

移动应用远程问题诊断

2015-11-29

董霖

- 2013 个推
Android/iOS 个推SDK
- 2011 个信
Symbian/Android/iOS App
- 2009 通讯录
Symbian/WM/Android App

个推-移动应用消息推送解决方案



背景



典型客户：





合适的时间



定时推送



合适的地点



地理围栏



合适的场景



智能场景
标签



合适的内容



有价值信息



合适的人



智能画像
标签

基于地理位置数据的用户画像 Location Based User Profiling

居住地属性

Where constantly?

用户住在哪里/工作地点

XX城市

XX街区



行为规律特征

Where regularly?

用户经常/最近去哪里

学生、车友、商务、时尚、白领、美食、旅游、居家、新人婚庆



实时位置场景

Where right now?

用户现在在哪里

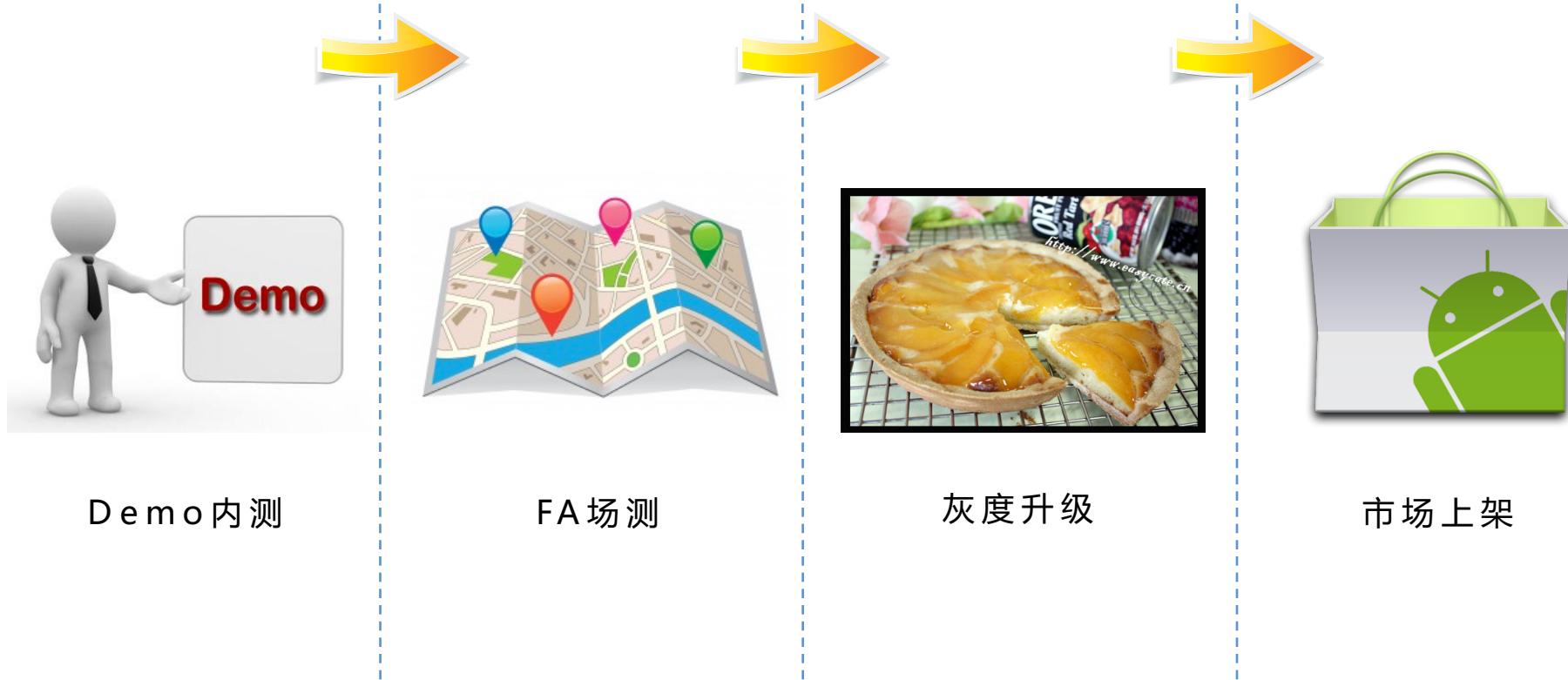
家里、商场、机场车站、景点、汽车4S店





Murphy's Law

- 如果有两种或两种以上的方式去做某件事情，而其中一种选择方式将导致灾难，则必定有人会做出这种选择。



All roads lead to Rome



Rome

Request

Of

Mobile

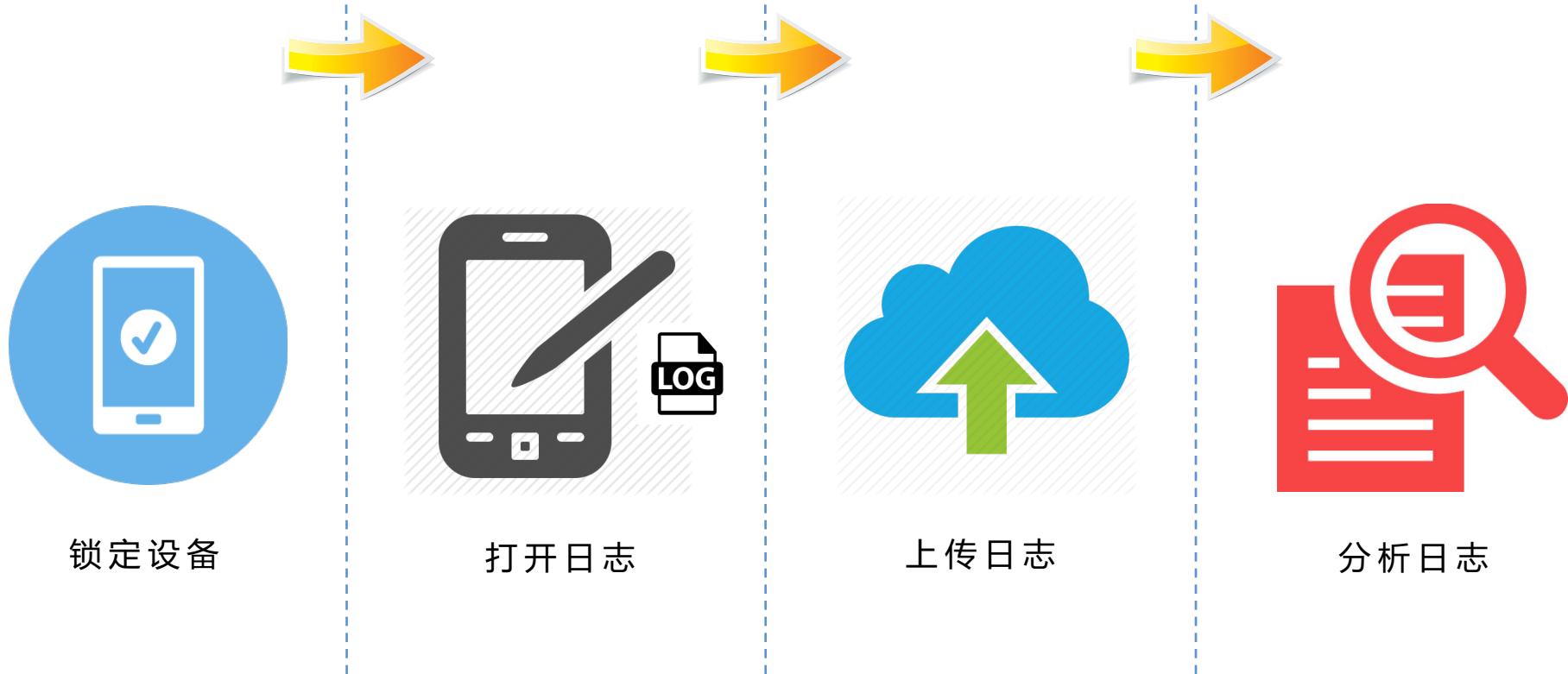
Exception

- 开log，看log
- 看屏幕，截屏

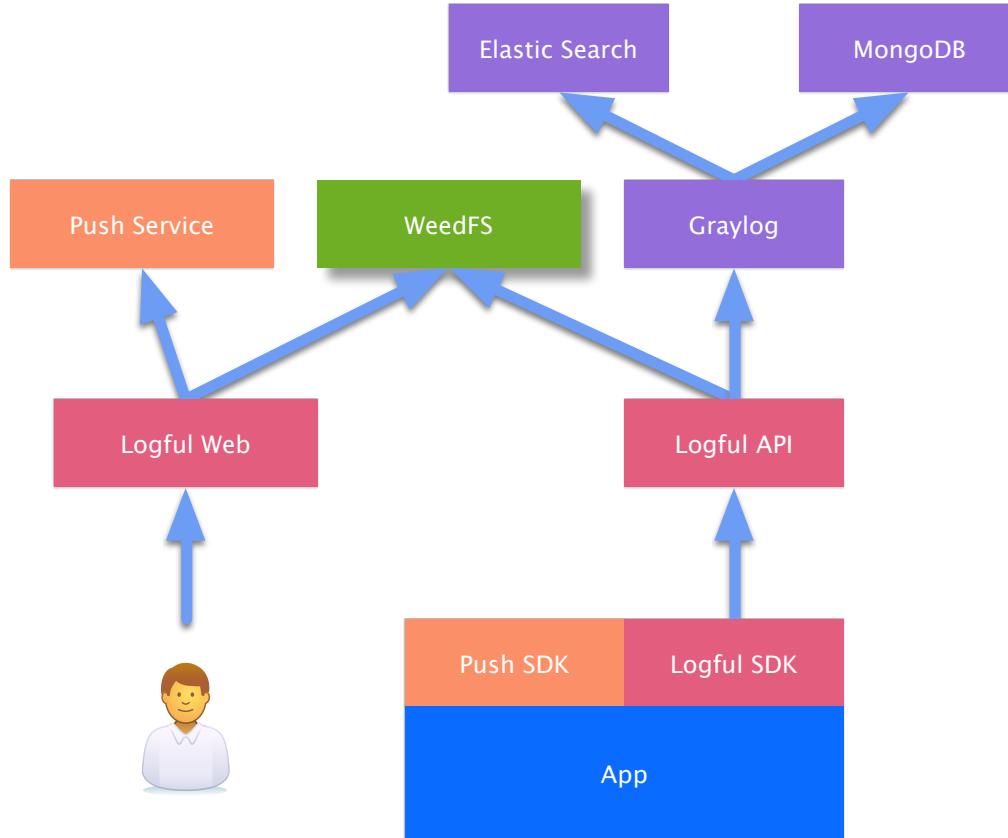
现有工具



问题解决流程



- Logful
- Full of Log





• Android初始化

```
@LogProperties(defaultLogger = "logger",
    defaultMsgLayout = "t,type,%s|r,result,%n|c,counts,%n")
public class MainApplication extends Application {

    @Override
    public void onCreate() {
        super.onCreate();

        LoggerConfigurator config = LoggerConfigurator.build();
        config.setCaughtException(false);
        LoggerFactory.init(this, config);
    }
}
```

- Android日志记录

```
LoggerFactory.turnOnLog();
LoggerFactory.verbose(TAG, "http login request sent.");
LoggerFactory.debug(TAG, "http|login|failed");
LoggerFactory.error(TAG, "t:post_error|r:80001|c:3");
```

```
defaultMsgLayout = "t,type,%s|r,result,%n|c,counts,%n")
```

- iOS初始化

```
#import "AppDelegate.h"
#import <LogLibrary/LogLibrary.h>

@interface AppDelegate : NSObject<UIApplicationDelegate>

@end

@implementation AppDelegate

- (BOOL)application:(UIApplication *)application didFinishLaunchingWithOptions:(NSDictionary *)launchOptions {
    // Override point for customization after application launch.
    GTLoggerConfigurator *config = [GTLoggerConfigurator defaultConfig];
    config.defaultLoggerName = @"sample";
    config.defaultMsgLayout = @":s,sendMessage,%s\n,length,%n";
    config.caughtException = NO;
    [GTLoggerFactory initWithConfig:config];
    return YES;
}
```

- iOS日志记录

```
- (TBAction)verbose:(id)sender {
    GLOG_VERBOSE(@"main", @"s:login|userid");
}

- (TBAction)debug:(id)sender {
    GLOG_DEBUG_CAPTURE(@"main", @"s:chat|hello,logful\n:n:12");
}
```

日志管理工具

Search... 

 信息总览

 UID 工具

 日志工具

 系统控制

信息总览

WeedFS 状态

Data Center	Rack	Remote Address	Volumes	Max Volumes	Detail
DefaultDataCenter	DefaultRack	localhost:8083	2	2	 详细

系统信息

 Server Version	0.2.0
 System Start Time	2015/11/20 10:57:51.436
 Graylog Connected	true
 WeedFS Connected	true
 WeedFS Error	no error

资源状态

内存占用

152.34 MB of 657.5 MB

线程占用

1 of 8

队列信息

0 of 512

graylog

Search Streams Dashboards Sources System ▾

In 0 / Out 0 msg/s Administrator ▾

Search in the last 15 minutes

app_id:com.getui.logful.sample

app_id:com.getui.logful.sample

Search result

Found 3 messages in 4 ms, searched in 1 index.

Add count to dashboard ▾

Save search criteria More actions ▾

Fields

Default All None Filter fields

- alias
- app_id
- attachment
- col_length
- col_sendMessage
- col2
- level
- log_level
- log_name
- log_timestamp
- message

List fields of [current page](#) or [all fields](#).

Histogram

Year, Quarter, Month, Week, Day, Hour, Minute

Add to dashboard ▾



Time	Count
15:10	0
15:15	0
15:20	0
15:25	3

Messages

Previous 1 Next

Timestamp	source
2015-11-20 15:25:25.159	127.0.0.1
s:chat hello,logful n:12	
2015-11-20 15:25:25.159	127.0.0.1
s:chat hello,logful n:12	
2015-11-20 15:25:25.159	127.0.0.1
s:chat hello,logful n:12	

graylog Search Streams Dashboards Sources System ▾ In 0 / Out 0 msg/s Administrator ▾

Search in the last 15 minutes col_sendMessage:chat

col_sendmessage:chat

Search result

Found 3 messages in 5 ms, searched in 1 index.

Add count to dashboard ▾ Save search criteria More actions ▾

Fields

Default All None Filter fields

- alias
- app_id
- attachment
- col_length
- col_sendMessage
- col2
- level
- log_level
- log_name
- log_timestamp
- message

List fields of [current page](#) or all fields.

Histogram

Year, Quarter, Month, Week, Day, Hour, Minute Add to dashboard ▾



Timestamp	source
2015-11-20 15:25:25.159	127.0.0.1
s:chat hello,logful n:12	
2015-11-20 15:25:25.159	127.0.0.1
s:chat hello,logful n:12	
2015-11-20 15:25:25.159	127.0.0.1
s:chat hello,logful n:12	

Messages

Previous 1 Next

Timestamp	source
2015-11-20 15:25:25.159	127.0.0.1
s:chat hello,logful n:12	
2015-11-20 15:25:25.159	127.0.0.1
s:chat hello,logful n:12	
2015-11-20 15:25:25.159	127.0.0.1
s:chat hello,logful n:12	

2015-11-20 15:25:25.159 127.0.0.1
s:chat|hello,logful|n:12

✉ e5ce56e1-8f57-11e5-a8d6-00163e021ffb

Received by alias
graylog on ↗ alias

Stored in index app_id
graylog2_1 com.getui.logful.sample

attachment attachment
Sacd9a7d9fb53ebb560d446257b31a89

col_length col_length
12

col_sendMessage col_sendMessage
chat

col2 col2
hello,logful

gl2_remote_ip gl2_remote_ip
127.0.0.1

gl2_remote_port gl2_remote_port
41076

level level
6

log_level log_level
2

log_name log_name
sample

log_timestamp log_timestamp
1448004325159

message message
s:chat|hello,logful|n:12

platform platform
ios

source source
127.0.0.1

tag tag
main

uid uid
74baf498322f457cb1a76e4477838683

version version
1.1

Permalink Copy ID Test against stream ▾

s:chat|hello,logful|n:12

uid:74baf498322f457cb1a76e4477838683

日志管理工具

信息总览

UID 工具

日志工具

系统控制

日志工具

获取日志文件列表

平台

应用 ID

UID

日期

获取

下载附件

下载

解密加密日志文件

应用 ID

加密日志文件

解密

清理缓存

清理

日志文件列表

Show 10 entries Search:

#	文件名	大小	级别	操作
1	sample-20151120-verbose-1	94 B	verbose	Download View
2	sample-20151120-verbose-2	78 B	verbose	Download View
3	sample-20151120-verbose-2	78 B	verbose	Download View
4	sample-20151120-verbose-2	78 B	verbose	Download View
5	sample-20151120-debug-1	92 B	debug	Download View
6	sample-20151120-debug-1	92 B	debug	Download View
7	sample-20151120-debug-2	122 B	debug	Download View
8	sample-20151120-debug-2	122 B	debug	Download View
9	sample-20151120-debug-2	122 B	debug	Download View
10	sample-20151120-info-1	91 B	info	Download View

Showing 1 to 10 of 18 entries

Previous [1](#) [2](#) Next

[关闭](#)



Demo

日志文件查看工具			
文件: sample-20151120-debug-2 条数: 1			
#	Time	Tag	Message
1	2015-11-20 13:42:10.305	main	s:chat hello,logful n:12 



日志文件查看工具 文件: sample-20151120-debug-2 条数: 1

#	Time	Tag	Message
1	2015-11-20 13:42:10.305	main	s:chat hello,logfull n:12 

VERBOSE DEBUG

INFO WARN

ERROR EXCEPTION

FATAL BATCH

UPLOAD CRASH

[INTERRUPT UPLOAD](#)

 ON

[Capture](#)

```
default-20150917-debug-3.log  *
1  2015-09-17 23:07:51.259|AppListActivity|sdkstatus|timeout
72 2015-09-17 23:07:51.574|AppListActivity|sdkconfig|timeout
73 2015-09-17 23:07:52.390|AppListActivity|sdkversion|timeout
74 2015-09-17 23:07:52.406|AppListActivity|sdkstatus|timeout
75 2015-09-17 23:07:56.796|NetInfoManager|http|login|request|com.getui.test
76 2015-09-17 23:07:56.802|NetInfoManager|http|login|request|com.getui.test
77 2015-09-17 23:07:56.873|NetInfoManager|http|login|request|com.sds.android.ttpod
78 2015-09-17 23:07:56.881|NetInfoManager|http|login|request|com.sds.android.ttpod
79 2015-09-17 23:07:56.915|NetInfoManager|http|login|response|200
80 2015-09-17 23:07:56.918|NetInfoManager|http|cid status|request|3a07d6f3077e8c73b3ab4b090bdb07e2|com.getui.test
81 2015-09-17 23:07:56.916|NetInfoManager|http|login|response|ok
82 2015-09-17 23:07:56.954|NetInfoManager|http|login|request|com.storm.smart
83 2015-09-17 23:07:56.954|NetInfoManager|http|login|response|200
84 2015-09-17 23:07:56.954|NetInfoManager|http|login|request|com.storm.smart
85 2015-09-17 23:07:56.954|NetInfoManager|http|login|response|ok
86 2015-09-17 23:07:56.956|NetInfoManager|http|cid detail|request|3a07d6f3077e8c73b3ab4b090bdb07e2|com.getui.test
87 2015-09-17 23:07:57.074|NetInfoManager|http|login|response|200
88 2015-09-17 23:07:57.075|NetInfoManager|http|login|response|ok
89 2015-09-17 23:07:57.077|NetInfoManager|http|cid detail|request|65917317e6dda973bb37b4aefd604d72|com.sds.android.ttpod
90 2015-09-17 23:07:57.116|NetInfoManager|http|login|response|200
91 2015-09-17 23:07:57.117|NetInfoManager|http|cid detail|request|c55f87e31e2b178af4df2d17ca74a2e7|com.storm.smart
92 2015-09-17 23:07:57.116|NetInfoManager|http|login|response|ok
93 2015-09-17 23:07:57.128|NetInfoManager|http|cid status|response|200|com.getui.test
94 2015-09-17 23:07:57.161|NetInfoManager|http|cid detail|response|200|com.getui.test
95 2015-09-17 23:07:57.177|NetInfoManager|http|login|response|200
96 2015-09-17 23:07:57.177|NetInfoManager|http|login|response|ok
```

日志管理工具

Search... 

信息总览

UID 工具

日志工具

系统控制

系统控制

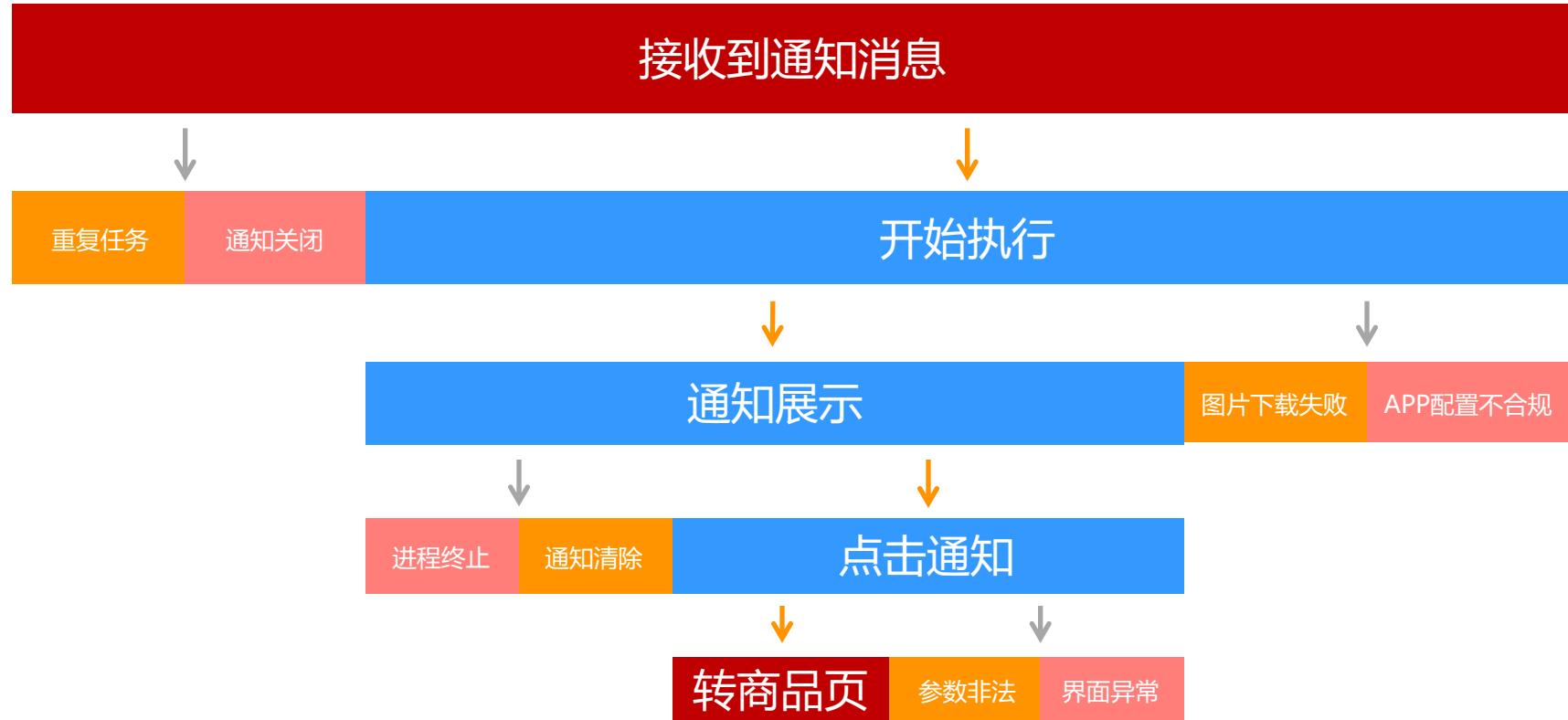
详细配置

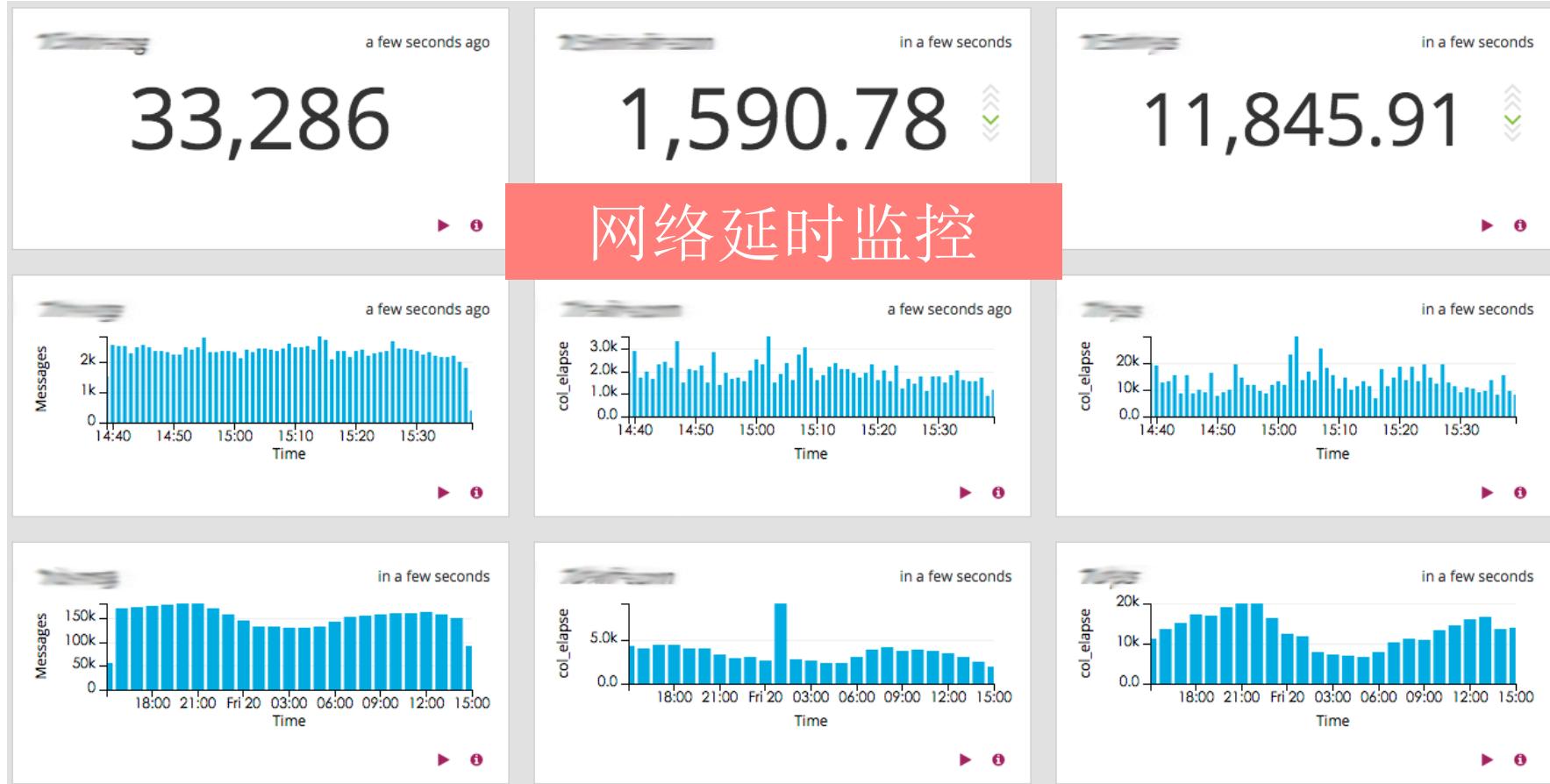
#	名称	时间	操作
---	----	----	----

灰度控制

灰度 
60%

用户灰度在 60% 以下可以上传日志





Alerts configuration for stream > [REDACTED]

You can define thresholds on any message field or message count of a stream and be alerted based on this definition.

[Learn more about alerts in the documentation.](#)

Add new alert condition

Message count condition [Configure new alert condition](#)

Configured alert conditions

Field value condition

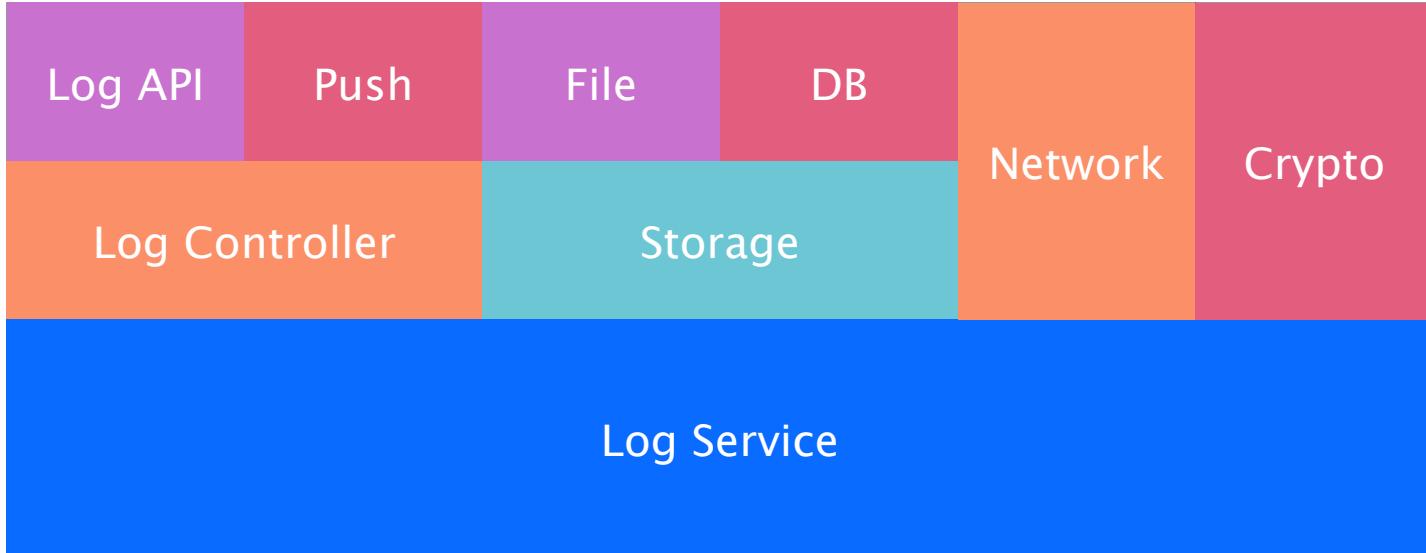
Alert ... when col_elapse has a higher mean value than 10000 in last 5 minutes.

Callbacks

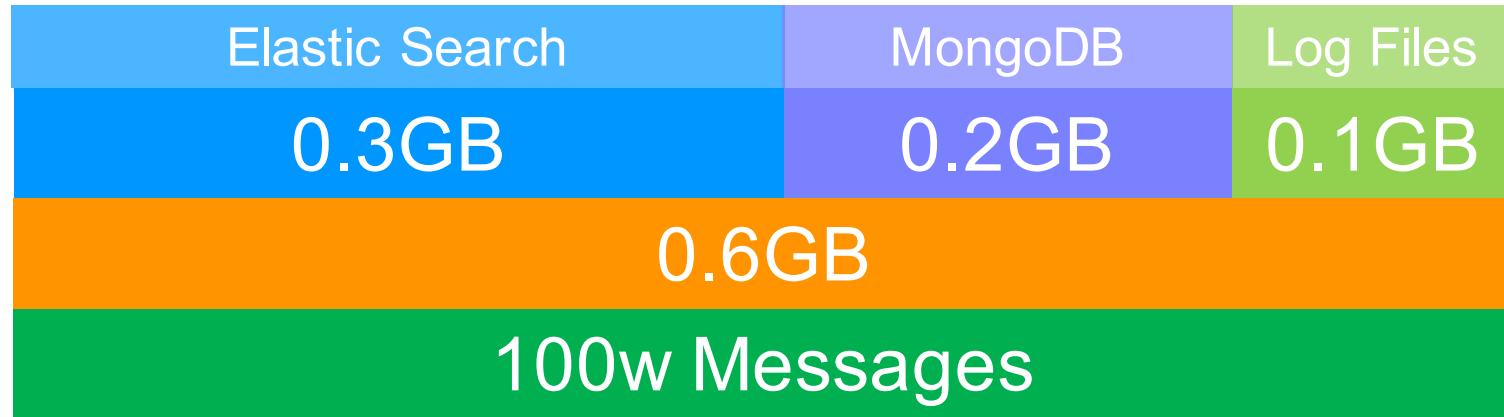
The following callbacks will be performed when this stream triggers an alert.

Email Alert Callback [Add callback](#) [Find more callbacks](#)

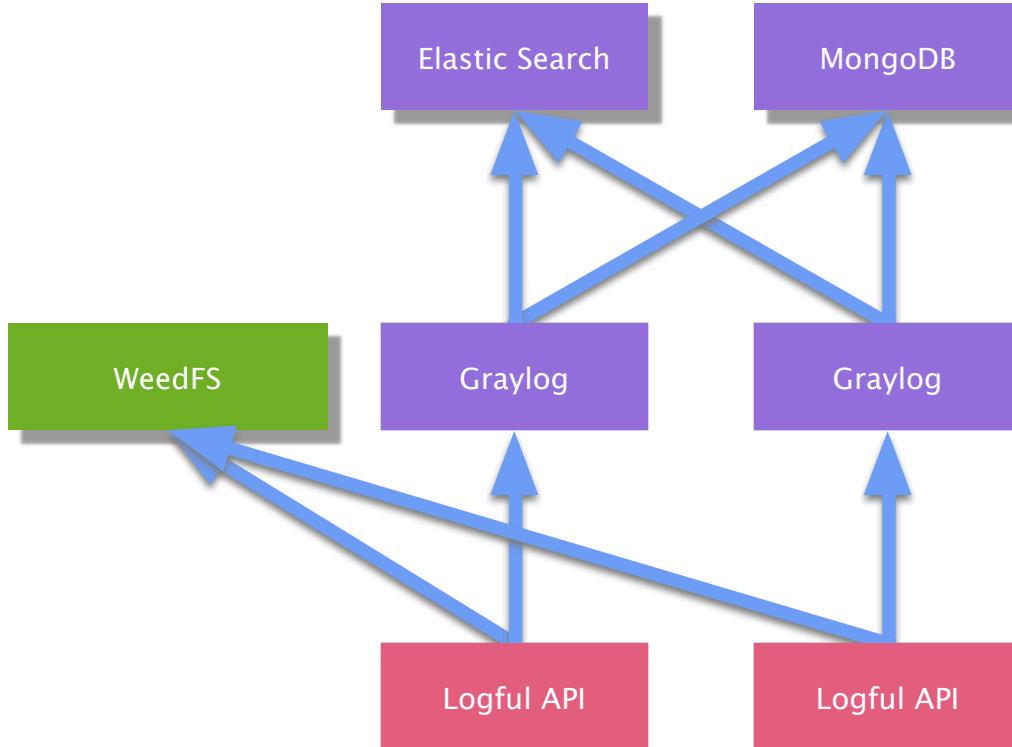
Email Alert Callback
Executed once per triggered alert condition.



日志级别	是否进Graylog	用途
verbose	否	通过Logful Web检索详细日志排查问题
debug	是	记录关键的程序执行点
info	是	收集程序运行时信息
warn	是	手机关键的警告信息
error	是	记录程序未按预想逻辑执行的错误
exception	是	记录部分重要的异常捕获
fatal	是	Crash或者其他导致程序无法继续正常运行的严重错误



并行扩展性



- Android/iOS支持
- 日志加密存储和上传
- 日志检索
- 实时日志控制
- 灰度日志控制
- Wifi下上传

特色功能

- 截图支持
- 日志预录
- 别名支持
- 日志模板
- 数据监控

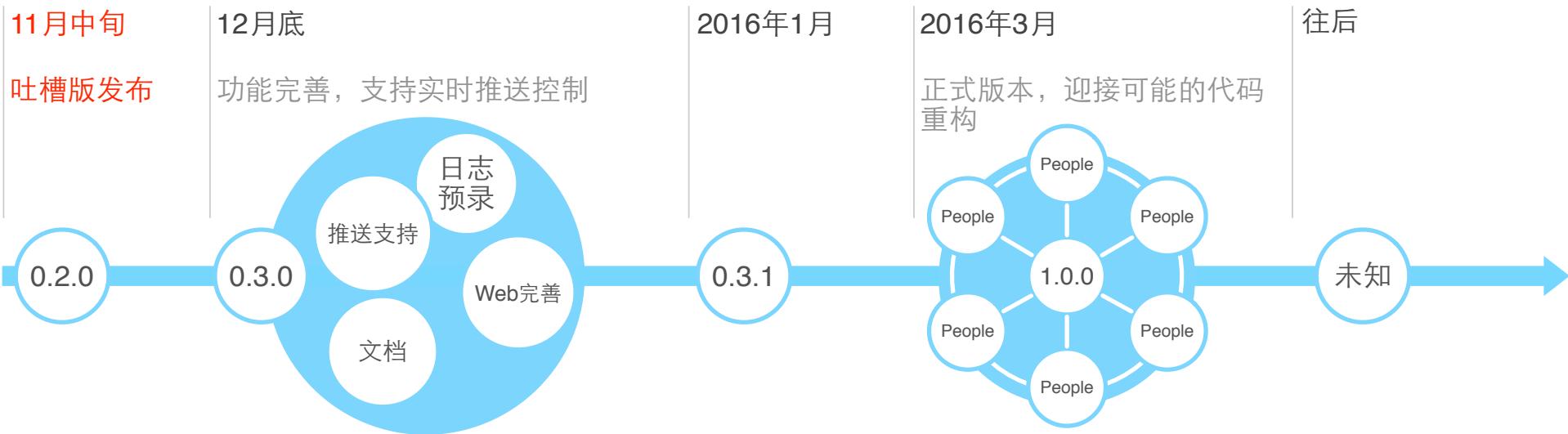
开 源

<https://github.com/logful>

<https://logful.github.io>



Roadmap



@个推



@dwelling



谢谢