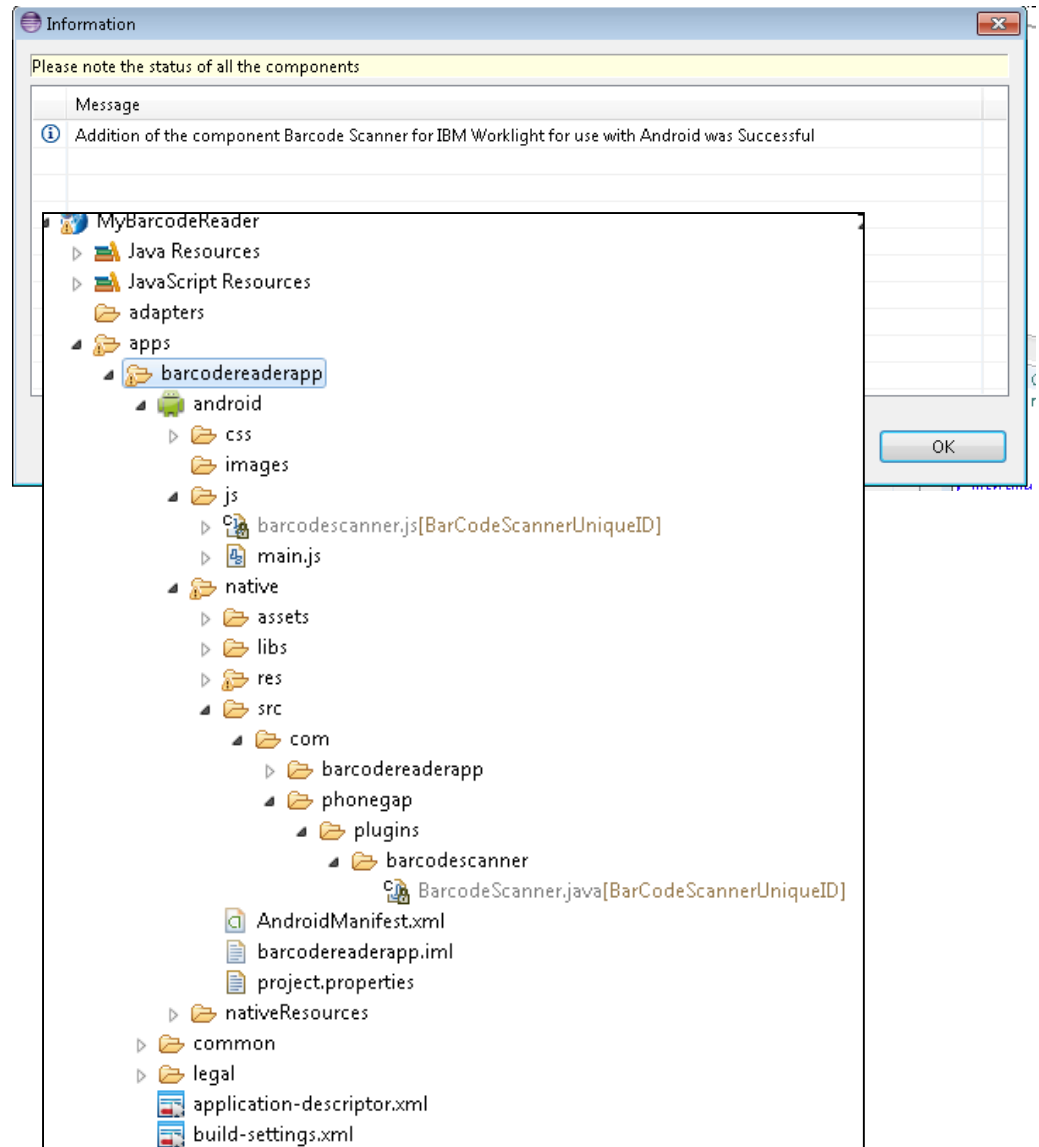
Add application components (2 of 4)

- The application components are scanned in the Download folder.
- Only valid application components are displayed in the Add and Remove application components wizard.
- Each component is displayed along with the Thumbnail, Name, Author and Version.
- Each component has a check-box besides it.
- The application components that you select are installed in the target Worklight project.



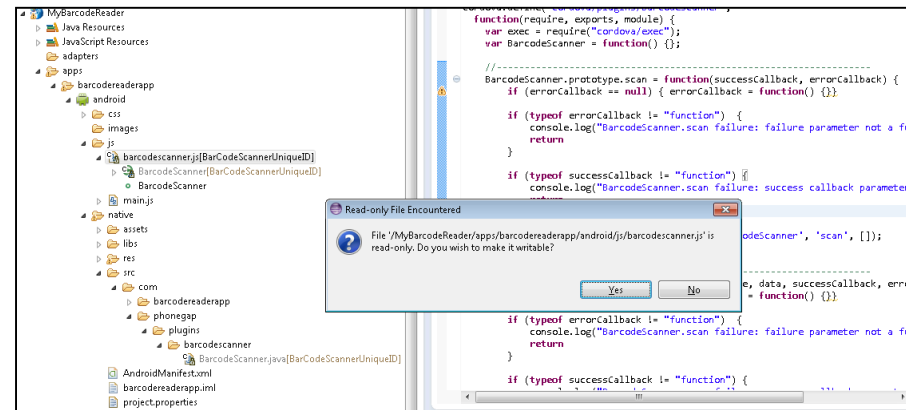
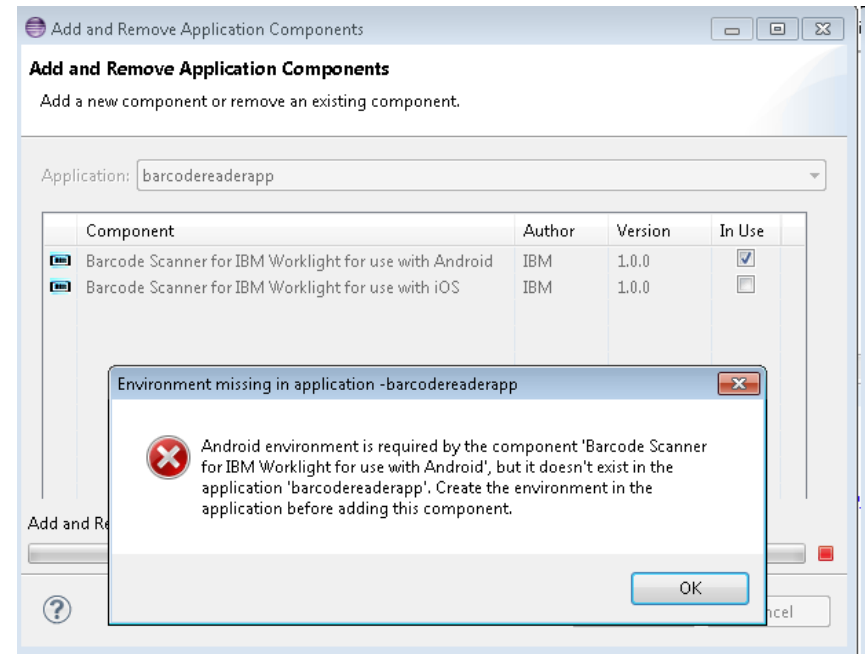
Add application components (3 of 4)

- The addition status of the application component is displayed after the activity is completed.
- The component resources are marked with the unique ID of the application component.



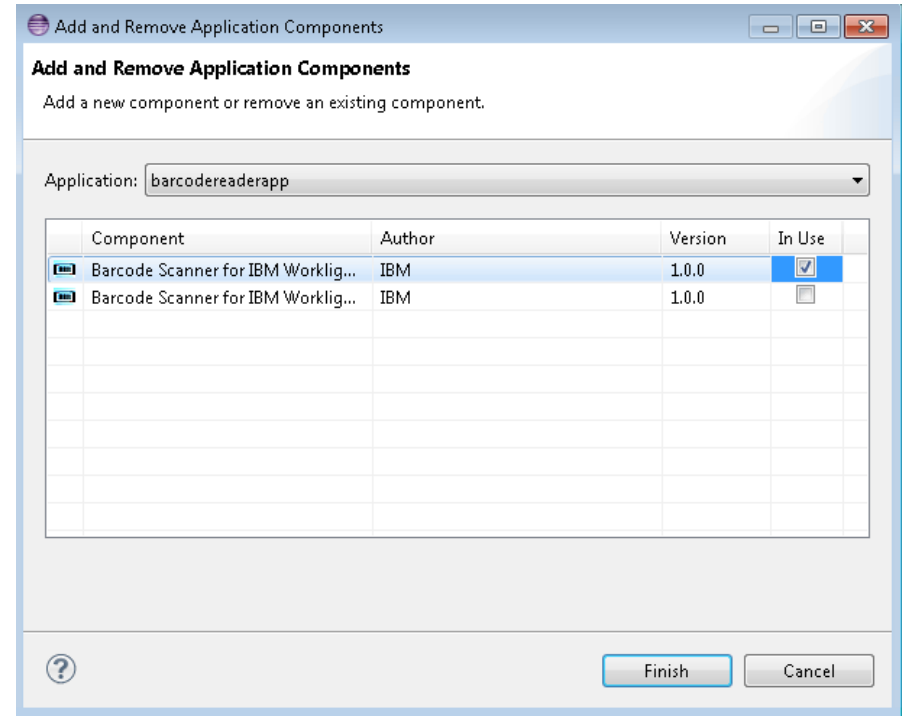
Add application components (4 of 4)

- Ensure that the prerequisite Worklight environments are created before you add the application component, otherwise error messages are displayed.
- If the required Android SDK is not installed on the hosting Worklight Studio, the appropriate message is displayed.
- If the contents of the application components or the Worklight applications are renamed, the linkage with the application component is broken.
- The application component files are read-only and you should not modify them.



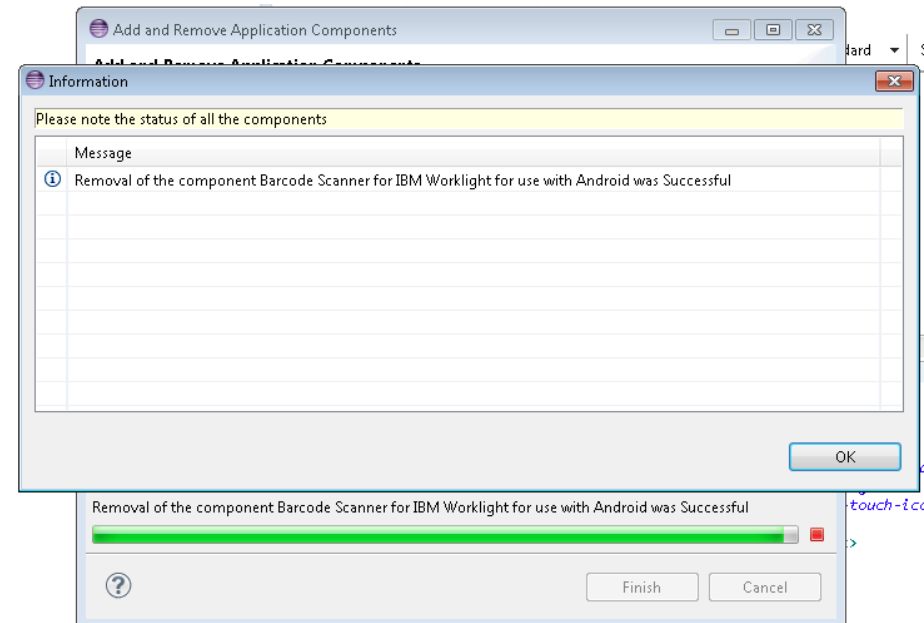
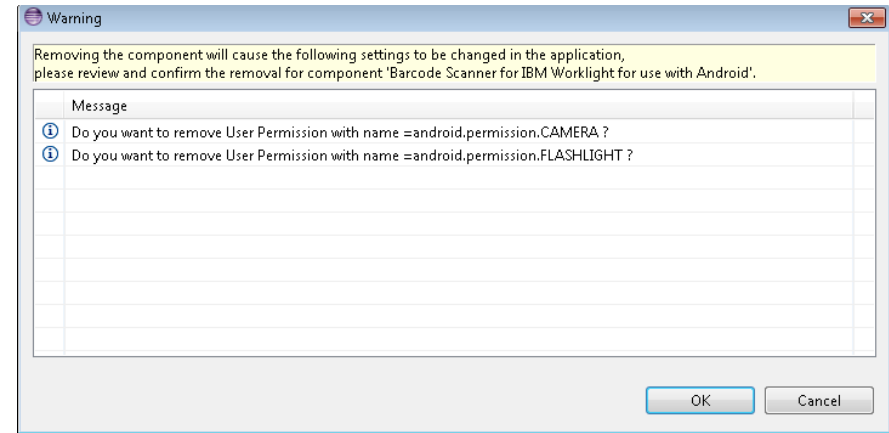
Remove application components (1 of 2)

- Right-click a Worklight hybrid project and select **Add/Remove Application Component**.
- Select the required application.
- Marks in the **In Use** column indicate the installed application components on the particular Worklight hybrid project.
- Clear the marks against the application components that you want to remove.



Remove application components (2 of 2)

- When removing some application components, you will be prompted to confirm whether to roll back the resource to its original content. Example : Removal of a UserPermission element will prompt you to confirm removal.
- The removal status of the application component is displayed after the removal activity is done.
- On successful removal of the application components, the original contents of the Worklight hybrid project resources are restored.



Agenda

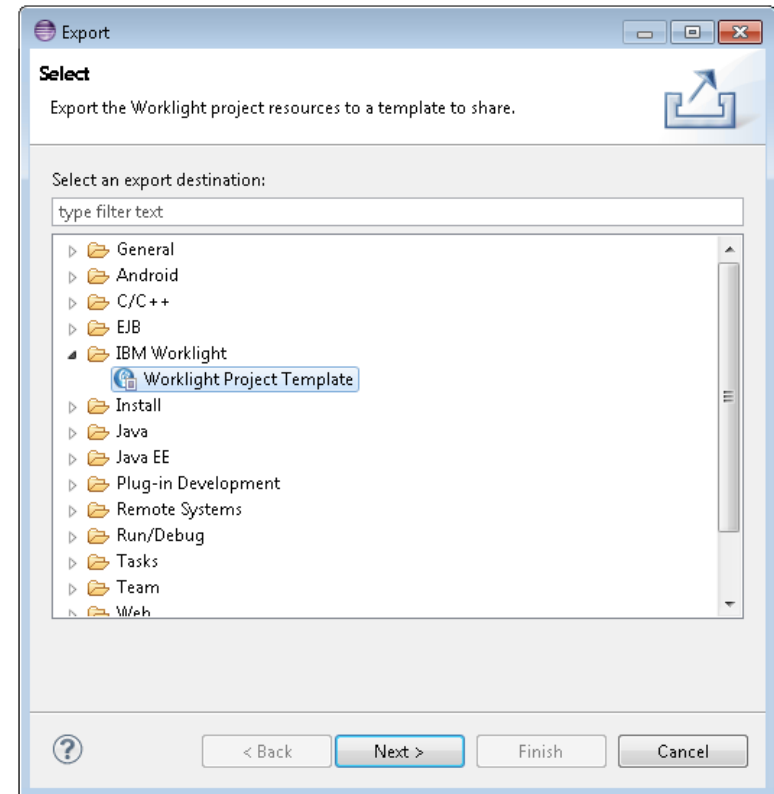
- Configuring application components and project template preferences
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Worklight project templates

- With Worklight project templates, you can accelerate the development of applications by not having to start from scratch.
- You can use Worklight project templates to provide value-added services; you can add elements that are consistent with the look and feel of your brand.
- The Worklight project templates are of hybrid type only.
- The Worklight project templates created from the newer version of Worklight are not supported in the older versions.

Create Worklight project templates (1 of 2)

- A user can export Worklight hybrid projects as Templates for re-usability.
- Right-click a Worklight project and click **Export > IBM Worklight > Worklight Project Template**.



Create Worklight project templates (2 of 2)

- On the Export page, enter basic information for the Worklight project template, such as **Template name**, **Author**, **Description**, **Thumbnail**, and **Template archive**.
- Valid extensions for Template archives are `.zip` and `.wlt`.
- All the fields are mandatory in this wizard.
- The Template archive is created at the selected location.
- The structure of the Template archive is described in the documentation.

Export


IBM Worklight Project Template Export

Export the Worklight project resources to a template to share.

Template name:

Author:

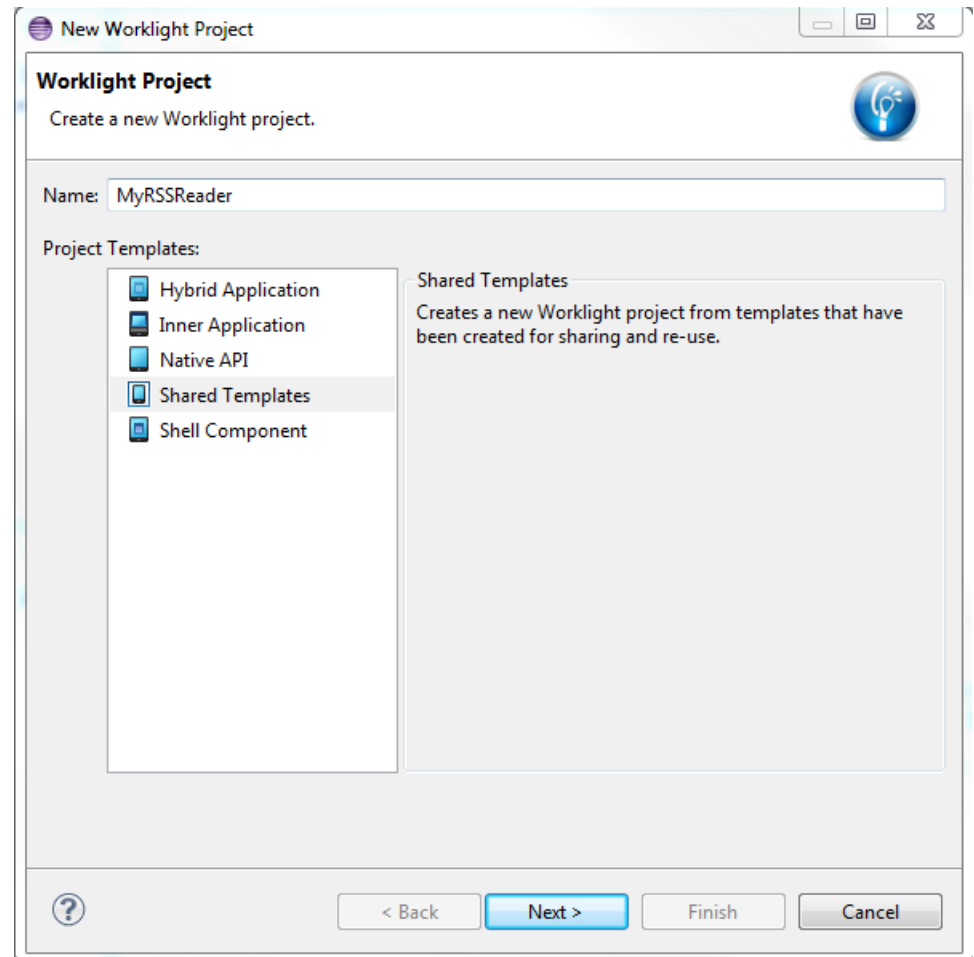
Description:

Thumbnail: 

Template archive:

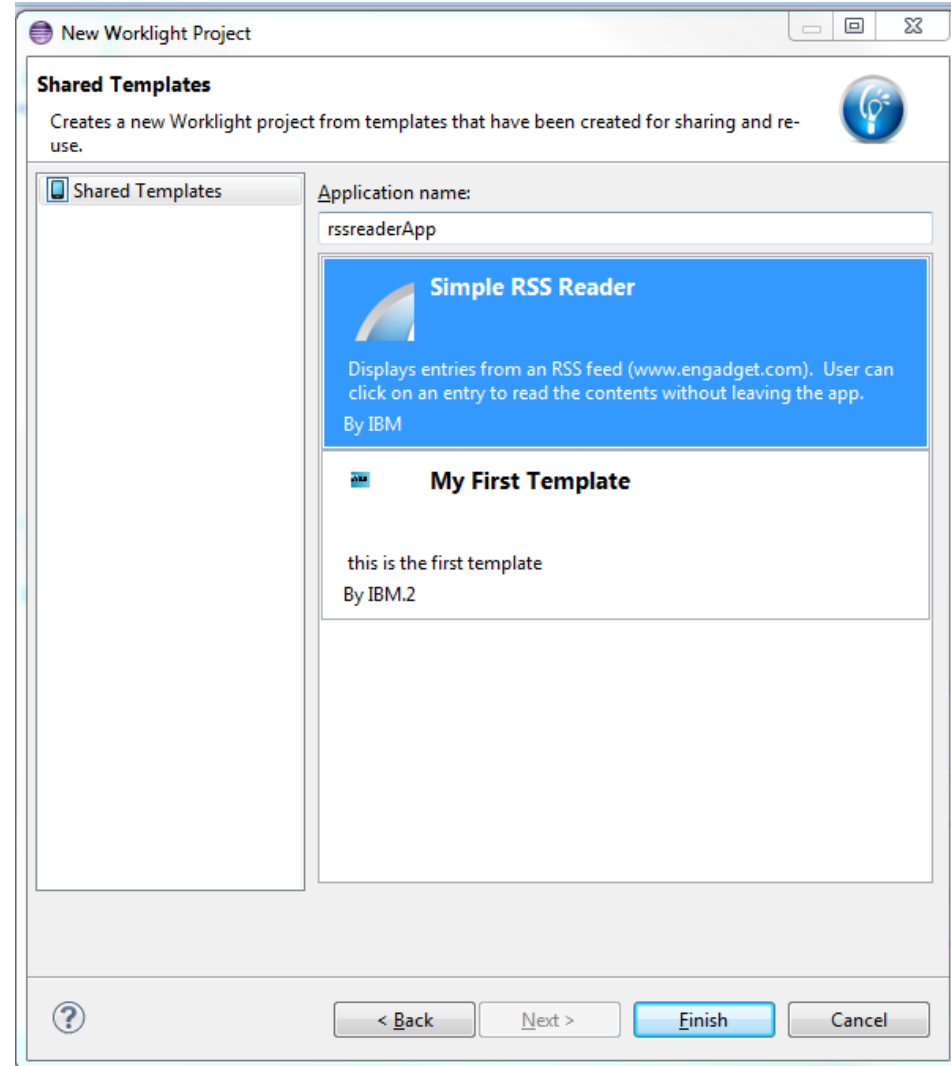
Add Worklight project templates (1 of 3)

- Use the **Shared Templates** option to create a Worklight project from a template.
- Click the **Create a Worklight Artifact** icon on the toolbar. For more information, see the IBM Worklight user documentation.
- In the **Name** field, provide a name for the Worklight project.
- From the **Project Templates** list, click **Shared Templates**.
- Click **Next**.



Add Worklight project templates (2 of 3)

- The Worklight project templates are loaded from the configured Download folder (as explained in **Configuring application components and Template preferences** section).
- Provide an application name
- Select the required Worklight project template.



Add Worklight project templates (3 of 3)

- A Worklight hybrid project is created with the contents of the Worklight project template archive.
- To view the FIXME tags, if any, click **Project > Properties > General > Editors > Structured Text Editors > Task Tags**.
 - Click **Enable searching for Task Tags**.
 - Click **Apply > OK**.
 - A **Task** tab is visible with the Tasks to be done.

The screenshot shows the Eclipse IDE interface. On the left, the Preferences dialog is open, with the 'Task Tags' section selected under 'Editors > Structured Text Editors'. The 'Enable searching for Task Tags' checkbox is checked. Below it, a table lists task tags: 'TODO' (Normal), 'FIXME' (High), and 'XXX' (Normal). Buttons for 'New...', 'Edit...', and 'Remove' are visible. At the bottom, the 'Tasks' console is open, showing two items:

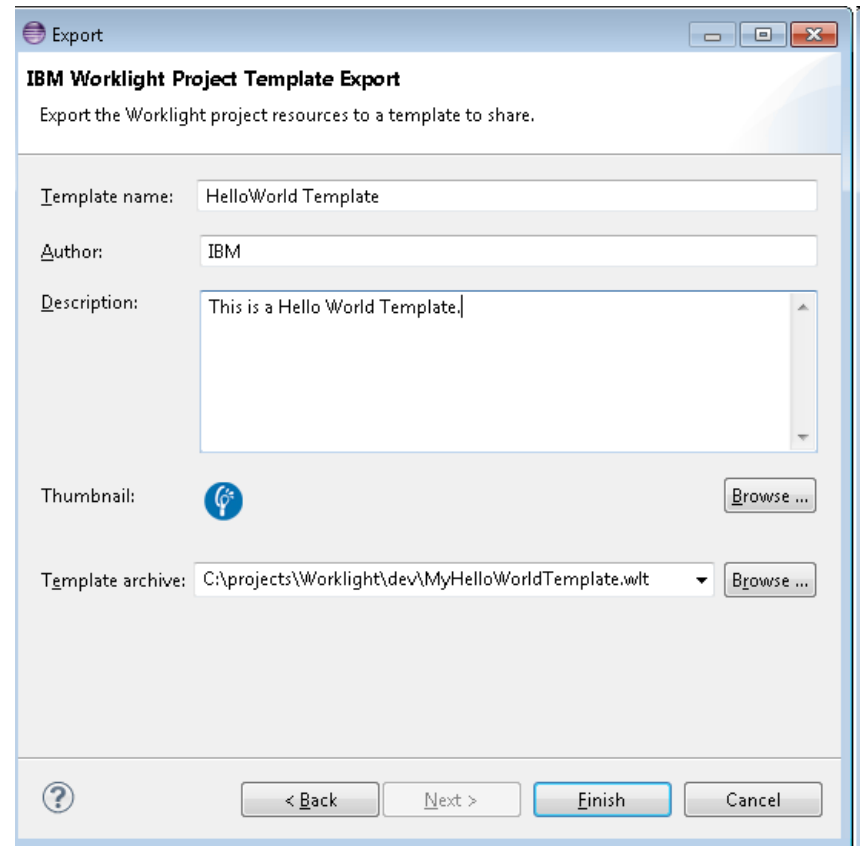
	!	Description	Resource	Path	Location	Type
	!	FIXME : correct the path to the RSS feed	WorklightStar...	/MyRSSReader/ada...	line 12	JavaScript Task
	!	FIXME: replace with domain of target RSS feed	WorklightStar...	/MyRSSReader/ada...	line 13	XML Task

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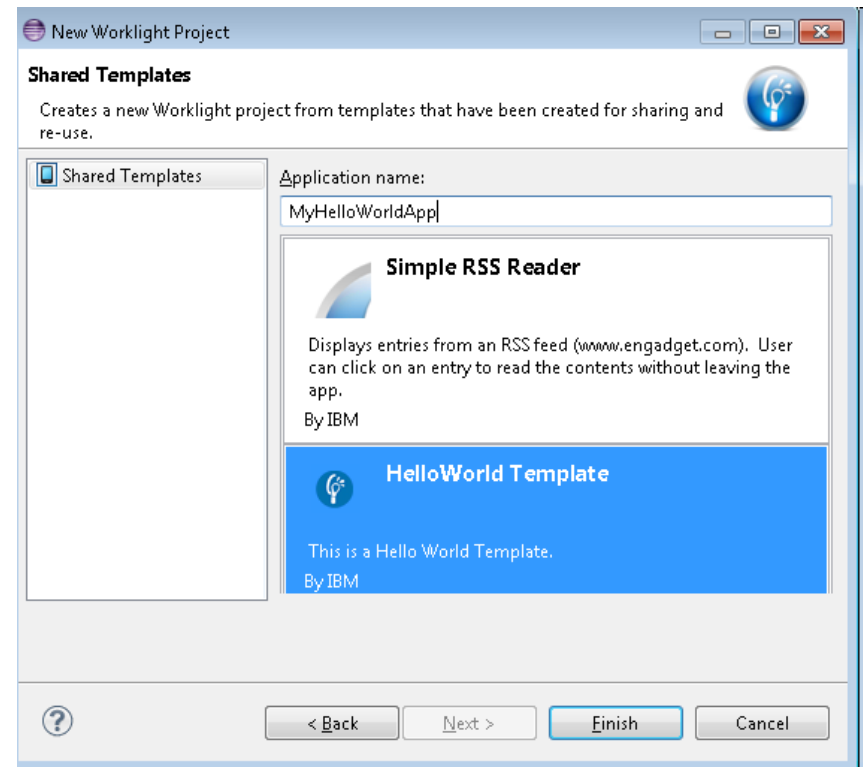
Exercise – Worklight project templates (1 of 2)

- Use the HelloWorldlight application that you created earlier.
- Edit the `apps\HelloWorklightApp\common\js\initOptions.js` file
- Add **// FIXME: Uncomment the initialization options as required.**
- Save the `initOptions.js` file.
- Export the HelloWorldlight application as a Worklight project template by using the option **Create a Worklight Project Template.**
- In the **Template name** field, enter: HelloWorld Template
- Verify that the archive contents match the description in the documentation.
- Switch to a new Worklight Studio workspace.



Exercise – Worklight project templates (2 of 2)

- Copy the Worklight project template that you previously created to a download folder.
- In the new workspace, configure the download folder where the newly created Worklight project template archive is copied.
- Use the option **Creating Worklight Artifact from the Shared Templates**.
- Enter the Worklight project name, and the application name.
- Select the **HelloWorld Template** Worklight project template, and click **Finish**.
- Use the **Tasks** tab to find out how to modify the `initOptions.js` file.



	Description	Resource	Path
!	FDXME : Uncomment the initialization options as required	initOptions.js	/My Hello World/apps/MyHelloWorld/common/js

Exercise – application components

- Use the HelloWorklight application that you created earlier.
- Create an application component.
- Expand **HelloWorklightProject > apps > HelloWorklightApp > common > css**.
- Select the `HelloWorklightApp.css` file for inclusion in the application component archive.
- Verify that the archive contents match the description in the documentation.
- Switch to a new Worklight Studio workspace.
- Copy the application component that you previously created to a download folder.
- In the new workspace, configure the download folder where the newly created application component archive is copied.
- Create a hybrid Worklight project with name `MyWorklightProject`.
- Use the option **Add/Remove Application Components** to add the newly created application component.
- After the successful addition of the application component, only the **HelloWorklightApp.css** file is found in the `MyWorklightProject`.

Quiz (1 of 2)

Test your knowledge. Answers are in the following slide.

- Complete the sentence: Worklight project templates...
 - avoid development of mobile applications from scratch.
 - are reusable libraries that developers can add to their applications.
 - are native specific applications.
- Complete the sentence: Application components...
 - support only hybrid applications.
 - support only native applications.
 - are Worklight Starter applications.

Quiz – answers (1 of 2)

- Complete the sentence: Worklight project templates...
 - avoid development of mobile applications from scratch.
 - are reusable libraries that developers can add to their applications.
 - are native specific applications.
- Complete the sentence: Application components...
 - support only hybrid applications.
 - support only native applications.
 - are Worklight Starter applications.

Quiz (2 of 2)

Test your knowledge. Answers are in the following slide.

- Worklight project templates and application components do not load in the Worklight wizards if:
 - There are no Worklight project templates and application components in the download folder.
 - Invalid Worklight project templates and application components are in the download folder.
 - The download folder is not configured.
 - All of the previous answers.
- The difference between Worklight project templates and application components is:
 - Worklight project templates support only hybrid applications while application components do not support hybrid applications.
 - Worklight project templates are starter apps to avoid development of mobile applications from scratch while application components are reusable libraries.
 - There are no differences between them.

Quiz – answers (2 of 2)

- Worklight project templates and application components do not load in the Worklight wizards if:
 - There are no Worklight project templates and application components in the download folder.
 - Invalid Worklight project templates and application components are in the download folder.
 - The download folder is not configured.
 - All of the previous answers.
- The difference between Worklight project templates and application components is:
 - Worklight project templates support only hybrid applications while application components do not support hybrid applications.
 - Worklight project templates are starter apps to avoid development of mobile applications from scratch while application components are reusable libraries.
 - There are no differences between them.

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