# <compatible-screens>

SYNTAX:

```
<compatible-screens>
    <screen android:screenSize=["small" | "normal" | "large" | "xlarge"]
            android:screenDensity=["ldpi" | "mdpi" | "hdpi" | "xhdpi"
                                 | "280" | "360" | "420" | "480" | "560" ] />
    ...
</compatible-screens>
```

CONTAINED IN:

<manifest>

DESCRIPTION:

Specifies each screen configuration with which the application is compatible. Only one instance of the `<compatible-screens>` element is allowed in the manifest, but it can contain multiple `<screen>` elements. Each `<screen>` element specifies a specific screen size-density combination with which the application is compatible.

The Android system *does not* read the `<compatible-screens>` manifest element (neither at install-time nor at runtime). This element is informational only and may be used by external services (such as Google Play) to better understand the application's compatibility with specific screen configurations and enable filtering for users. Any screen configuration that is *not* declared in this element is a screen with which the application is *not* compatible. Thus, external services (such as Google Play) should not provide the application to devices with such screens.

> **Caution:** Normally, **you should not use this manifest element**. Using this element can dramatically reduce the potential user base for your application, by not allowing users to install your application if they have a device with a screen configuration that you have not listed. You should use it only as a last resort, when the application absolutely does not work with specific screen configurations. Instead of using this element, you should follow the guide to Supporting Multiple Screens to provide scalable support for multiple screens using alternative layouts and bitmaps for different screen sizes and densities.

If you want to set only a minimum screen *size* for your your application, then you should use the `<supports-screens>` element. For example, if you want your application to be available only for *large* and *xlarge* screen devices, the `<supports-screens>` element allows you to declare that your application does not support *small* and *normal* screen sizes. External services (such as Google Play) will filter your application accordingly. You can also use the `<supports-screens>` element to declare whether the system should resize your application for different screen sizes.

Also see the Filters on Google Play document for more information about how Google Play filters applications using this and other manifest elements.
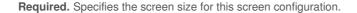
CHILD ELEMENTS:

`<screen>`

Specifies a single screen configuration with which the application is compatible.

At least one instance of this element must be placed inside the `<compatible-screens>` element. This element *must include both* the `android:screenSize` and `android:screenDensity` attributes (if you do not declare both attributes, then the element is ignored).

attributes:

`android:screenSize`

**Required.** Specifies the screen size for this screen configuration.

Accepted values:

- `small`

- `normal`

- `large`

- `xlarge`

For information about the different screen sizes, see Supporting Multiple Screens.

`android:screenDensity`

**Required.** Specifies the screen density for this screen configuration.

Accepted values:

- `"ldpi"` (approximately 120 dpi)

- `"mdpi"` (approximately 160 dpi)

- `"hdpi"` (approximately 240 dpi)

- `"xhdpi"` (approximately 320 dpi)

- `"280"`

- `"360"`

- `"420"`

- `"480"`

- `"560"`

For information about the different screen densities, see Supporting Multiple Screens.

EXAMPLE

If your application is compatible with only small and normal screens, regardless of screen density, then you must specify twelve different `<screen>` elements, because each screen size has six different density configurations. You must declare each one of these; any combination of size and density that you do *not* specify is considered a screen configuration with which your application is *not* compatible. Here's what the manifest entry looks like if your application is compatible with only small and normal screens:

```xml
<manifest ... >
    ...
    <compatible-screens>
        <!-- all small size screens -->
        <screen android:screenSize="small" android:screenDensity="ldpi" />
        <screen android:screenSize="small" android:screenDensity="mdpi" />
        <screen android:screenSize="small" android:screenDensity="hdpi" />
        <screen android:screenSize="small" android:screenDensity="xhdpi" />
        <screen android:screenSize="small" android:screenDensity="xxhdpi" />
        <screen android:screenSize="small" android:screenDensity="xxxhdpi" />
        <!-- all normal size screens -->
        <screen android:screenSize="normal" android:screenDensity="ldpi" />
        <screen android:screenSize="normal" android:screenDensity="mdpi" />
        <screen android:screenSize="normal" android:screenDensity="hdpi" />
        <screen android:screenSize="normal" android:screenDensity="xhdpi" />
        <screen android:screenSize="normal" android:screenDensity="xxhdpi" />
        <screen android:screenSize="normal" android:screenDensity="xxxhdpi" />
    </compatible-screens>
    <application ... >
        ...
    <application>
</manifest>
```

INTRODUCED IN:

API Level 9

SEE ALSO:

Supporting Multiple Screens

Filters on Google Play