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Managing Images: A KillSwitch Developer's Guide

KillSwitch International, Inc.

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Managing Images: a KillSwitch Developer's Guide

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Preface

Purpose of this Document

This document introduces the KillSwitch application for iOS; what it is, what does it do, and how does it work. It provides case studies and API documentation so app developers can make their own queries with the API.

Audience

The *primary audience* of this document is intended for iOS developers who are looking to develop software that can incorporate "kill switch" features onto any photo.

To utilize this document, users must have a working knowledge of HTTP processes, as well as other code processes.

The **secondary audience** of this document is intended for other app writers and engineers from other companies. For them, this guide can serve as a "case study" for similar company-related apps.

Revision History

Table 1. Revision History of This Book

| Version | Author | Description |
|---------|-----------|------------------------|
| 01 | Alex Yuan | Initial Document Draft |

Customer Documentation

The most up-to-date versions of all KillSwitch technical publications are available on the KillSwitch technical publications site, available directly from the Client Self Services Express site:

http://KillSwitchservice.lstatic.com/helpdesk

All documents are available in Adobe™ Acrobat™ (PDF) format, and require Acrobat Reader version 8.0 or later, available from the Adobe site at:

http://www.adobe.com

Contact Information

The following table lists the ways in which to contact KillSwitch International about support and service, technical problems, suggestions, or questions.

Table 2. How to Contact KillSwitch

| For help with | Contact | At |
|--|----------------------------|--|
| Technical problems or questions such as System failures or hardware RMAs | Technical Support Services | Email Address (mailto:KillSwitch.support@lstatic.com) Web Site http://www.lstatic.com/en-US/Service/Default.aspx |
| Submitting incident requests, or checking the status of existing requests or RMAs Client Self Services Express. Requires your client ID and KillSwitch-supplied password. | | Web Site http://KillSwitchservice.Istatic.com/helpdesk |

Chapter 1: Introduction

Overview

KillSwitch is an iOS-based application that lets users manage shared photos as they see fit. With it, users can freely share photos through social media, text messages, and email. They can also make said photos disappear just by activating the "kill switch".

Main Features

What can it do?

- *Unshare Image*: Shared a photo on Facebook, Twitter or Imgur? KillSwitch can go to all these sites and unshare unwanted images.
- *Image Delete*: KillSwitch's standard "delete all" button for an image. Works for all sites said image is on.
- *Timed Image*: Want to leave an image up, but only for a limited time? KillSwitch can set a "killswitch" timer on the image. After a certain amount of time, the image will be automatically deleted.

Control your photos on any platform

Once a photo is taken on an iOS device, an "kill switch" program is implemented on it. Photos with the kill switch enabled are 100% JPEG compatible; users can share and re-share these photos online however they like.

Easy un-sharing of photos

Once a photo is available online, there are multiples ways to un-share it:

- Activate the "kill switch" program.
- Let the photo automatically expire after some time.
- Enable limited accessibility this limits photo availability in terms of locations, view numbers, profile information, etc.

Chapter 2: Case Studies

This section lists all relevant Use Cases for KillSwitch. Corresponding AVI calls for each Use Case can be found in "Chapter 4: API References".

Case Study 1: Time Limit

Tom, an English Professor, plans to put up answers for a midterm for his students to see. He decides to take pictures of the answers (written on multiple pages) using his phone, and then upload the pictures (though KillSwitch) on his webpage. However, he intends to show them only for a limited period; this way, future students can't use these answers as midterm "study guides".

Function Tree

- 1. Photos are uploaded through KillSwitch; KillSwitch automatically implements "kill switch" programs on each photo.
- 2. Tom then adds a timer option on each photo. He then uploads the photos online.
- 3. The timer then links the photos to the "delete photo" function on whether website the photos are uploaded to.
- 4. The photos then stay online for a certain amount of time (determined by the timer).
- 5. Once the timer is up, the "kill switch" programs in each photo trigger the "delete photo" link, causing the website hosts to delete said photos automatically.

Case Study 2: Image Recall

Gary just came back from a hiking trip to the Himalayas; he has taken many pictures of the trip on his iPhone 10. He then uploads the photos to Facebook via KillSwitch for his friends and acquaintances to see. However, a few days later he realizes that some photos contain highly sensitive content he doesn't want people to see.

Function Tree

- 1. User accesses photo properties for KillSwitch program.
- 2. KillSwitch then "detects" the photo.
- 3. User is prompted if he wants to activate the "kill switch".
- 4. If user responds "yes", KillSwitch pulls all instances of the photo from the internet. -If user responds "no", nothing happens.

Chapter 3: API References

Overview

This section outlines each component of KillSwitch. Responses and status codes are provided under specific tasks.

To sign up for a developer account, contact <u>integration@killswitchers.com</u>. You will be provided an API key to start making queries.

https://sandbox.killswitch.pics to make requests against the API

Basic Languages

KillSwitch utilizes HTTP language for its functions. Notable functions include **GET** (retrieves data from a resource) and **POST** (submits information to a web server); HTTP status error codes are also used to identify specific errors.

The list of HTTP status error codes are as follows:

- 200 Success (information request was successful)
- 204 No Content (request without message)
- 400 Bad Request (unable to process request due to incorrect syntax)
- 401 Unauthorized (user authentication required)
- 404 Not Found
- 500 Internal Server Error

Additionally, all other responses are done in **JSON**, and communications in **SSL** (https://).

Error Response

```
"code": 40401;
"message": "No Image Found";
"key": "IMAGE_NO_FOUND";
}
```

Authorization

Must include (in all queries) an API key header followed by the API key provided.

Creating a New Image

This process creates a new image and returns the corresponding KillSwitch.

Response: POST /v1/images/

List of parameters:

| Name | Туре | Description |
|-------|--------|-------------------|
| image | String | Image file in x64 |

| duration | Number | Shared duration in seconds (max: 1 year or 31557600s) |
|--------------|---------|--|
| embeddedPass | Boolean | Optional; default 1 If set to 1, password is embedded to URL so user doesn't have to decrypt image. If privacy is a concern, this value can be set to 0 so the link will ask the viewer for the password to decrypt the image. |

List of responses:

| Name | Туре | Description |
|----------|--------|--|
| link | String | Share KillSwitch to the image |
| password | String | (Optional) Enables password for image decryption |
| imageId | string | Image identifier |

Image Information

Response: GET /v1/images/{imageid

List of responses:

| Name | Туре | Description |
|---------------|--------|---|
| views | Number | Number of views of the image |
| likes | Number | Number of likes hit in the website |
| thumbs | Number | Number of thumbs hit in the website |
| smiles | Number | Number of smiles hit in the website |
| remainingTime | Number | Remaining time in seconds until the image expires |
| link | String | KillSwitch to reshare (if option passEmbedd0 is selected, the password won't be stored in the server and URL) |

Unsharing Images

Command for un-sharing:

DELETE /v1/images/{imageid

Glossary

| API | Application Programming Interface - a set of methods and tools designed to | |
|-------|--|--|
| | enable communication between multiple software programs | |
| CA | Conditional Access – Content access that can only be accessed by fulfilling | |
| | certain criteria. | |
| HTTPS | Hyper Text Transfer Protocol Secure – secure version of HTTP that sends data | |
| | between the website and your browser | |
| JSON | JavaScript Object Notation – a minimal structuring data format used to | |
| | transfer data between a server a website | |
| SSL | Secure Sockets Layer – security protocol that sets up encrypted connections | |