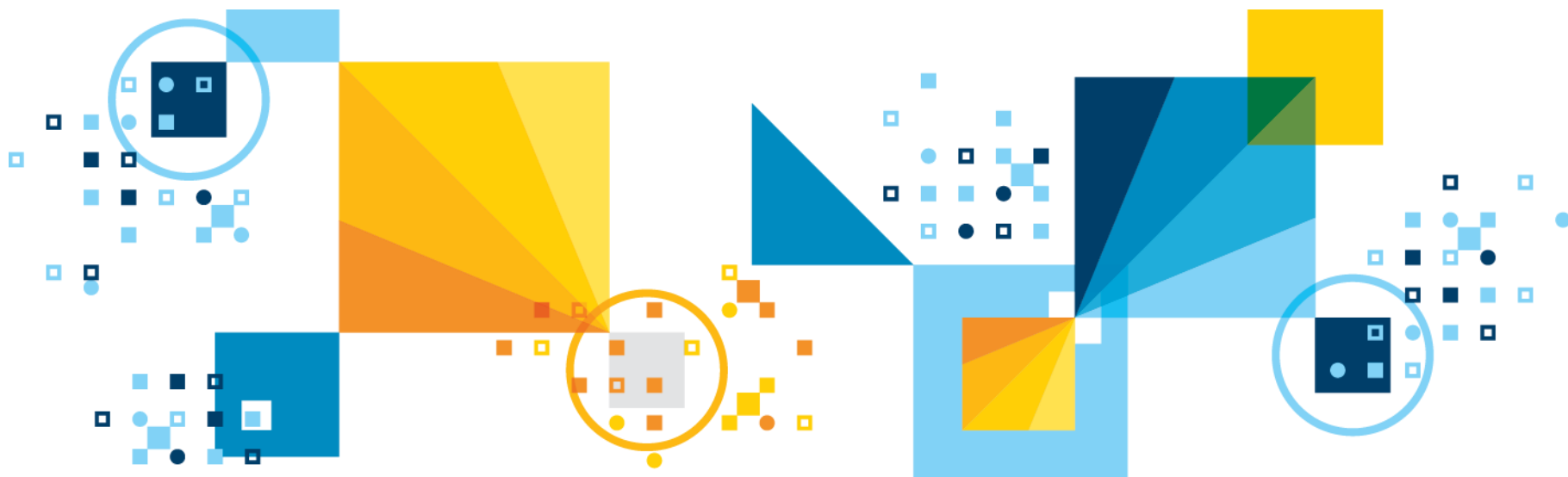


# Cloudant应用开发 – IBM Cloudant大赛





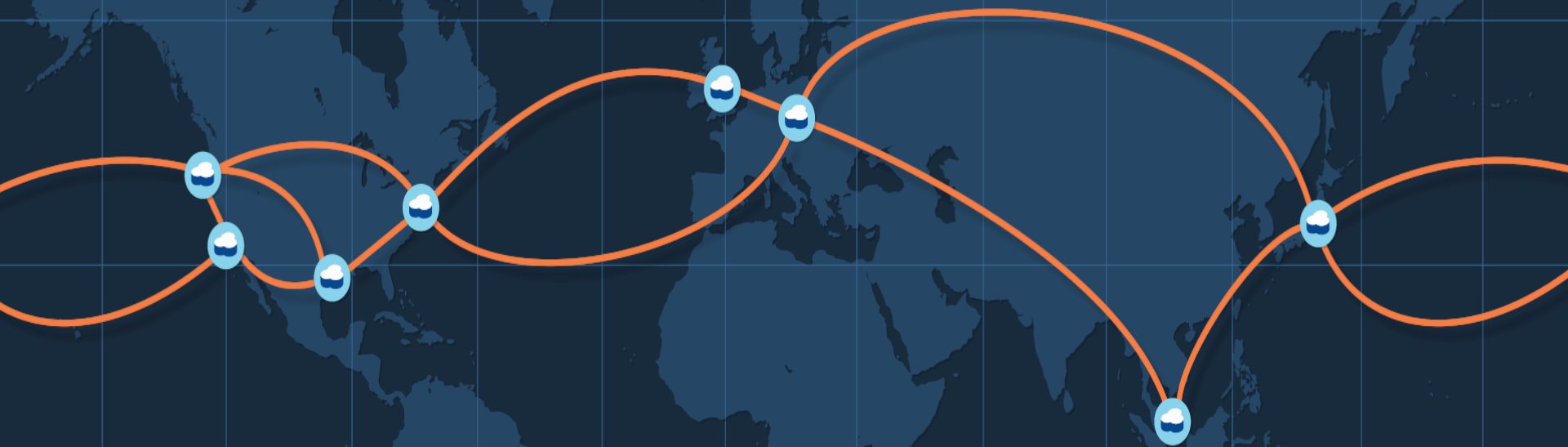
- 大赛规则
- 如何开始使用Cloudant
  - ✓ 注册用户
  - ✓ 数据导入
  - ✓ 数据库复制
- Cloudant API介绍
- Cloudant样例程序介绍
  - ✓ Location Tracker
  - ✓ 基于Watson和Cloudant的智能分析
  - ✓ 基于Cloudant的财务分析
  - ✓ 基于Cloudant的几款游戏



## 大赛规则

- **数据来源**：不限，可以是任意领域中的数据，Cloudant所支持的数据格式为Json格式。
- **建议应用开发方向**：
  - 我们欢迎各个方向的应用开发，互联网方向，企业级大数据方向，移动应用方向等；
  - 我们欢迎各个领域的创新探索，**新媒体领域**，**电商领域**，**社交网络领域**，**运动健康领域**，**网络游戏领域**，**舆情分析等其他领域**，领域不限；
  - Cloudant在地理信息支持上有得天独厚的优势，也欢迎地理信息GeoJson方向的应用开发；
  - Cloudant支持Lucene全文检索，欢迎挖掘其中的奥秘；
  - 如果您缺乏数据，我们也有一些已有样例数据供您参考。

# 如何开始使用Cloudant ?



全球35个数据中心。

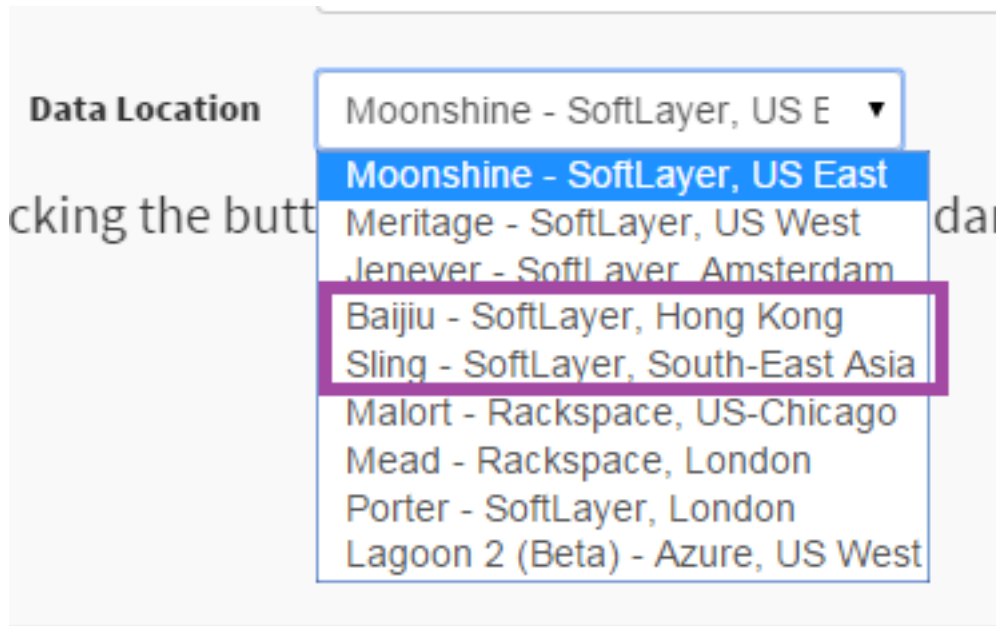
现有9个数据中心提供多租户服务，即普通用户注册时可供选择的数据中心共有9个，分别位于欧洲，亚洲，北美等地区。

IaaS 提供者: SoftLayer, Rackspace, Amazon, Azure

# 如何开始使用Cloudant?



1. 通过cloudant.com注册(3-5分钟) 请选择和自己比较近的数据中心。



2. 注册成功后，可以使用图形化工具Dashboard操作数据库。  
<https://username.cloudant.com/dashboard.html>

# 如何开始使用Cloudant?



## 3. 数据导入

- ✓最简易的方式CURL，每次导入的JSON文件大小不能超过**64MB**。
- ✓举例：music.json

```
{ "docs": [{"music_band": "Unknow", "music_genre": "Unknow", "music_id": 1, "singer_name": "Unknow", "album_name": null, "music_year": "Unknow", "music_name": "it hurts like hell", "rc_value": 5.04, "composer_name": "Unknow", "rc_main": "K", "music_remark": "Unknow"}, {"music_band": "Unknow", "music_genre": "Uknow", "music_id": 2, "singer_name": "Uknow", "album_name": "Uknow", "music_year": "2008-05-05", "music_name": "报复曲(音乐) - 电影原声", "rc_value": 5.02, "composer_name": "Uknow", "rc_main": "K", "music_remark": "0"}, {"music_band": "Unknow", "music_genre": "Uknow", "music_id": 3, "singer_name": "Uknow", "album_name": "Uknow", "music_year": "2004-12-14", "music_name": "狼之初 性心善 - 电影原声", "rc_value": 5.025, "composer_name": "Uknow", "rc_main": "M", "music_remark": "0"}, {"music_band": "Unknow", "music_genre": "Unknow", "music_id": 4, "singer_name": "电影原声", "album_name": null, "music_year": "2008-05-05", "music_name": "童年的初恋(音>乐)", "rc_value": 5.17, "composer_name": "Unknow", "rc_main": "W", "music_remark": "Unknow"}]}
```

### ✓导入命令

```
curl -d @music.json https://username.cloudant.com/dbname/_bulk_docs -H "Content-Type:application/json" -u username:password
```

# 如何开始使用Cloudant?



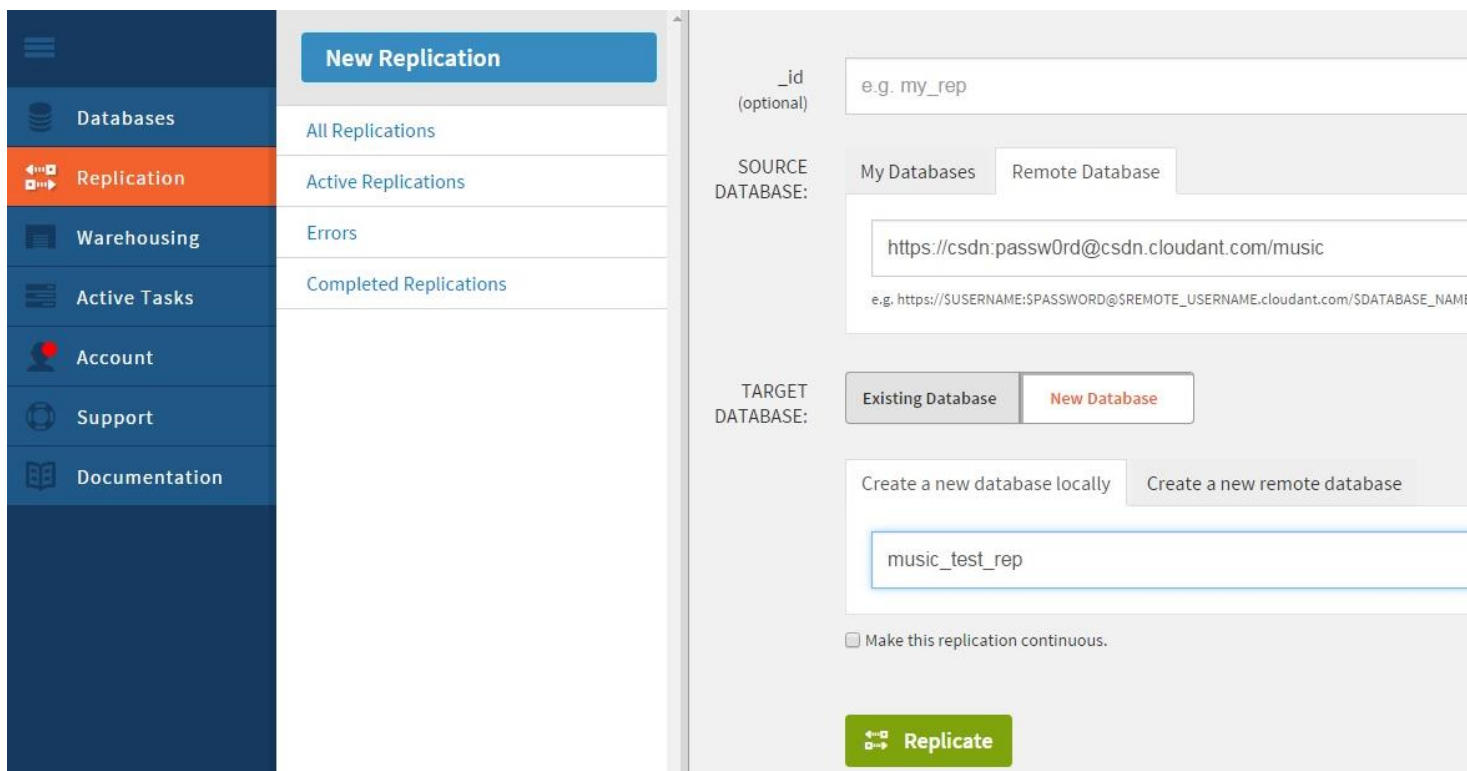
## 3. 通过Dashboard做远程数据库复制Replication.

可选远程数据库如下

[https://csdn.passw0rd/csdn.cloudant.com/music\\_check\\_result](https://csdn.passw0rd/csdn.cloudant.com/music_check_result)

[https://csdn.passw0rd/csdn.cloudant.com/check\\_data\\_music](https://csdn.passw0rd/csdn.cloudant.com/check_data_music)

<https://csdn.passw0rd/csdn.cloudant.com/resumes>



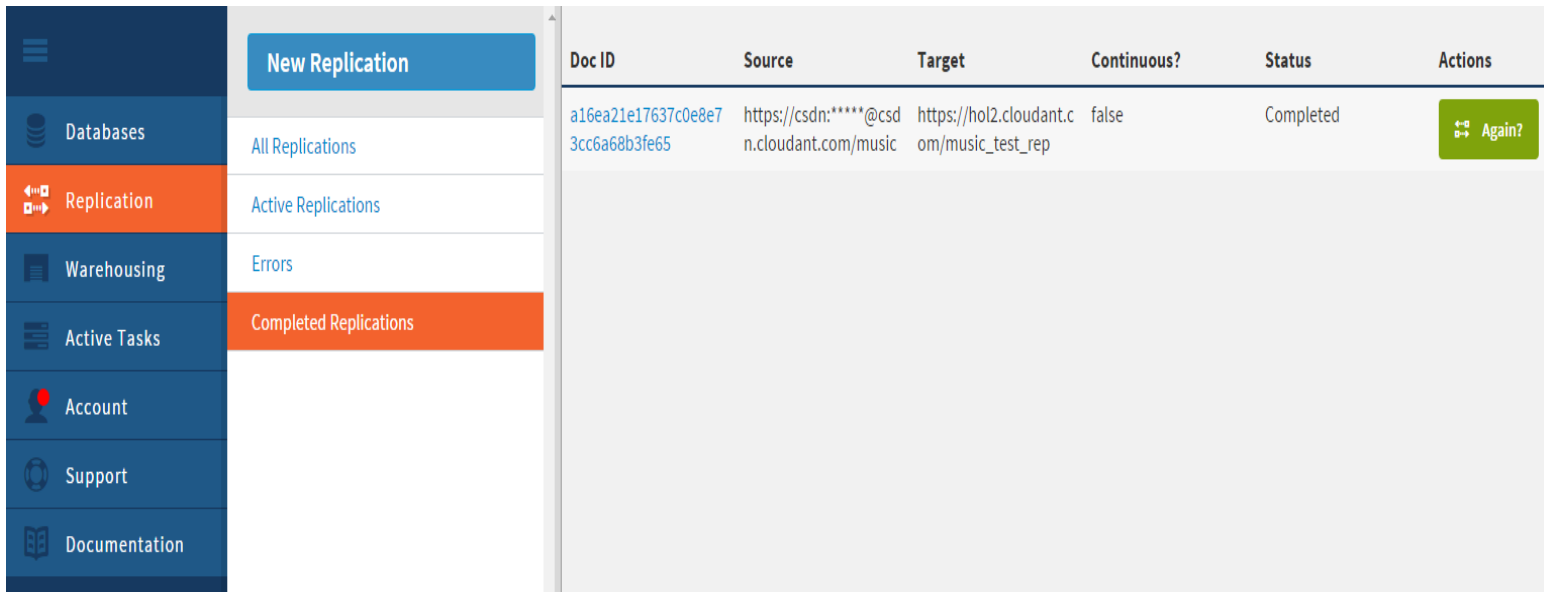
The screenshot shows the Cloudant dashboard interface for creating a new replication. On the left is a navigation sidebar with options: Databases, Replication (highlighted), Warehousing, Active Tasks, Account, Support, and Documentation. The main content area is titled 'New Replication' and contains the following fields and options:

- \_id (optional):** A text input field with the example value 'e.g. my\_rep'.
- SOURCE DATABASE:** Two tabs: 'My Databases' and 'Remote Database'. The 'Remote Database' tab is selected, and a text input field contains the URL 'https://csdn:passw0rd@csdn.cloudant.com/music'. Below this field is a small text example: 'e.g. https://\$USERNAME:\$PASSWORD@\$REMOTE\_USERNAME.cloudant.com/\$DATABASE\_NAME'.
- TARGET DATABASE:** Two tabs: 'Existing Database' and 'New Database'. The 'New Database' tab is selected. Below it are two options: 'Create a new database locally' and 'Create a new remote database'. The 'Create a new remote database' option is selected, and a text input field contains the name 'music\_test\_rep'.
- Make this replication continuous.
- Replicate:** A green button with a double-headed arrow icon.

# 如何开始使用Cloudant?



- 3. 通过Dashboard做远程数据库复制Replication.  
复制成功



The screenshot shows the Cloudant dashboard interface. On the left is a navigation sidebar with options: Databases, Replication (highlighted), Warehousing, Active Tasks, Account, Support, and Documentation. The main content area has a 'New Replication' button and a table of replication tasks. The table has columns for Doc ID, Source, Target, Continuous?, Status, and Actions. One task is listed with a status of 'Completed' and an 'Again?' button.

Doc ID	Source	Target	Continuous?	Status	Actions
a16ea21e17637c0e8e7 3cc6a68b3fe65	https://csdn:****@csdn.cloudant.com/music	https://hol2.cloudant.com/music_test_rep	false	Completed	<a href="#">↺↻ Again?</a>



# Cloudant API 介绍



- API视频介绍

[http://v.youku.com/v\\_show/id\\_XMTI4NDE2MDE4OA==.html?f=25917691&o=0&from=y1.2-3.4.4](http://v.youku.com/v_show/id_XMTI4NDE2MDE4OA==.html?f=25917691&o=0&from=y1.2-3.4.4)

- <https://cloudant.com/for-developers/crud/>

- ✓ Cloudant是如何支持读写操作的，Cloudant支持现在应用开发最流行的RESTful API.
- ✓ 任何数据的访问操作都可以通过一个URL。
- ✓ 只要你可以连接互联网，那你就可以使用Cloudant，这也是我们Database as Service的概念之一。

For Developers

Data Migration &  
Transformation Tools

Libraries and Tutorials

Reading & Writing

Primary Index

Secondary Indexes

Search Indexes

Examples



# Cloudbant样例程序介绍

- 地理信息跟踪程序Location Tracker

<https://github.com/cloudant-labs?page=1>

<http://www.ibm.com/developerworks/library/mo-pebble-where-app/index.html>

- 基于Watson和Cloudbant的智能分析

<https://developer.ibm.com/bluemix/2014/10/17/building-java-ee-app-ibm-bluemix-using-watson-cloudant/>

- 基于Cloudbant的财务分析

<http://www.ibm.com/developerworks/library/ba-bluemix-enterprise-scale-database-cloudant/index.html#N100EB>

- 基于Cloudbant的小游戏

<http://www.ibm.com/developerworks/cloud/library/cl-multiservicegame-app/index.html?ca=drs->

## HOTHEAD GAME的传奇故事



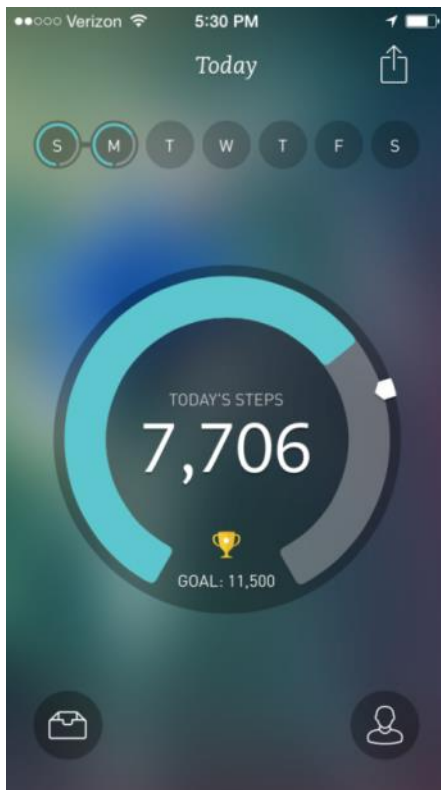
- 2012年旗舰产品Big Win Soccer上线，两天内升为iPhone体育类第一名应用.
- Hothead Games公司选择了Cloudant作为其游戏的数据层，并推出了多款Big Win体育系列游戏，陆续创造了多个体育类第一



# 案例研究：FitnessKeeper



- 健身跟踪移动应用 RunKeeper 的创建者



# Cloudbant特性

1. 开源技术的贡献——开放性
2. NoSQL JSON文档数据——灵活性
3. 弹性可扩展的数据库集群
4. 持续可用Always on
5. 极强的数据同步能力
6. 支持多种云计算模式



3. 弹性可扩展的数据库集群



4. 持续可用Always on



5. 极强的数据同步能力



6. 支持多种云计算模式





## Cloudbant相关视频

Building a Java EE webap on Bluemix Using Watson and Cloudbant

[http://v.youku.com/v\\_show/id\\_XMTI4NDE1MzIxNg==.html?f=25917691&o=0&from=y1.2-3.4.1](http://v.youku.com/v_show/id_XMTI4NDE1MzIxNg==.html?f=25917691&o=0&from=y1.2-3.4.1)

How to- Define indexes and queries

[http://v.youku.com/v\\_show/id\\_XMTI4NDE1NzczNg==.html?f=25917691&o=0&from=y1.2-3.4.2](http://v.youku.com/v_show/id_XMTI4NDE1NzczNg==.html?f=25917691&o=0&from=y1.2-3.4.2)

How to- Identify Useful HTTP API Tools

[http://v.youku.com/v\\_show/id\\_XMTI4NDE1OTQ1Ng==.html?f=25917691&o=0&from=y1.2-3.4.3](http://v.youku.com/v_show/id_XMTI4NDE1OTQ1Ng==.html?f=25917691&o=0&from=y1.2-3.4.3)

Review the HTTP API

[http://v.youku.com/v\\_show/id\\_XMTI4NDE2MDE4OA==.html?f=25917691&o=0&from=y1.2-3.4.4](http://v.youku.com/v_show/id_XMTI4NDE2MDE4OA==.html?f=25917691&o=0&from=y1.2-3.4.4)



Thank you