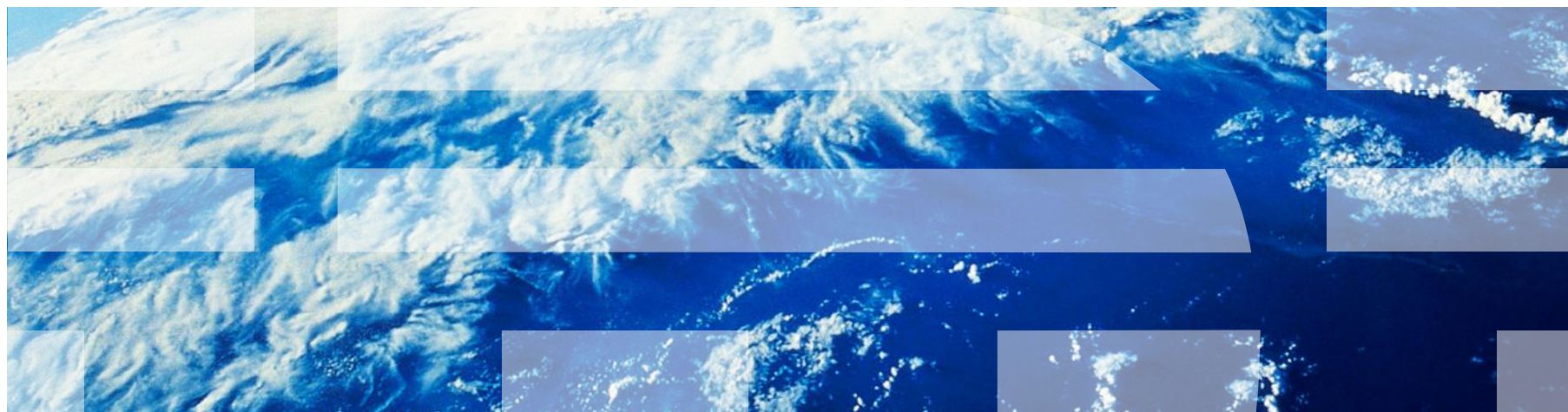IBM

IBM Worklight Foundation V6.2.0
Getting Started

Distributing mobile applications with Application Center

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See http://www.ibm.com/ibm/us/en/

Overview

- The IBM Worklight® Application Center is a **repository of mobile applications** similar to public app stores but focused on the needs of an organization or a team (private app store)

- It facilitates sharing mobile applications:
  - You can **share feedback and rating** information.
  - You can use access control lists to limit who can install applications.

- It works with IBM Worklight and non IBM Worklight apps, and supports any **iOS**, **Android**, **BlackBerry 6 or 7**, and **Windows Phone 8** applications.

- It can be used in different contexts:
  - As an enterprise app store across an organization.
  - During development to distribute applications within a team.
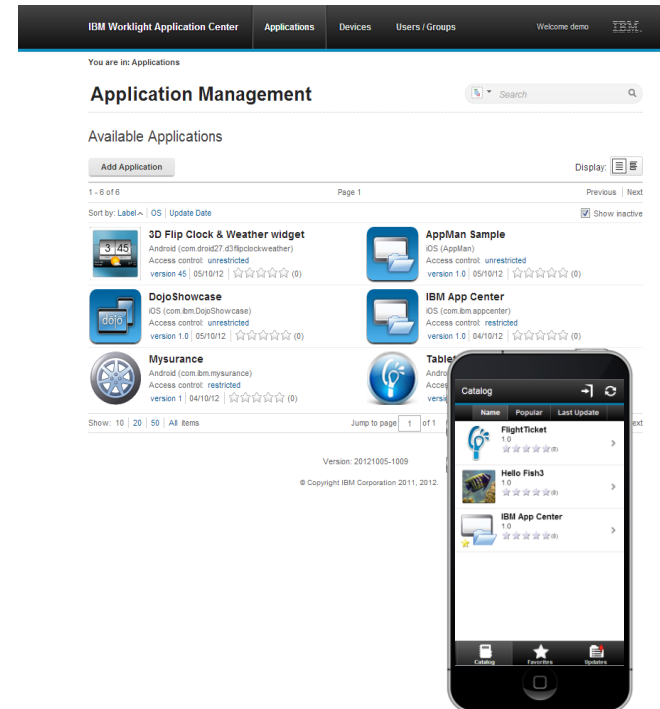
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- Overview

- Installing and configuring

- Managing applications in the Application Center console

- Application Center Mobile client

- Deploying application from Worklight Studio

- Application Center command line tools

Installing and configuring

- Application Center is installed as part of the installation of the Worklight Server with IBM Installation Manager.

- Before you install the Application Center, you must have installed:
  - An application server (Tomcat or WebSphere® Application Server [full or Liberty profile])
  - A database (DB2®, Oracle, or MySQL)

- If you do not have a database installed, the installation can also install an Apache Derby database, but using this database is not recommended for production scenarios.

- IBM Installation Manager guides you through the installation of the Application Center with choices of database and application server; see the topic Installing Worklight Server in the IBM Worklight product documentation.

  Since iOS 7.1 supports only https, the Application Center server needs to be secured with SSL if you plan to distribute apps for devices running iOS7.1. Self signed certificates do not work; only real SSL certificates work. See the topic Configure Secure Socket Layer in the IBM Worklight product documentation.

Installing and configuring

- After the Application Center is installed with IBM Installation Manager, open the console using:

  http://localhost:9080/appcenterconsole

- Login with user / password : **demo** / **demo**

- At this point, you can configure user authentication; for example, by connecting to an LDAP repository. For more information, see Configuring the Application Center after installation in the IBM Worklight product documentation.

Installing and configuring

The next step is to prepare the mobile client for Android, iOS, BlackBerry, and Windows Phone 8. The mobile client is the mobile application that you use to browse the catalog and install the application.

- For **Android** phones and tablets:
  - The mobile client is delivered as a compiled application (APK)

<installation-dir>/ApplicationCenter/installer/IBMApplicationCenter.apk

- For **iPad** and **iPhone**:
  - You must compile and sign the client application provided in source code.
  - In Worklight Studio, open the IBMAppCenter Project at: `<installation-dir>/ApplicationCenter/installer`
  - Use **Run As > Build and Deploy** to build the project.
  - Use Xcode to build and sign the application with your Apple iOS Enterprise profile.

Installing and configuring

- For **BlackBerry**

    - To build the BlackBerry version, you must have the BlackBerry Eclipse IDE (or Eclipse with the BlackBerry Java™ plug-in) with the BlackBerry SDK 6.0. The application also runs on BlackBerry OS 7 when compiled with BlackBerry SDK 6.0.

    - A BlackBerry project is provided in `<installation-dir>/ApplicationCenter/installer/IBMAppCenterBlackBerry6.`

Installing and configuring

- For **Windows Phone 8**

  - You must register a company account with Microsoft.

  - Application Center will only manage company applications that are signed with the company certificate that comes with your company account.

  - The Application Center mobile client must also be signed with this company certificate.

  - To install company applications on a device, the device must first be enrolled with the company by installing a company enrollment token.

  - For more information about the company accounts and enrollment tokens see Company app distribution for Windows Phone in the https://dev.windowsphone.com/en-us/develop web site.

Installing and configuring

- For **Windows Phone 8** (continued)

  – The Windows Phone version of the mobile client is included at `ApplicationCenter/installer/IBMApplicationCenterUnsigned.xap`

  – **You cannot use the unsigned .xap file directly**: Before you can install it on a device, you must first sign it with your company certificate that you obtained from Symantec or Microsoft.

  – For more information about how to sign the Windows Phone mobile client application, see the Microsoft developer web site at https://dev.windowsphone.com/en-us/develop.

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Managing applications in the Application Center console

Use the Application Center console to manage applications in the catalog in the following ways:

- Add and remove applications

- Manage versions of applications

- Look at the details of an application

- Restrict the access of an application to specific users or groups of users

- Read the reviews for each application

- Review registered users and devices
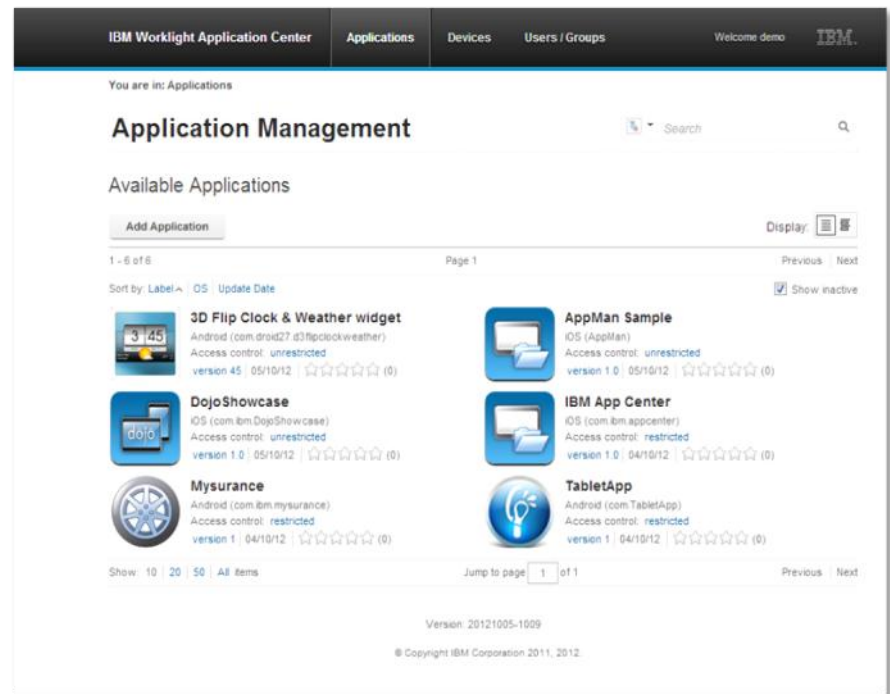
Managing applications in the Application Center console

- To add new applications in the Store:

    - Open the Application Center console.

    - Click **Add application**.

    - Select the Application File:
        - .ipa (iOS)
        - .apk (Android)
        - .zip (BlackBerry)
        - .xap (Windows Phone 8)

    - Click **Next**.

Available Applications

Add Application

Sort by: Label | OS | Update Date

No application…

Show: 10 | 20 | 50 | All items

Application File
Upload an application file with file extension apk, ipa, xap or zip.

◉ Application file: [   ] Upload…
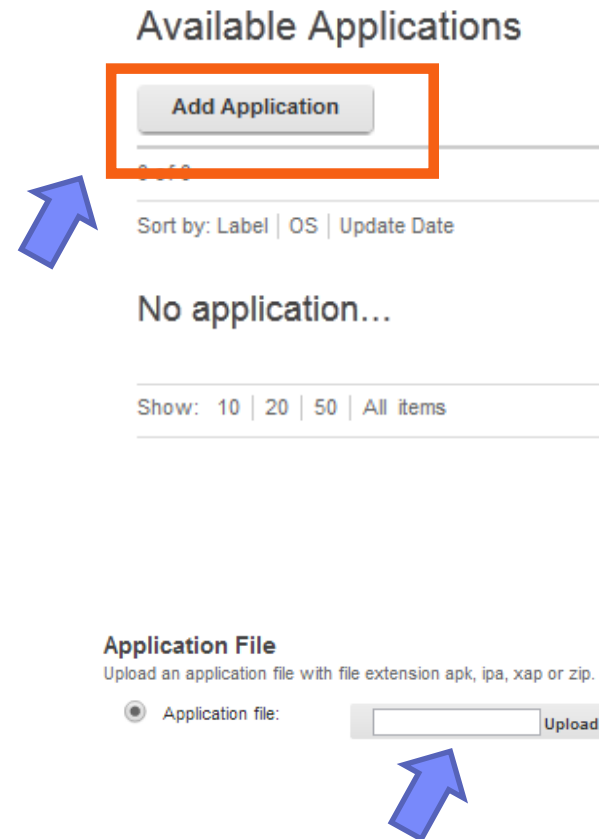
Managing applications in the Application Center console

- In the Application Details views, you can review the information about the new application and enter further information such as the description.

- You can return to this view later for all applications in the catalog.

- Click **Done** to finish the task.

- The new application is added to the store.

Application Management

Add an application

Application Details
Package, Version and Label must be set in the uploaded application package and cannot be modified afterwards.

Package:	**com.ibm.myapp**
	Identifies the application
Internal Version:	1
	Internal version number used to compare versions
Commercial Version:	1.0
	Version displayed on the mobile device
* Label:	
	Label of the application as defined by the developer
External URL:	ibmappctr://show-app?id=**com.ibm.myapp**
	URL to open the Application Center mobile client on this application.
Author:	demo
	User who has uploaded this application
Description:	
	(2048 characters maximum)
Minimal OS Version:	8
	This application runs on devices with OS at least this version
Recommended:	
	This application will be listed as a recommended application on the mobile device
Installer:	
	Indicates whether this application is an installer
Active:	✔
	An active application can be installed on a device
Ready for production:	
	Indicates whether this application is ready for production

Previous   Done   Cancel

Managing applications in the Application Center console

- By default, an application can be installed by any authorized user of the store.

- To restrict the access to a group of users:

  - In the catalog view, click the **unrestricted link** that is next to the application name. The **Installation Access Control** page opens.

  - Select **Access control enabled**: You can now enter the list of users or groups that are authorized to install the application.

  - If you have configured LDAP, you add users and groups that are defined in the LDAP repository.

TabletApp
Android (com.TabletApp)
Access control: unrestricted
version 1.0 (4) | 715 KB | ☆☆☆☆☆ (0)

Installation Access Control

The users with permission to install this application on their devices.

☑ Access control enabled

| type to find user or group | | Add |

Select an existing user or register a new one.

1 of 1   Page 1

Sort by: Name ∧

| 👤 demo | demo |

Show: 10 | 20 | 50 | 100 | All items

Managing applications in the Application Center console

- You can also add applications from public app stores such as Google Play or Apple App Store by entering their URLs.

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The Application Center Mobile client

- A mobile application to manage the applications on the device

  – List all applications from the catalog (for which you have access rights)

  – List the favorite applications

- Install Applications

  – Install an application or upgrade to a new version.

- Feedback

  – Provide feedback and five-star rating for an application.
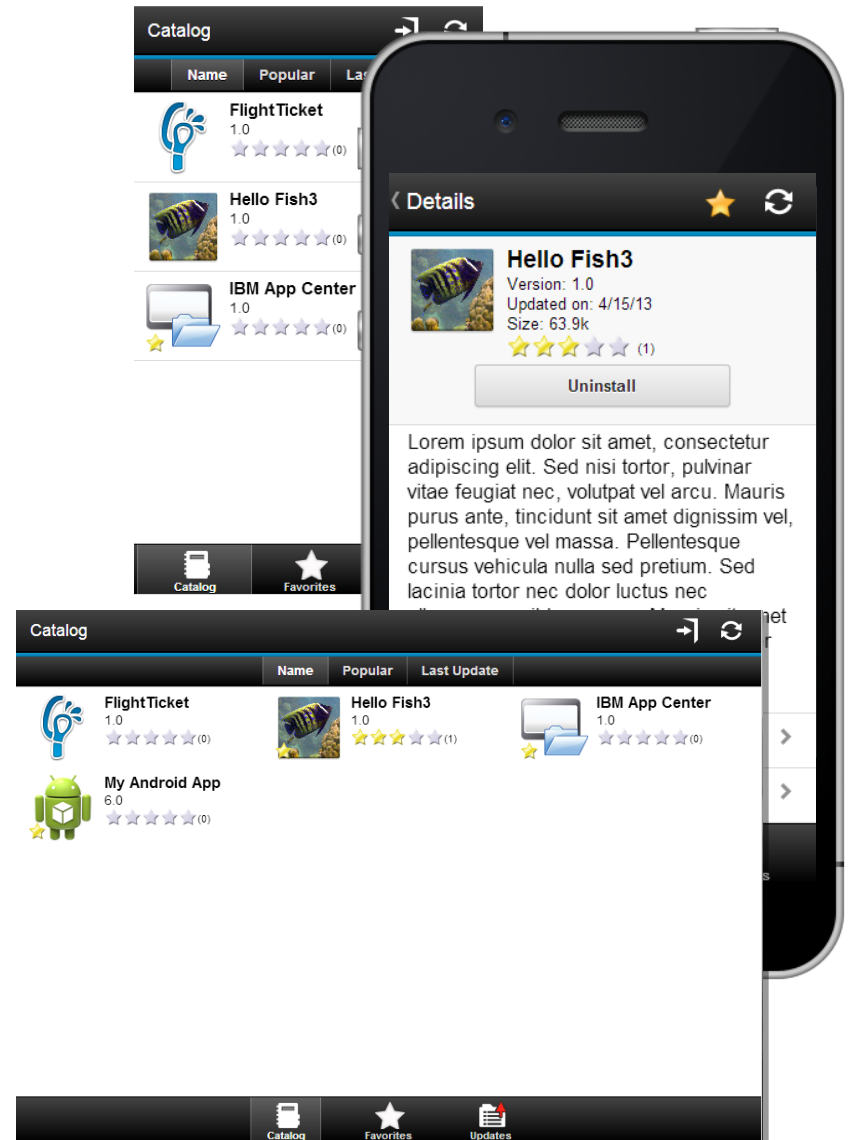
The Application Center Mobile client

- Application Center Mobile client applications must be added to the catalog.

  - Open the Application Center console.

  - Click the **Add Application** button to add the mobile client .apk, .ipa,.zip, or .xap file.

  - Click **Next** to open the Details page.

  - In the Application Details page, select **Installer** to indicate that this application is a mobile client.

  - Click **Done** to add the IBM App Center app to the catalog.

Available Applications

Add Application

Sort by: Label | OS | Update Date

No application…

Show: 10 | 20 | 50 | All items

Available Applications

Add Application

1 of 1

Sort by: Label∧ | OS | Update Date

IBM App Center
Android (com.ibm.appcenter)
Access control: unrestricted
version 2.0 (2) | 7/5/13 | ☆☆☆☆☆ (0)

Show: 10 | 20 | 50 | All items
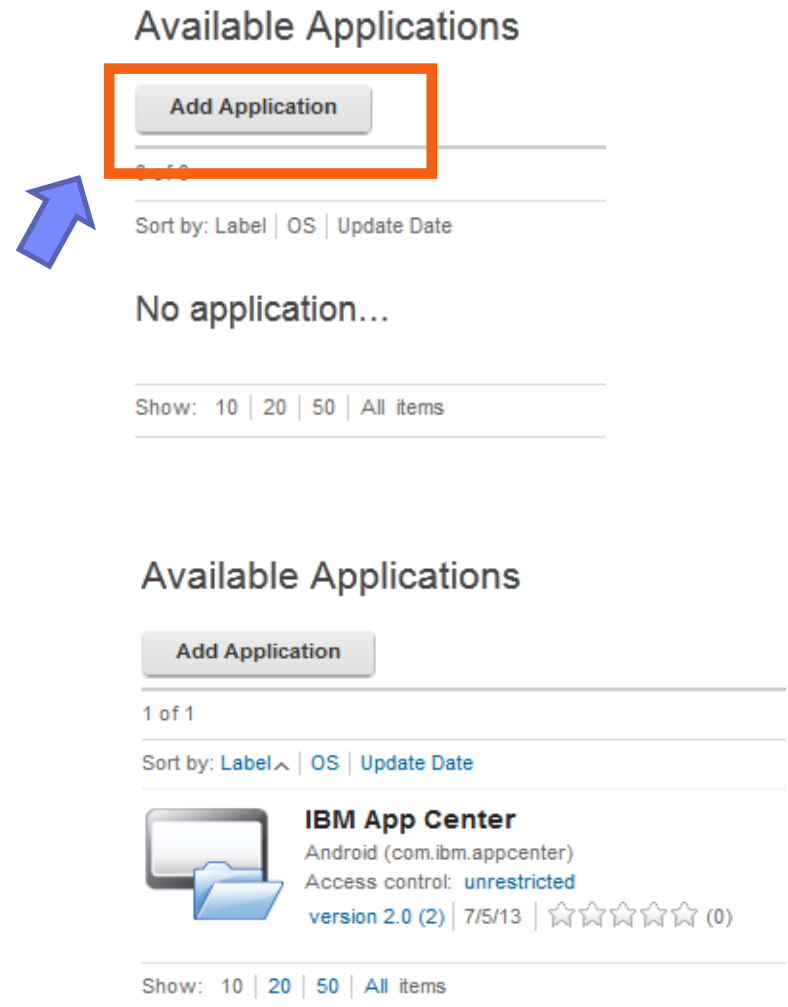
The Application Center Mobile client

- On Windows Phone 8, you must also install the enrollment token that you received with your company account in the Application Center console, so that users will be able to enroll their devices.

- You do this in the Application Center Settings page that you can open through the gear icon.

The Application Center Mobile client

- To install the mobile client on the mobile device:
  - Open the web browser on the device.
  - Enter the URL: http://hostname:9080/appcenterconsole/installers.html
  - Enter the user name and password.
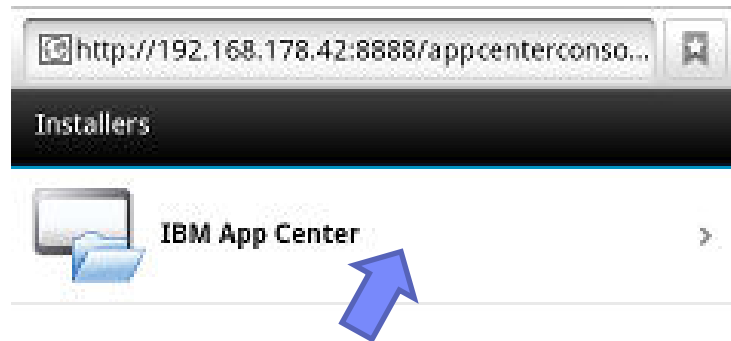
  - Select the IBM App Center application to start the installation.
  - On **Android**, you must open the Android Download application and select the IBM App Center for installation.
  - On **Windows Phone 8**, before you can install the Mobile client, you must enroll the device with the company by installing an enrolment token (see next slide).
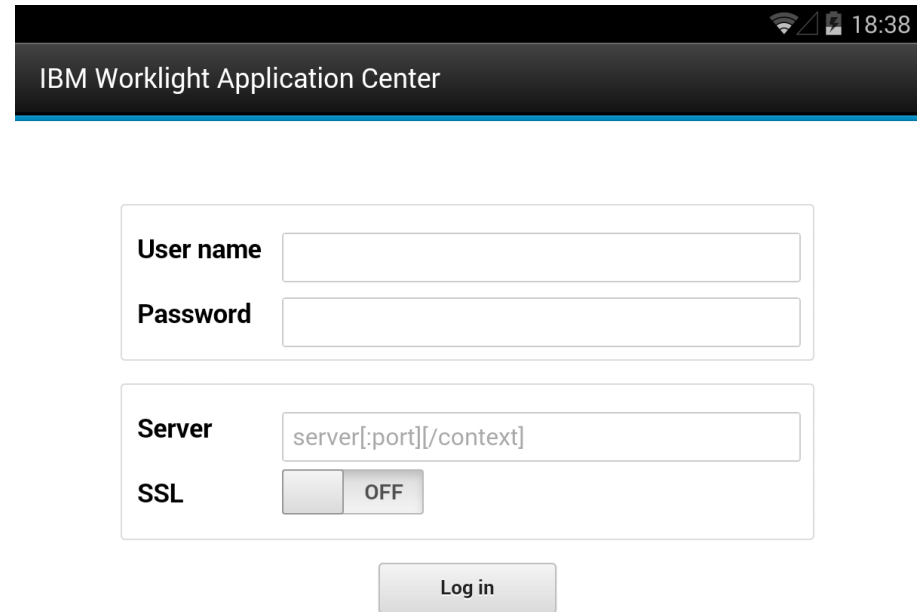
The Application Center Mobile client

- For **Windows Phone 8**, enroll your device with the company by installing first the company enrolment token.

  – Open the web browser on the device.

  – Enter the URL: http://hostname:9080/appcenterconsole/installers.html

  – Enter the user name and password.

  – Click **Tokens**, to open the list of enrolment tokens.

  – Select the company in the list.

    • The details of the company account are displayed.

  – Click **Add Company Account**.

    • Your device is enrolled.

The Application Center Mobile client

To log in to the Mobile client:

- Enter your credentials for access to the server.

- Enter the host name or IP address of the server.

- In the **Port** field, enter the port number if it is not the default one (80).

- In the **Context** field, enter the context: **applicationcenter**

IBM Worklight Application Center

User name

Password

Server   server[:port][/context]

SSL   OFF

Log in

The Application Center Mobile client

- The Catalog view displays the list of available applications.

- Selecting an application opens the Details view on the application.

- The application can be installed from the Details view.
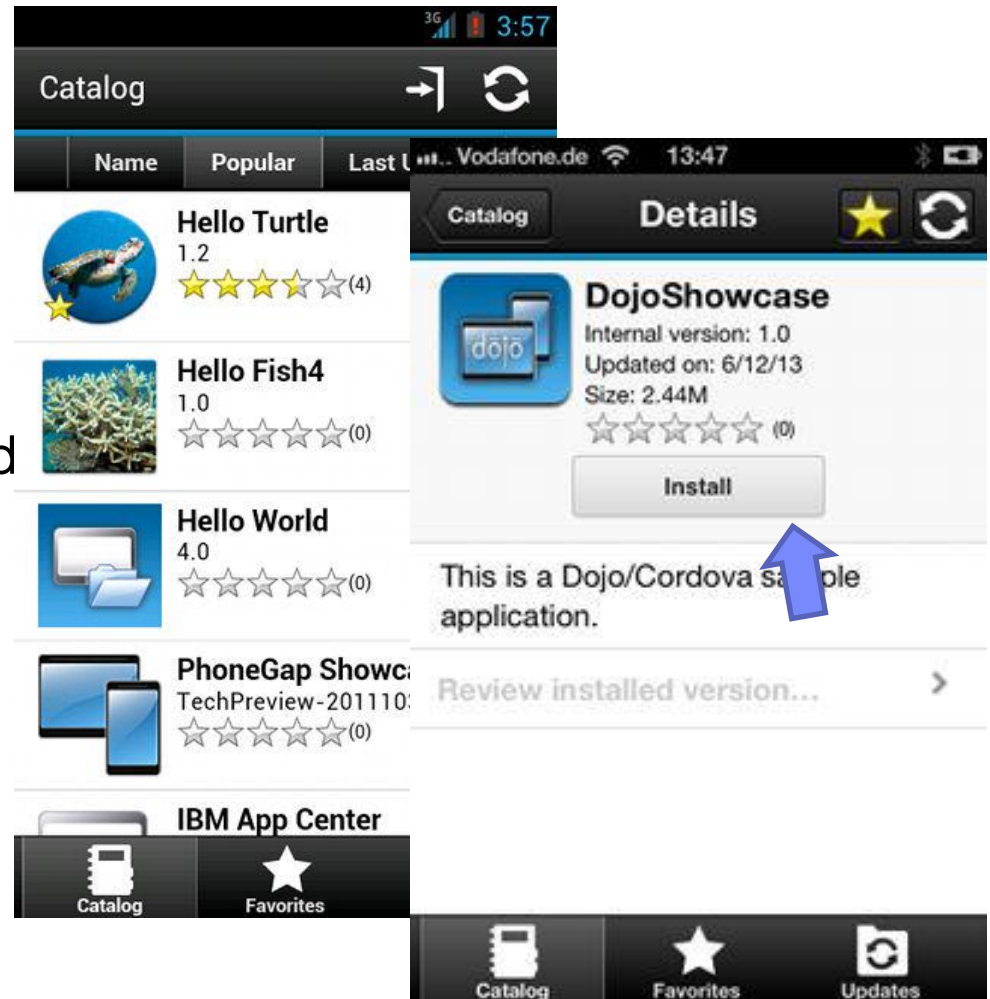
The Application Center Mobile client

- Applications can be marked as favorites by using the ⭐ icon in the view.

- Favorite applications are listed in the Favorites view.

- The favorite applications list is available on all the devices of a particular user.

The Application Center Mobile client

- The Updates view lists all available updates.

- In the Updates view, navigate to the Details view.

- In the Details view, select a newer version of the application or take the latest available version.

- If the Application Center is configured to send push notification, you might be notified of updates by push notification messages.

The Application Center Mobile client

- From the Mobile Client, you can rate the application and send a review. Reviews can be seen on the console or on the phone.

Submit feedback directly from the Application Center mobile client.
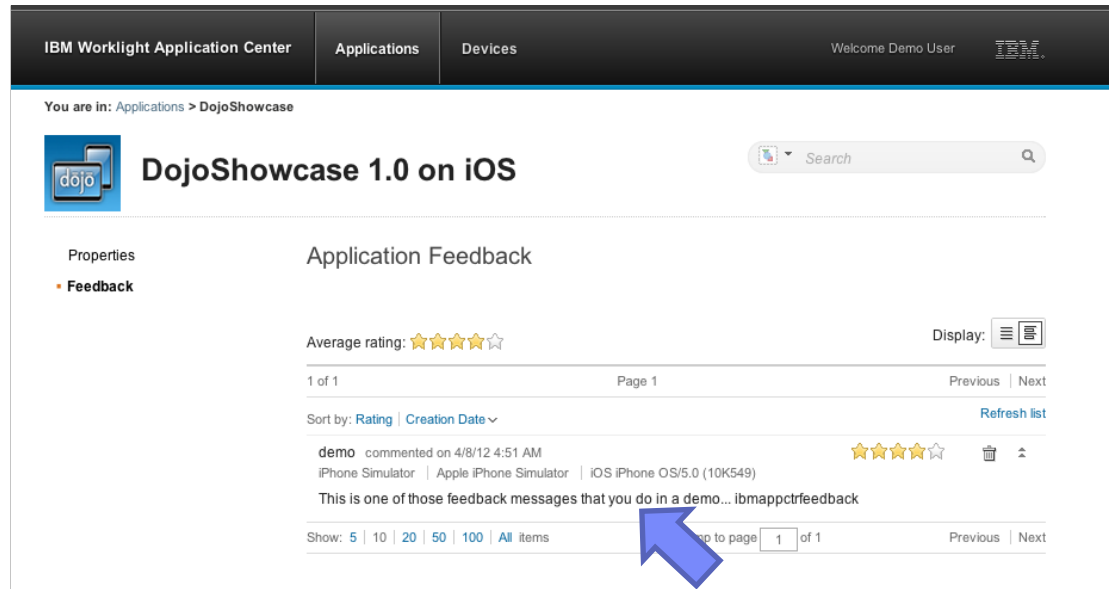
Look at Reviews by using the Application Center console.

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Deploying applications from Worklight Studio

- Applications can be deployed to the Application Center directly from Worklight Studio.

- You start by setting the publication preferences.

- In Worklight Studio, use **Window/Preferences** to open the Preferences views.

- Select **Worklight/IBM Application Center** and specify the server URL, your login, and your password.
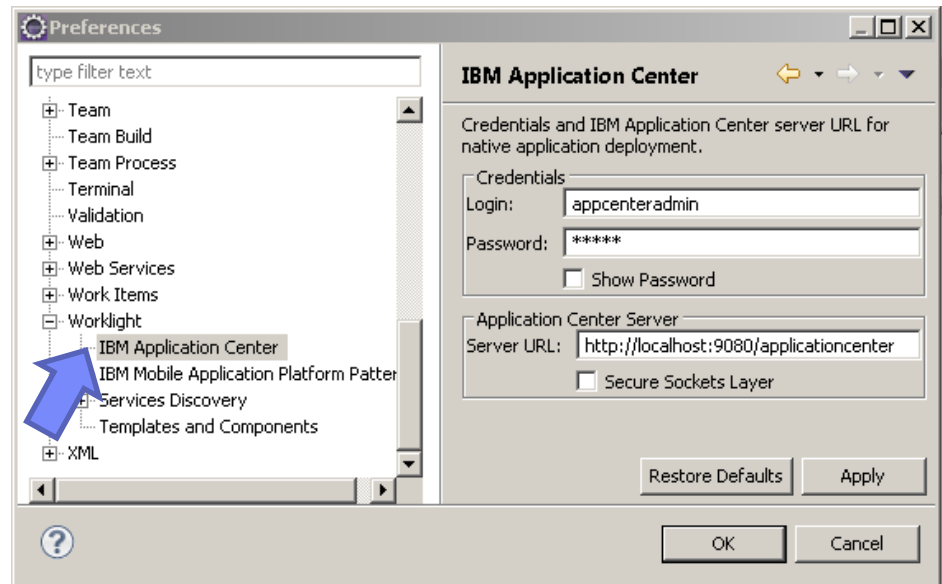
Deploying applications from Worklight Studio

- To deploy APK files or IPA files to the Application Center:

  1. Right-click the file in the Worklight Studio workspace.

  2. Select **IBM Application Center/publish application**.

  3. Confirm by clicking **Publish**.
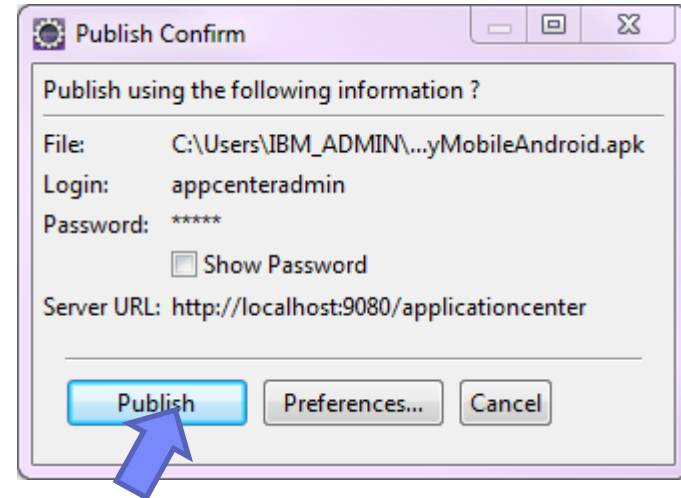
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Application Center command-line tools

- The `<installation-dir>/ApplicationCenter/tools` directory contains all the files that are required to use the command-line tool or Ant tasks to manage the applications in the store:

  - `applicationcenterdeploytool.jar`: the upload command-line tool.

  - `json4j.jar`: the library for the JSON format that is required by the upload tool.

  - `build.xml`: a sample Ant script that you can use to upload a single file or a sequence of files to the Application Center.

  - `acdeploytool.sh` and `acdeploytool.bat`: Simple scripts to call Java with `applicationcenterdeploytool.jar`.

For example, to deploy an application (`app.apk`) to the store in (`localhost:9080/applicationcenter`) with user ID "`demo`" and password "`demo`", use:

```
Java com.ibm.appcenter.Upload -s
http://localhost:9080 -c
applicationcenter -u demo -p
demo app.apk
```

For more information

For more information about Application Center, see the following topic in the IBM Worklight user documentation: *Application Center*

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http://www.ibm.com/mobile-docs

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