



# Android Sync Adapter介绍和使用

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2013.4.24

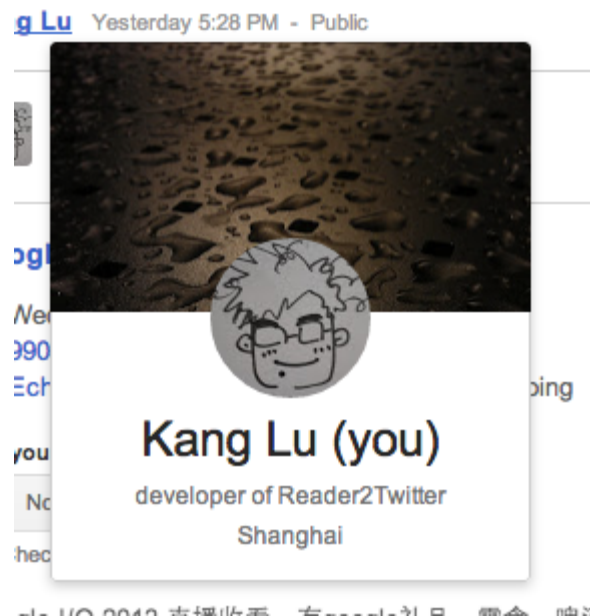


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# 内容纲要

Why Sync Adapter

How to use Sync Adapter

Resources

# Why Sync Adapter

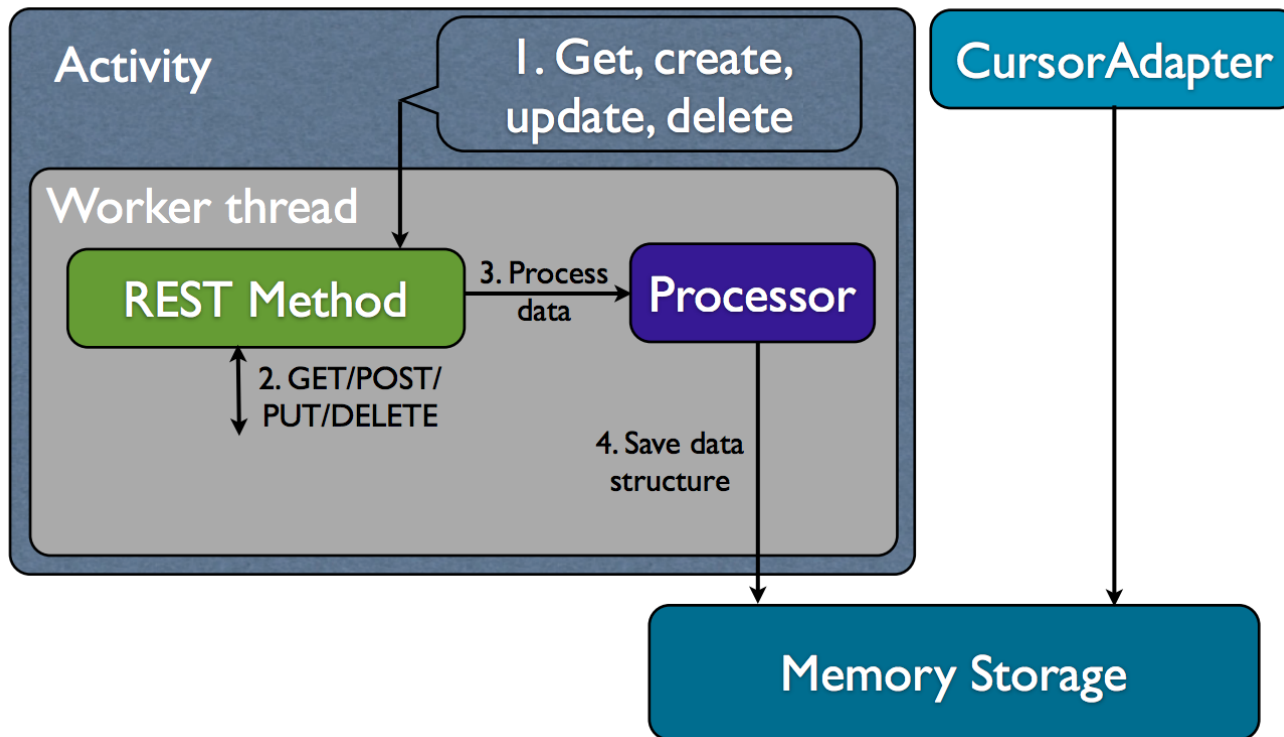
Incorrect Implementation of REST Methods

“I haven’t failed, I’ve found 10,000 ways that don’t work.”

- Thomas Alva Edison

# Why Sync Adapter

## Incorrect Implementation of REST Methods



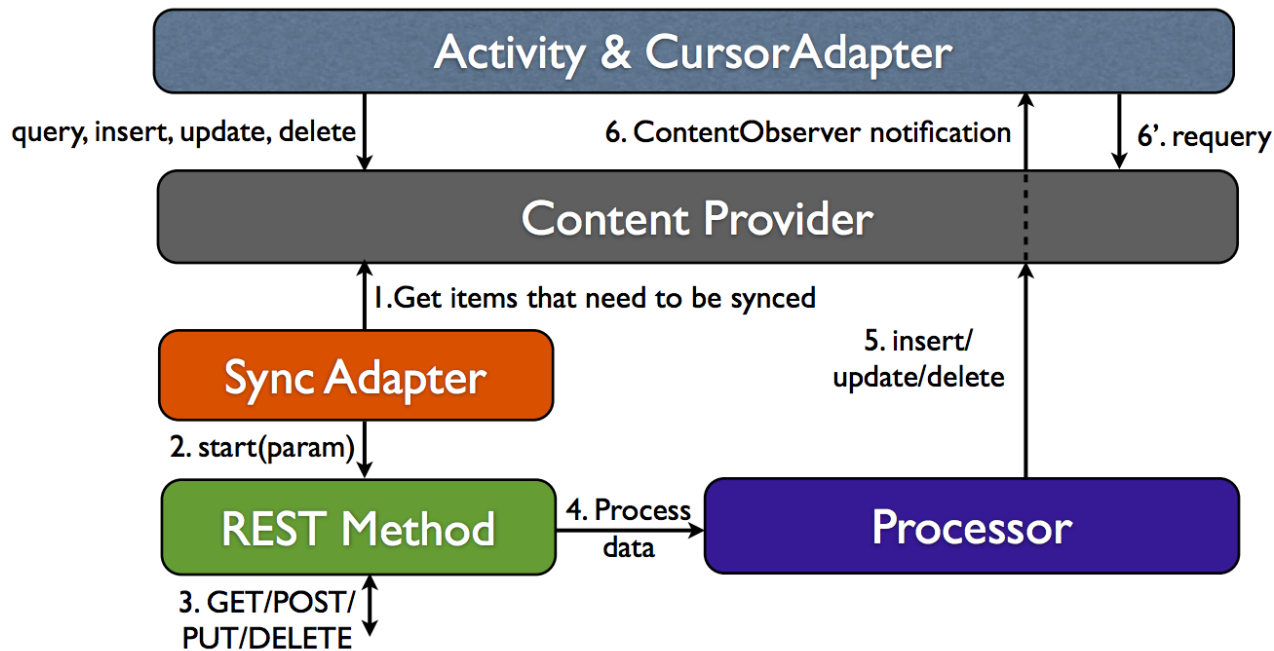
# Why Sync Adapter

What's wrong?

- The operating system may shut down the process
- Data is not persistently stored

# Why Sync Adapter

Use a sync adapter to initiate all your REST methods





# How to use Sync Adapter

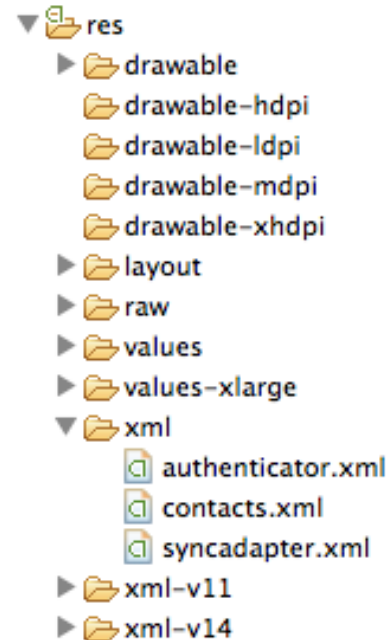
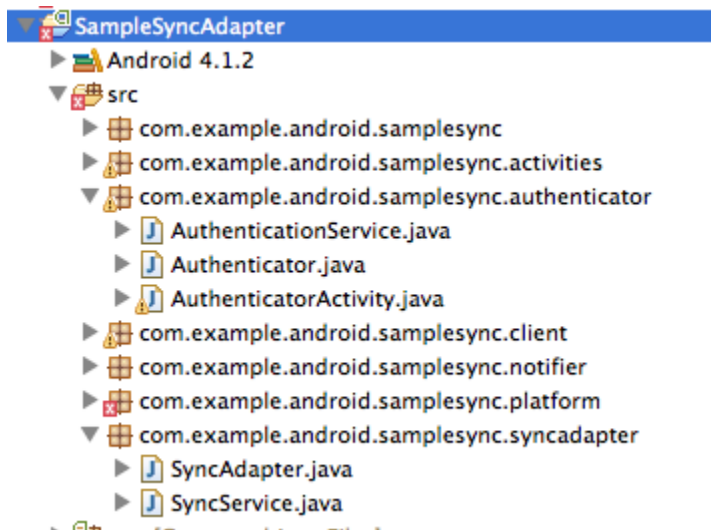
Virgil Dobjanschi



# How to use Sync Adapter

- 1.AuthenticatorService
- 2.Authenticator
- 3.AccountAuthenticatorActivity
- 4.SyncService
- 5.SyncAdapter

# How to use Sync Adapter



# How to use Sync Adapter

## AndroidManifest.xml

```
<uses-permission android:name="android.permission.INTERNET" />
<uses-permission android:name="android.permission.ACCESS_NETWORK_STATE" />
<uses-permission android:name="android.permission.READ_CONTACTS" />
<uses-permission android:name="android.permission.WRITE_CONTACTS" />
<uses-permission android:name="android.permission.GET_ACCOUNTS" />
<uses-permission android:name="android.permission.MANAGE_ACCOUNTS" />
<uses-permission android:name="android.permission.AUTHENTICATE_ACCOUNTS" />
<uses-permission android:name="android.permission.READ_SYNC_SETTINGS" />
<uses-permission android:name="android.permission.WRITE_SYNC_SETTINGS" />
```

# How to use Sync Adapter

## AndroidManifest.xml

```
<service
    android:name=".authenticator.AuthenticationService"
    android:exported="true">
    <intent-filter>
        <action
            android:name="android.accounts.AccountAuthenticator" />
        </intent-filter>
    <meta-data
        android:name="android.accounts.AccountAuthenticator"
        android:resource="@xml/authenticator" />
</service>
<service
    android:name=".syncadapter.SyncService"
    android:exported="true">
    <intent-filter>
        <action
            android:name="android.content.SyncAdapter" />
        </intent-filter>
    <meta-data
        android:name="android.content.SyncAdapter"
        android:resource="@xml/syncadapter" />
</service>
```

# How to use Sync Adapter

syncadapter.xml

```
<sync-adapter xmlns:android="http://schemas.android.com/apk/res/android"
    android:contentAuthority="com.android.contacts"
    android:accountType="com.example.android.samplesync"
    android:supportsUploading="false"
    android:userVisible="true"
/>
```

# How to use Sync Adapter

authenticator.xml

```
<account-authenticator xmlns:android="http://schemas.android.com/apk/res/android"
    android:accountType="com.example.android.samplesync"
    android:icon="@drawable/icon"
    android:smallIcon="@drawable/icon"
    android:label="@string/label"
/>
```

# How to use Sync Adapter

## SyncAdapter.java

Public Methods	
Context	<code>getContext ()</code>
final IBinder	<code>getSyncAdapterBinder ()</code>
abstract void	<code>onPerformSync (Account account, Bundle extras, String authority, ContentProviderClient provider, SyncResult syncResult)</code> Perform a sync for this account.
void	<code>onSyncCanceled (Thread thread)</code> Indicates that a sync operation has been canceled.
void	<code>onSyncCanceled ()</code> Indicates that a sync operation has been canceled.



# Resources

1.VD <https://dl.google.com/googleio/2010/android-developing-RESTful-android-apps.pdf>

## 2. Concept of Sync Provider

<https://sites.google.com/site/andsamples/concept-of-syncadapter-androidcontentabstractthreadedsyncadapter>

## 3. Android SDK Sample - Sample Sync Adapter



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