



Using and Managing Dialogs

Rather than creating new instances of a Dialog each time it's required, Android provides the `OnCreateDialog` and `onPrepareDialog` event handlers within the Activity class to persist and manage Dialog-box instances.

By overriding the `onCreateDialog` class, you can specify Dialogs that will be created on demand when `showDialog` is used to display a specific Dialog. As shown in this code snippet, the overridden method includes a switch statement that lets you determine which Dialog is required:

```
static final private int TIME_DIALOG = 1;
@Override
public Dialog onCreateDialog(int id) {
    switch(id) {
        case (TIME_DIALOG) :
            AlertDialog.Builder timeDialog = new AlertDialog.Builder(this);
            timeDialog.setTitle("The Current Time Is...");
            timeDialog.setMessage("Now");
            return timeDialog.create();
        }
    return null;
}
```

After the initial creation, each time a `showDialog` is called, it will trigger the `onPrepareDialog` handler. By overriding this method, you can modify a Dialog immediately before it is displayed. This lets you contextualize any of the display values, as shown in the following snippet, which assigns the current time to the Dialog created above:

```
@Override
public void onPrepareDialog(int id, Dialog dialog) {
    switch(id) {
        case (TIME_DIALOG) :
            SimpleDateFormat sdf = new SimpleDateFormat("HH:mm:ss");
            Date currentTime;
            currentTime = new Date(java.lang.System.currentTimeMillis());
            String dateString = sdf.format(currentTime);
            AlertDialog timeDialog = (AlertDialog)dialog;
            timeDialog.setMessage(dateString);
            break;
        }
}
```

Once you've overridden these methods, you can display the Dialogs by calling `showDialog`, as shown below. Pass in the identifier for the Dialog you wish to display, and Android will create (if necessary) and prepare the Dialog before displaying it:

```
showDialog(TIME_DIALOG);
```

As well as improving resource use, this technique lets your Activity handle the persistence of state information within Dialogs. Any selection or data input (such as item selection and text entry) will be persisted between displays of each Dialog instance.