

Content Providers



What are Content Providers

Content providers are a feature of the Android platform that allow you to save data in a database, which can then be accessed by other apps on the device. A lot of Android apps use content providers to share dictionaries, calendar events and even contact information. You can get this data in your own app and you can also write an app that provides its own data with a content provider, which other apps can then access.

Basic setup instructions

Below are five steps that must be followed when creating a Content Provider.

- Create a class extending `ContentProvider`
- Define your URI address to access the content
- Create a database for `ContentProvider`
- Override the six abstract methods of `ContentProvider`
- Define provider tag in Manifest file

The six methods to override are described in more detail below.

- `query()`: Fetches data from database and returns a `Cursor` object
- `insert()`: Inserts a new row and return its content URI
- `Update()`: updates existing rows and return updated row count
- `delete()`: deletes existing rows and returns the number deleted
- `getType()`: returns Multipurpose Internet Mail Extension (MIME) of content URI
- `onCreate()`: called when content provider is being created

Demonstration

I have created a demo project to show how ContentProvider works. It consists of two apps. One will be the content provider, the other will read the data.

These apps have no link to each other, the ContentProvider does not know about the other app. It simply makes the data available to all apps and the other app accesses it via a content URI.

With that let's start the demo!

Conclusion

Thank you for your attention. I hope you enjoyed the presentation and you now know a little more about content providers.

