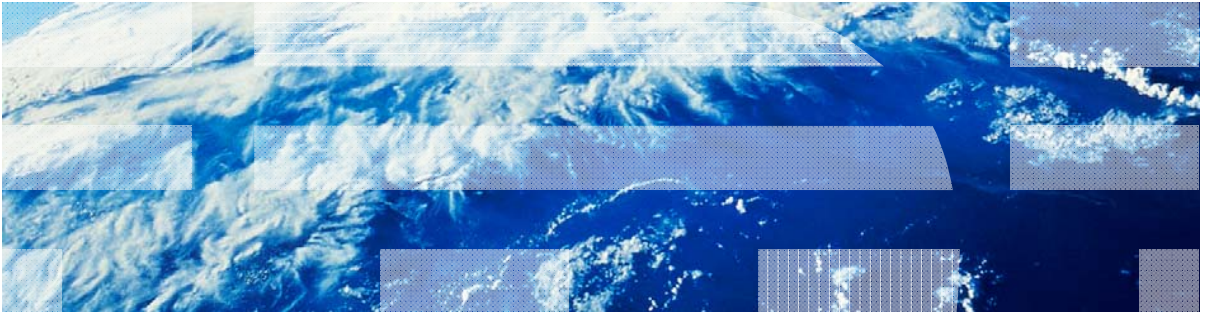


IBM Worklight V6.0.0 Getting Started

Optimizing your application for various environments



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

Agenda

- What is an environment optimization?
- Currently supported environments
- How does optimization work?

What is environment optimization?

- IBM Worklight® applications run in mobile, tablet, and web environments.
- Runtime environments differ in many aspects such as screen size, orientation, specific UI guidelines and components, physical user interface, and unique environment functionality.
- IBM Worklight increases development efficiency and productivity by providing an environment optimization framework.
- The core logic and design guidelines of the app are written by using web technologies (HTML, CSS, and JavaScript™) and are shared by all environments.
- Environment-specific optimization can be added when required.
- If you use a source control management system (such as Rational Team Concert™ (RTC), GIT or Subversion), see *Integrating with source control systems* in the IBM Worklight user documentation for instructions on how to commit your source code.

Agenda

- What is environment optimization?
- Currently supported environments
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Currently Supported Environments



- iOS 5.0 and later
- Android 2.2.x, 2.3.x, 4.x and later
- BlackBerry OS 6 and later
- Windows Phone 7.5 and later



- Modern browsers that support HTML4, CSS2.1 and JavaScript 1.5 at a minimum
- Browsers supporting HTML5 and CSS3



- iOS 5.x and later
- Android 2.2.x, 2.3.x, 4.x and later



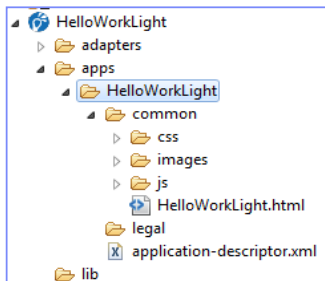
- Mobile Web
- Desktop browser page

Agenda

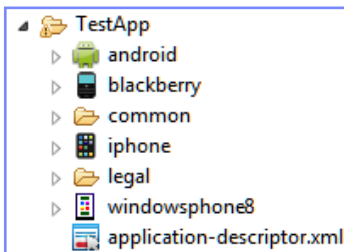
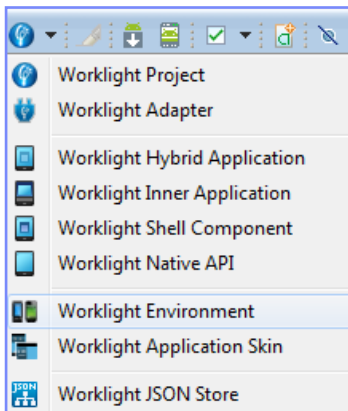
- What is environment optimization?
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How does optimization work?

- The Worklight application structure is divided into environment folders (iPhone, Android, BlackBerry, etc.).
- Each environment folder contains the resources (CSS, JS, images, etc.) that are relevant for that specific environment.
- A newly-created application contains the base environment in a common folder. The common resources serve as the basis for the optimized environments that might be added later.
- The common folder must hold only resources that are shared by all environments.



Adding an environment



How does optimization work?

HTML

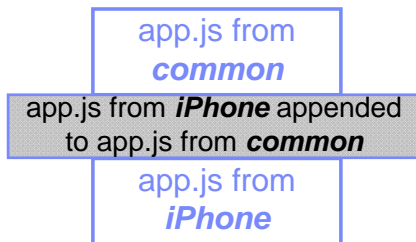
- The newly added environment (for example, iPhone) extends the resources of the common environment in the following way:
 - HTML: The common HTML file is overridden by the new environment HTML code
 - Note: by default a new environment does not include a new HTML file because the common HTML is shared by all environments



How does optimization work?

JavaScript

- The newly added environment (for example, iPhone) extends the resources of the common environment in the following way:
 - JavaScript: The JavaScript file from an environment folder has a `wlEnvInit()` function that invokes the `wlCommonInit()` JavaScript function from the common folder.
 - Technically, the JavaScript from an environment folder is appended to the file from common.
 - Using the same variable names as in common redefines their meaning.



```
function wlCommonInit() {  
    // Put your initialization code here  
}
```

```
function wlEnvInit(){  
    wlCommonInit();  
}
```

How does optimization work?

CSS

- The newly added environment (for example, iPhone) extends the resources of the common environment in the following way:
 - CSS: The CSS file from an environment folder is appended to the CSS file from the common folder.
 - Using the same property names as in common overrides their settings.
 - Note: the environment CSS might contain some default CSS rules that match the environment needs.

app.css from
common

app.css from *iPhone* appended
to app.css from *common*

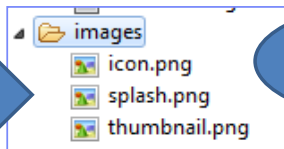
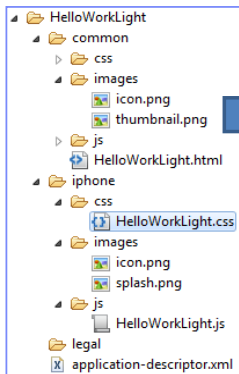
app.css from
iPhone

```
/*  
NOTE: THIS CSS FILE EXTENDS THE BASE APP CSS FILE (UNDER COMMON)  
*/  
  
/*BODY SHOULD STRETCH IN AN IPHONE APPLICATION*/  
body {  
    height: auto;  
    overflow: auto;  
}  
  
/*WORKLIGHT CONTAINER DIV*/  
#content {  
    height: auto;  
    width: 100%;  
    border: none;  
}
```

How does optimization work?

Images

- The newly added environment (for example, iPhone) extends the resources of the common environment in the following way:
 - Images: A new environment images folder contains the required default images for the specific environment.
 - Note: the new environment images override the common images if name collision occurs.



Common icon
overridden by the
iPhone one

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