



Private API

Black App
2013/05/28

+ iOS API



- Published API (Documented API)
- Unpublished API (Undocumented API)
- Private API

+ How to use private API?

- We need header file.
 - Download from: <https://github.com/nst/iOS-Runtime-Headers>
 - Or dump by class-dump.



+ How to use private API? -Dump .h File.

1. Get class-dump.
 - Download the latest version:
<http://stevenygard.com/projects/class-dump/>
 - Drop the class-dump file to /usr/bin directory.
2. Dump the .h file.
 - Cd to /Applications/Xcode.app/Contents/Developer/Platforms/iPhoneSimulator.platform/Developer/SDKs/iPhoneSimulator6.1.sdk/System/Library/Frameworks/
 - Run the command: `class-dump ./Message.framework/ > /Users/Brian/Desktop/Message_6.1.h`
3. We can use the private API now!



How to detect the use of private APIs?



1. `otool -L`
 - This will list **all libraries** the app has linked to.
2. `nm -u`
 - This will list **all linked symbols**.
 - Ex: Undocumented C functions such as `_UIImageWithName`.
3. Listing Objective-C selectors, or strings.
 - **Objective-C selectors** are stored in a special region of the binary, and therefore Apple could extract the content from there, and check if you've used some undocumented Objective-C methods, such as `-[UIDevice setOrientation:]`.



Get screenshot with iOS Device.



- `CGImageRef screen = UIGraphicsImage();`
- `UIImage* image = [UIImage imageWithCGImage:screen];`
- `CGImageRelease(screen);`

+ Get screenshot with iOS Device.



A nice screenshot is now available under iPhone album



Send messages with iPhone



- 1. We have to dump header file for a private class call **CTMessageCenter**
- 2. Send simple message with a static method call **sendSMSWithText:**

```
[[CTMessageCenter sharedMessageCenter]  
sendSMSWithText:@ "h3LL0 W0rld" serviceCenter:nil  
toAddress:@ "0972195395"];
```


+ Demo



- Use class-dump tool to dump private API.
- Get screenshot with iOS Device.
- Send messages with iPhone.