



<uses-configuration>

SYNTAX:

```
<uses-configuration
  android:reqFiveWayNav=["true" | "false"]
  android:reqHardKeyboard=["true" | "false"]
  android:reqKeyboardType=["undefined" | "nokeys" | "qwerty" | "twelvekey"]
  android:reqNavigation=["undefined" | "nonav" | "dpad" | "trackball" | "wheel"]
  android:reqTouchScreen=["undefined" | "notouch" | "stylus" | "finger"] />
```

CONTAINED IN:

<manifest>

DESCRIPTION:

Indicates what hardware and software features the application requires. For example, an application might specify that it requires a physical keyboard or a particular navigation device, like a trackball. The specification is used to avoid installing the application on devices where it will not work.

Note: Most apps should not use this manifest tag. You should *always* support input with a directional pad (d-pad) in order to assist sight-impaired users and support devices that provide d-pad input in addition to or instead of touch. For information about how to support d-pad input in your app, read [Enabling Focus Navigation](#). If your app absolutely cannot function without a touchscreen, then instead use the <uses-feature> tag to declare the required touchscreen type, ranging from "android.hardware.faketouch" for basic touch-style events to more advanced touch types such as "android.hardware.touchscreen.multitouch.jazzhand" for distinct input from multiple fingers.

ATTRIBUTES:

android:reqFiveWayNav

Whether or not the application requires a five-way navigation control — "true" if it does, and "false" if not. A five-way control is one that can move the selection up, down, right, or left, and also provides a way of invoking the current selection. It could be a D-pad (directional pad), trackball, or other device.

If an application requires a directional control, but not a control of a particular type, it can set this attribute to "true" and ignore the [reqNavigation](#) attribute. However, if it requires a particular type of directional control, it can ignore this attribute and set [reqNavigation](#) instead.

android:reqHardKeyboard

Whether or not the application requires a hardware keyboard — "true" if it does, and "false" if not.

android:reqKeyboardType

The type of keyboard the application requires, if any at all. This attribute does not distinguish between hardware and software keyboards. If a hardware keyboard of a certain type is required, specify the type here and also set the [reqHardKeyboard](#) attribute to "true".

The value must be one of the following strings:

Value	Description
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"undefined"	The application does not require a keyboard. (A keyboard requirement is not defined.) This is the default value.
"nokeys"	The application does not require a keyboard.
"qwerty"	The application requires a standard QWERTY keyboard.
"twelvekey"	The application requires a twelve-key keypad, like those on most phones — with keys for the digits from 0 through 9 plus star (*) and pound (#) keys.

android:reqNavigation

The navigation device required by the application, if any. The value must be one of the following strings:

Value	Description
"undefined"	The application does not require any type of navigation control. (The navigation requirement is not defined.) This is the default value.
"nonav"	The application does not require a navigation control.
"dpad"	The application requires a D-pad (directional pad) for navigation.
"trackball"	The application requires a trackball for navigation.
"wheel"	The application requires a navigation wheel.

If an application requires a navigational control, but the exact type of control doesn't matter, it can set the [reqFiveWayNav](#) attribute to "true" rather than set this one.

android:reqTouchScreen

The type of touch screen the application requires, if any at all. The value must be one of the following strings:

Value	Description
"undefined"	The application doesn't require a touch screen. (The touch screen requirement is undefined.) This is the default value.
"notouch"	The application doesn't require a touch screen.
"stylus"	The application requires a touch screen that's operated with a stylus.
"finger"	<div> <p>The application requires a touch screen that can be operated with a finger.</p> <p>Note: If some type of touch input is required for your app, you should instead use the <code><uses-feature></code> tag to declare the required touchscreen type, beginning with "android.hardware.faketouch" for basic touch-style events.</p> </div>

INTRODUCED IN:

API Level 3

SEE ALSO:

- [configChanges](#) attribute of the `<activity>` element
- [ConfigurationInfo](#)