

Location Sensor

Non-Visible component

Category	Requires	Version
Sensors	API 19, Android 4.4 - 4.4.4 KitKat	3

Overview

Non-visible component providing location information, including longitude, latitude, altitude (if supported by the device), speed (if supported by the device), and address. This can also perform "geocoding", converting a given address (not necessarily the current one) to a latitude (with the `LatitudeFromAddress` method) and a longitude (with the `LongitudeFromAddress` method).

In order to function, the component must have its `Enabled` property set to `True`, and the device must have location sensing enabled through wireless networks or GPS satellites (if outdoors).

Location information might not be immediately available when an app starts. You'll have to wait a short time for a location provider to be found and used, or wait for the `OnLocationChanged` event

Permissions

- `android.permission.ACCESS_FINE_LOCATION`
- `android.permission.ACCESS_COARSE_LOCATION`
- `android.permission.ACCESS_MOCK_LOCATION`
- `android.permission.ACCESS_LOCATION_EXTRA_COMMANDS`

Events

Location Changed

Indicates that a new location has been detected.

Params	
latitude	Number
longitude	Number
altitude	Number
speed	Number

Status Changed

Indicates that the status of the location provider service has changed, such as when a provider is lost or a new provider starts being used.

Params	
provider	Text
status	Text

Methods

Latitude From Address

Returns: *Number*

Derives latitude of given address

Params	
location Name	Text

Longitude From Address

Returns: *Number*

Derives longitude of given address

Params	
location Name	Text

Properties

Accuracy

Number — Read - **Blocks**

The most recent measure of accuracy, in meters. If no value is available, 0 will be returned.

Altitude

Number — Read - **Blocks**

The most recently available altitude value, in meters. If no value is available, 0 will be returned.

Available Providers

List — Read - **Blocks**

Current Address

Text — Read - Blocks

Provides a textual representation of the current address or "No address available".

Distance Interval

Number Default: 5 — Read Write - Designer Blocks

Determines the minimum distance interval, in meters, that the sensor will try to use for sending out location updates. For example, if this is set to 5, then the sensor will fire a LocationChanged event only after 5 meters have been traversed. However, the sensor does not guarantee that an update will be received at exactly the distance interval. It may take more than 5 meters to fire an event, for instance.

Enabled

Boolean Default: True — Read Write - Designer Blocks

Indicates whether the user has specified that the sensor should listen for location changes and raise the corresponding events.

Has Accuracy

Boolean — Read - Blocks

Indicates whether information about location accuracy is available.

Has Altitude

Boolean — Read - Blocks

Indicates whether altitude information is available.

Has Longitude Latitude

Boolean — Read - Blocks

Indicates whether longitude and latitude information is available. (It is always the case that either both or neither are.)

Latitude

Number — Read - Blocks

The most recently available latitude value. If no value is available, 0 will be returned.

Longitude

Number — Read - Blocks

The most recent available longitude value. If no value is available, 0 will be returned.

Provider Locked

Boolean — Read Write - Blocks

Indicates whether the sensor should allow the developer to manually change the provider (GPS, GSM, Wifi, etc.) from which location updates are received.

Provider Name

Text — Read Write - Blocks

Indicates the source of the location information. If there is no provider, the string "NO PROVIDER" is returned. This is useful primarily for debugging.

Time Interval

Number Default: 60000 — Read Write - Designer Blocks

Determines the minimum time interval, in milliseconds, that the sensor will try to use for sending out location updates. However, location updates will only be received when the location of the phone actually changes, and use of the specified time interval is not guaranteed. For example, if 1000 is used as the time interval, location updates will never be fired sooner than 1000ms, but they may be fired anytime after.

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