Android BroadastReceivers

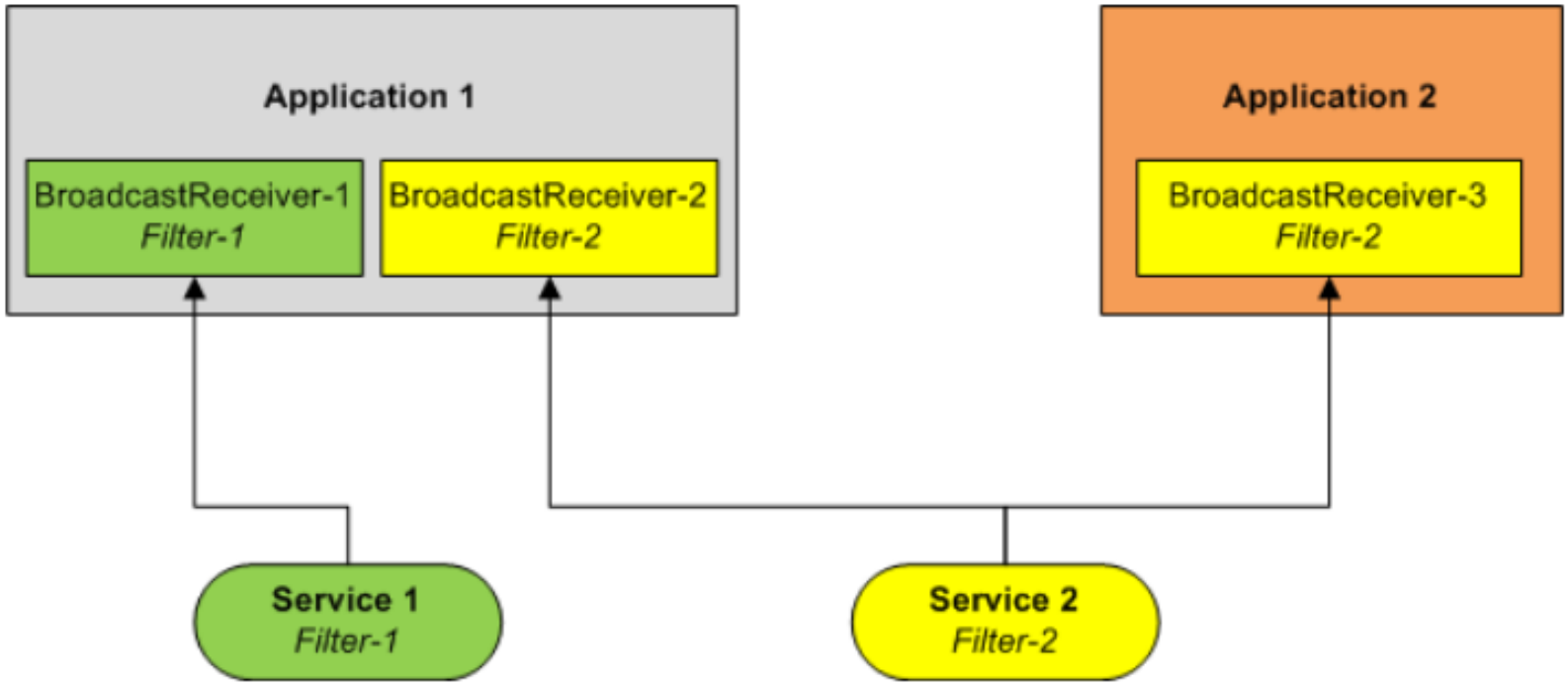
Android - BroadastReceivers

- Component that responds to system-wide broadcast announcements. •
- Example system broadcasts: screen has turned off, the battery is low, user is present using phone, or a picture was captured. •
- Applications can initiate broadcasts—e.g., to let oth er applications know that some data has been downlo aded to the device and is available for them to use. •
- Don't display a UI, but can create a status bar notifi cation to alert the user when a broadcast event occu rs..

- Usually, a broadcast receiver is just a "gate way" to other components and is intended to do a very minimal amount of work. For in stance, it might initiate a service to perfor m some work based on the event. –
  - Important: you must complete tasks in a Broadcast Receiver in<10s. If you have a task that will take longer, you must start a new thread to avoid app as sassin OS.

BroadastReceivers Life Cycle

The system delivers a broadcast Intent to all interested broadcast receivers, which handle the Intent *sequentially*.



BroadastReceivers Life Cycle

A broadcast receiver has a single callback method:

```
void onReceive(ContextcurContext, IntentbroadcastMsg)
```

1. When a broadcast message arrives for the receiver, Android calls its onReceive() method and passes it the Intent object containing the message.
2. The broadcast receiver is considered to be active only while it is executing this method.
3. When onReceive() returns, it is inactive.

BroadastReceivers Via xml

The manifest of applications using Android Services must include:

1. A **<service>** entry for each service used in the application.
2. If the application defines a **BroadcastReceiver** as an independent class, it must include a **<receiver>** clause identifying the component. In addition an **<intent-filter>** entry is needed to declare the actual filter the service and the receiver use.