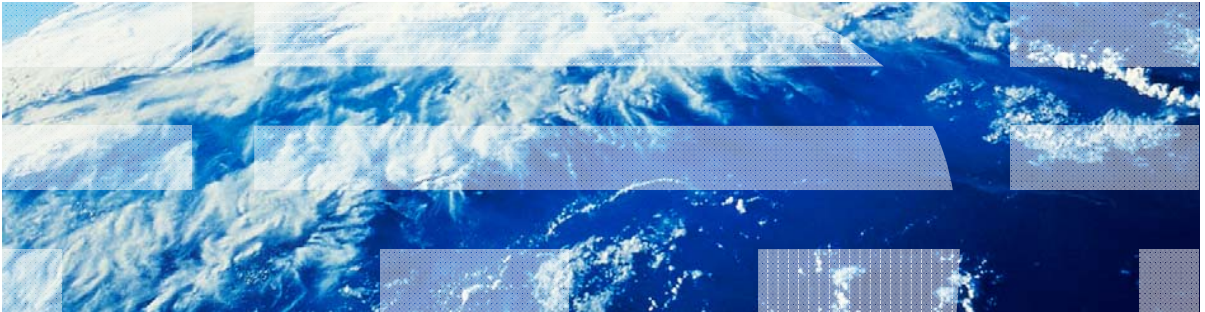


IBM Worklight V6.0.0 Getting Started

General information when developing desktop applications



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Agenda

- Supported desktop environments
- Development
- Environment-specific capabilities
- Environment-specific images
- Debugging the application
- Deployment

Supported desktop environments

- IBM Worklight® supports the following desktop environments:
 - Windows Store Apps - Built into the Windows 8 OS
 - Adobe Air - <http://get.adobe.com/air/>

Agenda

- Supported desktop environments
- **Development**
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Development

- Windows Store apps
 - The development is done in the Worklight Studio and in Microsoft Visual Studio Express 2012 for Windows 8.
 - To open the project in Visual Studio Express 2012 for Windows 8, double-click the <APPLICATION_NAME>.jsproj file in the native folder.
 - The files in the project in Visual Studio Express 2012 for Windows 8 are the files in the Native folder in the Eclipse project.

- Adobe Air:
 - The development is done entirely in Worklight Studio.

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Environment-specific capabilities: Windows Store apps (1 of 2)

- Some useful Windows Store Apps APIs implemented in the Worklight API:
 - Initialize an option menu: `WL.OptionsMenu.init();`
 - Add an item to the option menu: `WL.OptionsMenu.addItem('ID', function() {}, ITEM_TEXT, {image: 'PATH_TO_IMAGE_IN_THE_RESOURCES_FOLDER'});`
 - Override an icon with a default Windows 8 icon:
`document.getElementById('#ID').winControl.icon = 'refresh';`
- Other Windows Store Apps APIs:
 - `Windows.Devices.Geolocation`
 - `Windows.Media.Capture`
 - `Windows.ApplicationModel.Contacts`

Environment-specific capabilities: Windows Store apps (2 of 2)

- Add Options menu to your application

Worklight Starter	
Engadget's holiday gift guide 2012: gaming	>
Mon, 19 Nov 2012 12:00:00 EDT	
CE-Oh no he didn't!: SpaceX creator Elon Musk says Ariane 5 rocket has 'no chance'	>
Mon, 19 Nov 2012 11:43:00 EDT	
Slickdeals' best in tech for November 19th: desktops, ASUS Transformer, and Panasonic Lumix DMC-GF3	>
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Warner Archive on-demand disc service kicks off Blu-ray availability with Gypsy, Deathtrap	>
Mon, 19 Nov 2012 09:55:00 EDT	
<pre>function afterInitEnv() { WL.OptionsMenu.init(); WL.OptionsMenu.addItem('tab1', function() {selectTab('#feedsWrapper');}, Messages.tabFeed, {image: 'images/feed.png'}); WL.OptionsMenu.addItem('tab2', function() {selectTab('#aboutTab');}, Messages.tabAbout, {image: 'images/about.png'}); WL.OptionsMenu.addItem('tab3', function() {loadFeeds();}, Messages.reload, {image : 'images/reload.png'}); }</pre>	>
Weekend here: collector vehicle ranked on video	>
Mon, 19 Nov 2012 08:09:00 EDT	
Amazon Kindle celebrates five e-inked years	>
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Start button utility strips down more 'B' from Microsoft B, has sold 'tens of thousands' of copies	>

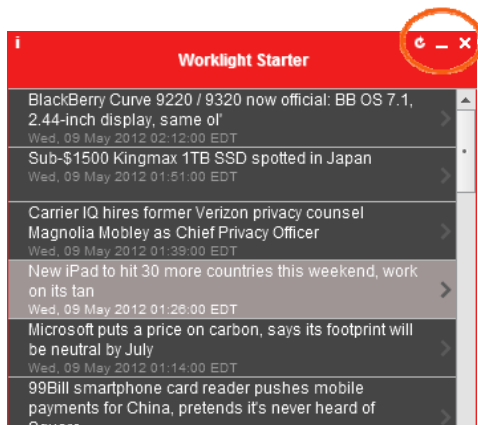


Environment-specific capabilities: Adobe AIR (1 of 2)

- Some useful Adobe Air APIs:
 - Minimize window: `window.nativeWindow.minimize();`
 - Maximize window: `window.nativeWindow.maximize();`
 - Restore window: `window.nativeWindow.restore();`
 - Close window: `window.nativeWindow.close();`

Environment-specific capabilities: Adobe AIR (1 of 2)

- Add minimize and close buttons to your app



```

50 function afterIntiEnv() {
51     createCloseAndMinimize();
52 }
53
54 function createCloseAndMinimize() {
55     var closeAir, minimizeAir;
56
57     closeAir = $('<a/>', {'id': 'closeAir'});
58     $('#content').append(closeAir);
59     closeAir.click(function() {
60         WL.Client.close();
61     });
62
63     minimizeAir = $('<a/>', {'id': 'minimizeAir'});
64     $('#content').append(minimizeAir);
65     minimizeAir.click(function() {
66         WL.Client.minimize();
67     });
68 }
69
70 #closeAir {
71     background: transparent url("../images/closeAndMinimize.png") no-repeat right top;
72     right: 2px;
73 }
74
75 #minimizeAir {
76     background: transparent url("../images/closeAndMinimize.png") no-repeat left top;
77     right: 19px;
78 }
  
```

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- **Environment-specific images**
- Debugging the application
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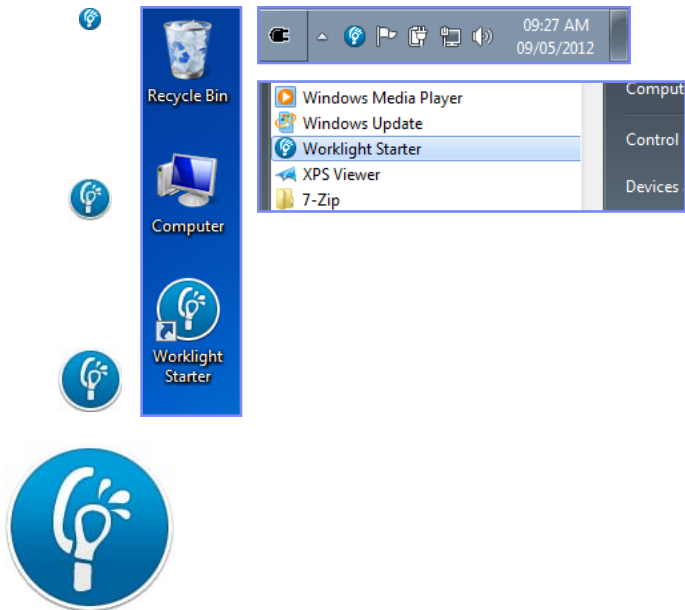
Environment-specific images: Windows Store apps

- logo.png
The logo image represents the square tile image of the app in the Start screen
150px * 150px
- smalllogo.png
The small logo is displayed with your app display name in search results that are returned on the Start screen
30px * 30px
- Splashscreen.png
The splash screen is displayed for a short time when the user opens the app.
620px * 300px
- Storelogo.png
The store logo is the image the Windows Store uses when it displays your app listing in search results and with the app description in the listing page
50px * 50px



Environment-specific images: Adobe Air

- icon.png
 - icon16x16.png
 - 16 px * 16px
 - Program menu icon
 - Tray icon
 - Minimum OS X desktop icon
 - icon32x32.png
 - 32px * 32px
 - Standard Windows desktop icon
 - Taskbar icon
 - Medium OS X desktop icon
 - icon48x48.png
 - 48px * 48px
 - Large Windows desktop icon
 - Large OS X desktop icon
 - Icon128x128.png
 - 128px * 128px
 - Maximum OS X desktop icon



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Debugging the Application: Windows Store apps

- Debug by using Microsoft Visual Studio Express 2012 for Windows 8
- Use Worklight WL.Logger API

worklightStarter (Running) - Microsoft Visual Studio Express 2012 for Windows 8

Process: [8148] WWAHost.exe

DOM Explorer

```

worklightStarter.js
feedItemLen = 120,
response,
// Static members - Worklight adapter
FEEDS_ADAPTER = 'worklightStarterAdapter',
GET_FEEDS = 'gettinggetFeeds',
// Static members - Tabs
FEEDS_TAB = '#feedsWrapper',
FEEDS_DESCRIPTION_TAB = '#feedDescriptionTab',
ABOUT_TAB = '#aboutTab',

function wCommonInit() {
    WL.Logger.debug('*** this is a debug message');
    beforeInitInv();
    // Common initialization code goes here
    // Initialize the busy indicator
    initializeBusy();
    busy.show();
}

// Show tabs only after application successfully initializes
$('.tab').removeClass('hidden');

```

JavaScript Console

Clear 0 Errors 2 Warnings 1 Messages

```

connect success
before: app init onSuccess
*** this is a debug message
Request: [http://localhost:8080/apps/.../api/worklightStarter/windows8/query]
after: app init onSuccess
wClient init success

```

Solution Explorer

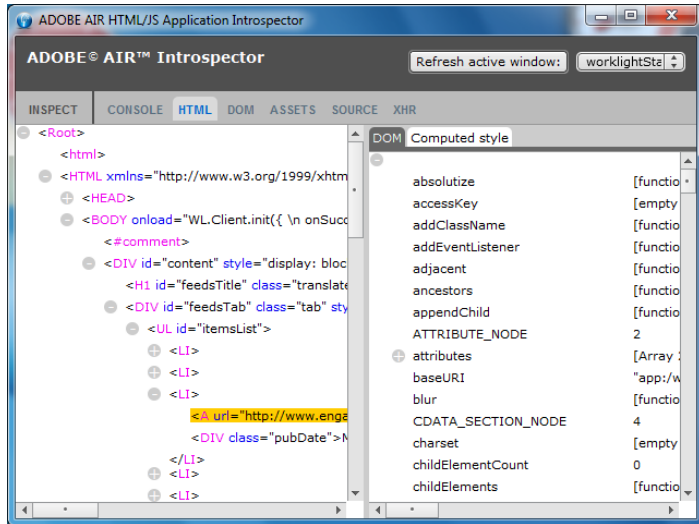
Solution 'worklightStarter' (1 project)

- Script Documents
 - MSAppHost/1.0
 - worklightStarter.html
 - wl.js
 - base.js
 - messages.js
 - wlcommon.js
 - busy.js
 - diagnosticDialog.js
 - deviceAuthentication.js
 - window.js
 - worklight.js
 - wlclient.js
 - wlfragments.js
 - encryptedcache.js
 - jsonstore.js
 - ansiSRPChallengeHandler.js
 - authenticityChallengeHandler.js
 - deviceAuthAutoProvisioningChal
 - deviceAuthNoProvisioningChalle
 - remoteDisableChallengeHandler.j
 - optionMenu.js
 - base.js
 - wl.js
 - initOptions.js
 - Utils.js
 - messages.js
 - worklightStarter.js

Ready

Debugging the Application: Adobe Air

- Debug by using the Adobe Air Introspector
- Click **F12** to start a session

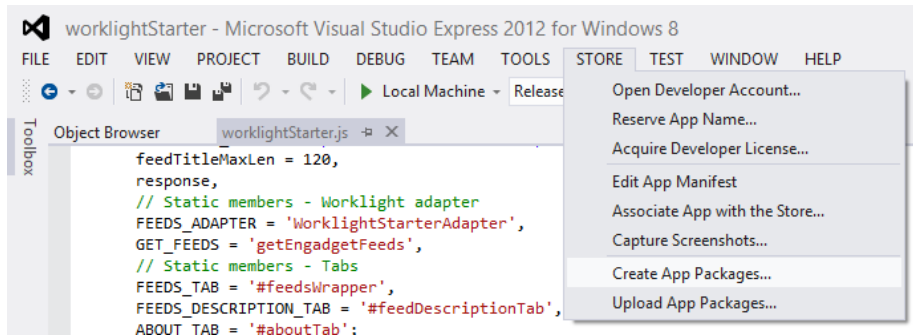


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Deployment: Windows Store apps

Use Microsoft Visual Studio Express 2012 for Windows 8 to create App Packages



Deployment: Adobe Air

- Use the Worklight Console to get the Adobe Air package.

The screenshot displays the IBM Worklight Console interface. At the top, there are tabs for 'Catalog', 'Push Notifications', and 'Active Users'. Below these is a header bar with the text 'Deploy application or adapter: Choose File No file chosen Submit'. The main content area is titled 'Worklight Starter' and includes a 'Delete' button. A lightbulb icon represents the application, with the description 'Retrieves an RSS feed from engadget.com' and 'Last updated at: 2012-06-03 17:16'. Below this, a list of application versions is shown for various platforms. The 'Adobe Air' version 1.0 is highlighted with a red box, and its 'Install' link is underlined. Other platforms listed include iPad, Android, Windows Phone, Vista, Dashboard, Facebook, iGoogle, Embedded, and Mobile Web, each with their respective version and status (Active or Install).

Platform	Version	Status	Authentication
iPad	Version 1.0	Active	App Authentication: Disabled, Device Authentication: Enabled, User Authentication: None
Android	Version 1.0	Active	App Authentication: Disabled, Device Authentication: Enabled, User Authentication: None
Windows Phone	Version 1.0	Active	
Vista	Version 1.0	Install	
Adobe Air	Version 1.0	Install	
Dashboard	Version 1.0	Install	
Facebook	Version 1.0	Get App URL	
iGoogle	Version 1.0	Get Descriptor	
Embedded	Version 1.0	Embed in Web Page	
Mobile Web	Version 1.0	Get App URL	

Exercise: Optimize Worklight Starter

- This exercise is based on the **WorklightStarter** application
- Optimize **Worklight Starter** for Windows store Apps:
 - Optimize design
 - Option menu
- Optimize the **Worklight Starter** for Air:
 - Optimize color scheme
 - Minimize & Close buttons

Exercise: Optimize the RSS Reader (1 of 2)

- Optimize for Windows store Apps
 - Add an Option menu With Feeds About and Reload buttons

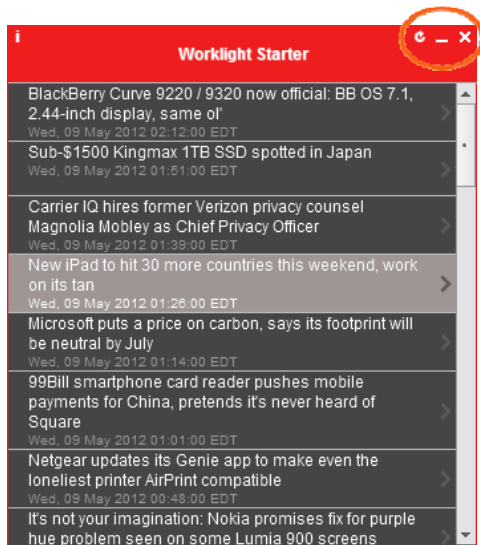
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Warner Archive on-demand disc service kicks off Blu-ray availability with Gypsy, Deathtrap Mon, 19 Nov 2012 09:48:00 EDT	>
Intel CEO Paul Otellini to step down in May, leaves a legacy of x86 dominance Mon, 19 Nov 2012 09:11:00 EDT	>
Elgato EyeTV Mobile ships to the US, brings Dyle live TV tuning to data cap-dodging iOS users Mon, 19 Nov 2012 09:00:00 EDT	>
Samsung ATIV S for Vodafone UK goes up for pre-order at Phones4U with a December launch Mon, 19 Nov 2012 08:40:00 EDT	>
Opera Mobile launches Unlimited Music service in Russia Mon, 19 Nov 2012 08:29:00 EDT	>
Nokia Here collection vehicle hands-on (video) Mon, 19 Nov 2012 08:09:00 EDT	>
Amazon Kindle celebrates five e-inked years Mon, 19 Nov 2012 07:46:00 EDT	>
Nintendo's Wii U gets gutted in the name of specs Mon, 19 Nov 2012 07:26:00 EDT	>

Click button with the three lines icon to see more '8' from Windows 8. See also 'five of thousands' of online



Exercise: Optimize the RSS Reader (2 of 2)

- Optimize for Air
 - Add Minimize & Close buttons to the Air environment



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