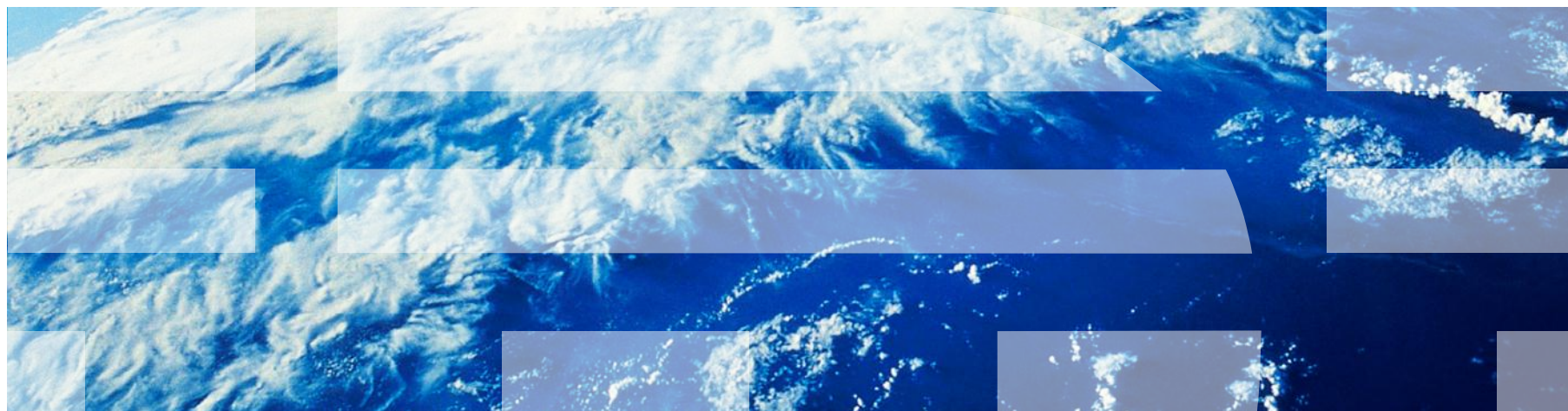


IBM Worklight Foundation V6.2.0 Getting Started

Invoking adapter procedures from native iOS applications



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Agenda

- **Creating and configuring an iOS native application**
- Initializing WLClient
- Invoking a Worklight procedure
- Receiving a procedure response

Creating and configuring an iOS native project

- To create and configure an iOS native project, first follow through the training module “*Creating your first Native iOS Worklight application*”.

Agenda

- Creating and configuring an iOS native application
- **Initializing WLClient**
- Invoking a Worklight procedure
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Initializing WLClient

- Access the WLClient functionality by using `[WLClient sharedInstance]` anywhere in your application.
- Initiate the connection to the server by using the `wlConnectWithDelegate` method.
- For most actions, you must specify a delegate object, such as a `MyConnectListener` instance in the following example:

```
MyConnectListener *connectListener = [[MyConnectListener alloc] initWithController:self];  
[[WLClient sharedInstance] wlConnectWithDelegate:connectListener];
```

- You learn how to create it in subsequent slides.
- Remember to import `WLClient.h` and `WLDelegate.h` in your header file.

Initializing WLClient – continued

- As described on the previous slide, you must supply a connection delegate (listener) to the Worklight Server invocation methods.
- Create a delegate to be used in the `wlConnectWithDelegate` method and receive the response from the Worklight Server. Name the class `MyConnectListener`.
- The header file must specify that it implements the `WLDelegate` protocol.

```
#import <Foundation/Foundation.h>
#import "WLClient.h"
#import "WLDelegate.h"
#import "ViewController.h"

@interface MyConnectListener : NSObject <WLDelegate> {
    @private
    ViewController *vc;
}

- (id)initWithController: (ViewController *)mainView;
@end
```

- The `WLDelegate` protocol specifies that the class implements the following methods:
 - The `onSuccess` method: `(WLResponse *) response`
 - The `onFailure` method: `(WLFailResponse *) response`

Initializing WLClient – continued

- After `wlConnectWithDelegate` finishes, the `onSuccess` method or the `onFailure` method of the supplied `MyConnectListener` instance is invoked.
- In both cases, the response object is sent as an argument.
- Use this object to operate data that is retrieved from the server.

```
-(void)onSuccess:(WLResponse *)response{
    NSLog(@"\nConnection Success: %@", response);
    NSString *resultText = @"Connection success. ";

    if ([response responseText] != nil){
        resultText = [resultText stringByAppendingString:[response responseText]];
    }
    [vc updateView:resultText];
}

-(void)onFailure:(WLFailResponse *)response{
    NSString *resultText = @"Connection failure. ";

    if ([response responseText] != nil){
        resultText = [resultText stringByAppendingString:[response responseText]];
    }
    [vc updateView:resultText];
}
```


Agenda

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Invoking a Worklight procedure

- To invoke a procedure, use the following steps:
 - Create a `WLProcedureInvocationData` object and specify the adapter name and the procedure name.
 - Invoke the procedure by using the shared instance of the `WLClient`.

```
WLProcedureInvocationData *myInvocationData = [[WLProcedureInvocationData alloc]
                                               initWithAdapterName:@"RSSReader" procedureName:@"getStories"];
MyInvokeListener *invokeListener = [[MyInvokeListener alloc] initWithController:self];
[[WLClient sharedInstance] invokeProcedure:myInvocationData withDelegate:invokeListener];
```

- As previously stated, you must supply a delegate object to manage the retrieved data.
 - See subsequent slides to learn how to create this object.

Agenda

- Creating and configuring an iOS native application
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Receiving a procedure response

- When the procedure invocation is complete, a delegate method of `MyInvokeListener` class instance is called.
- Any delegate header file must specify that it complies with a `WLDelegate` protocol.

```
#import <Foundation/Foundation.h>
#import "WLClient.h"
#import "WLDelegate.h"
#import "ViewController.h"

@interface MyInvokeListener : NSObject <WLDelegate> {
```

Receiving a procedure response – continued

- After the procedure invocation finishes, the `onSuccess` method or the `onFailure` method of the supplied `MyInvokeListener` instance is called.
- In both cases, a response object is sent as an argument.
- Use this object to operate data that is retrieved from the server.

```
-(void)onSuccess:(WLResponse *)response {
    NSLog(@"Invocation Success: %@", response);
    NSString *resultText = @"Invocation success. ";

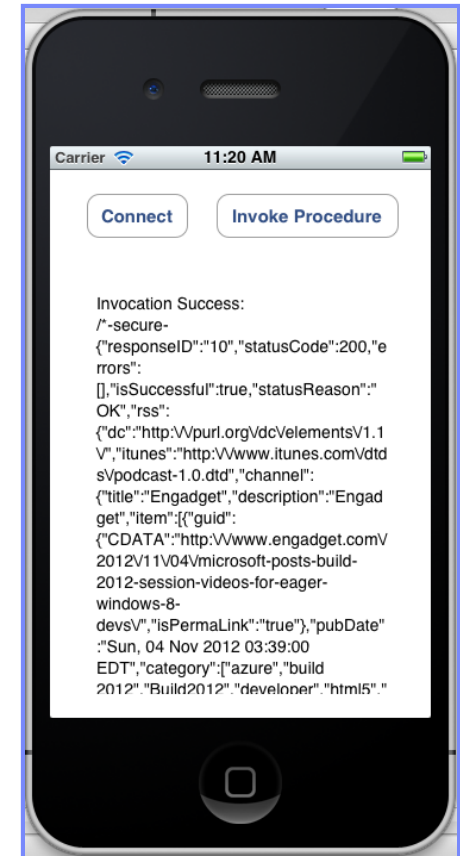
    if ([response responseText] != nil){
        resultText = [resultText stringByAppendingString:[response responseText]];
    }
    [vc updateView:resultText];
}

-(void)onFailure:(WLFailResponse *)response{
    NSLog(@"Invocation Failure: %@", response);
    NSString *resultText = @"Invocation failure. ";

    if ([response responseText] != nil){
        resultText = [resultText stringByAppendingString:[response responseText]];
    }
    [vc updateView:resultText];
}
```

Receiving a procedure response – continued

- You can find the sample for this training module in the Getting Started page of the Worklight documentation website at <http://www.ibm.com/mobile-docs>.
- The sample contains two projects:
 - The `InvokingAdapterProceduresNativeProject.zip` file contains a Worklight native API that you can deploy to your Worklight server.
 - The `InvokingAdapterProceduresiOSProject.zip` file contains a native iOS application that uses a Worklight native API library to communicate with the Worklight Server.
- Make sure to update the `worklight.plist` file in `iOSNativeApp` with the relevant server settings.



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