KBSW180106 SLAMWARE SDK API (Android)

AndroidSLAMWARE SDKAPI

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    - ISweepMoveAction
    - ISweepMoveAction IAction
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    - PointMap
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        - ConnectionFailException
        - ConnectionLostException
        - ConnectionTimeOutException
        - InvalidArgumentException
        - OperationFailException
        - OutOfResourceException
        - ParseInvalidException
        - PathFindFailException
        - RequestFailException
        - RequestTimeOutException
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        - UnsupportedCommandException
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    - com.slamtec.slamware.sdp
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        - CompositeMapHelper

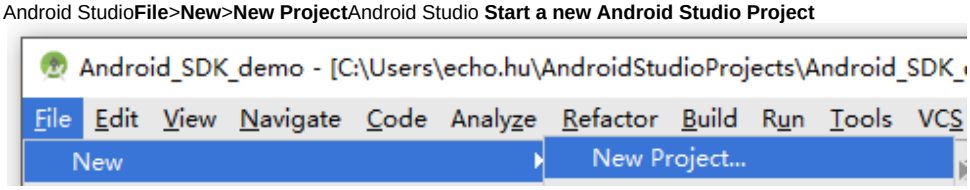
Android Slamware SDK

- Android 4.3Android 4.3

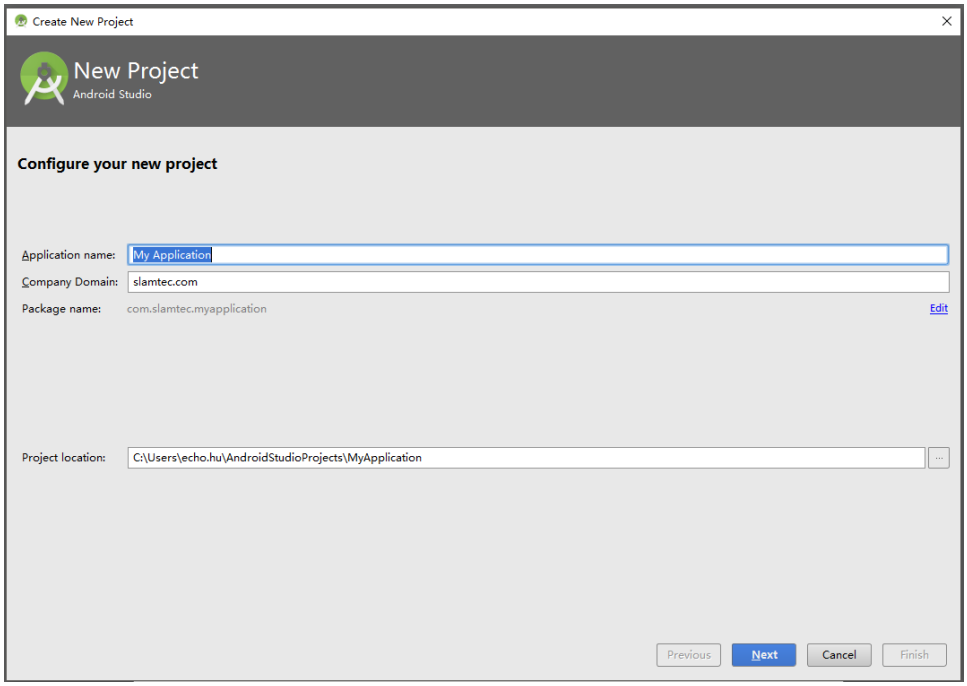
SDK

- Slamware Android SDkslamtec_agent.jararmeabiSDKAndroid

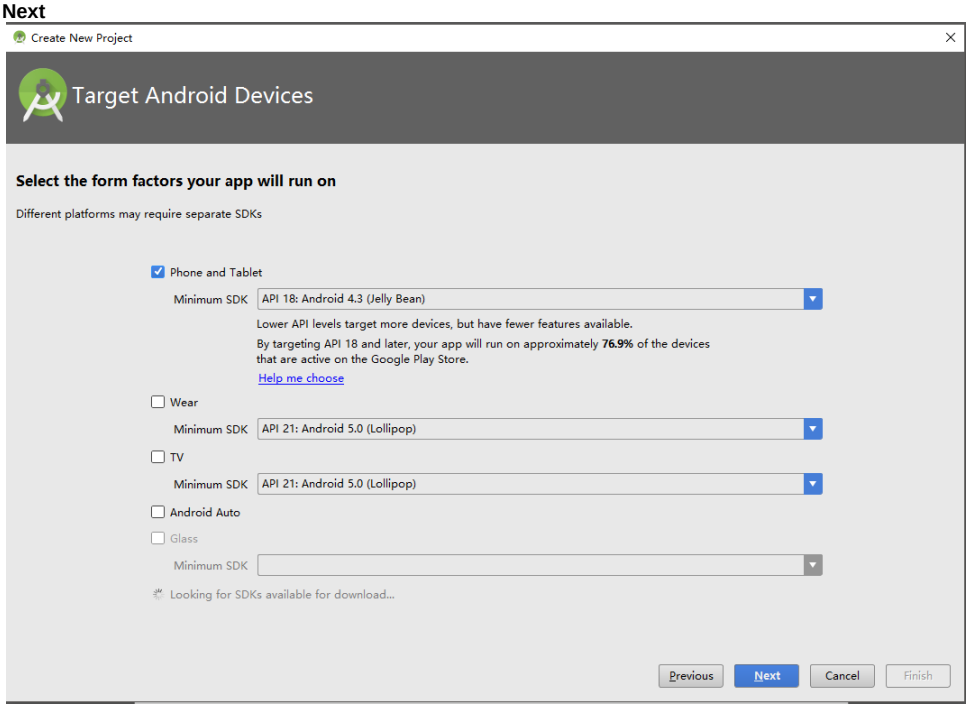
1. Android Studio**File**>**New**>**New Project**Android Studio **Start a new Android Studio Project**



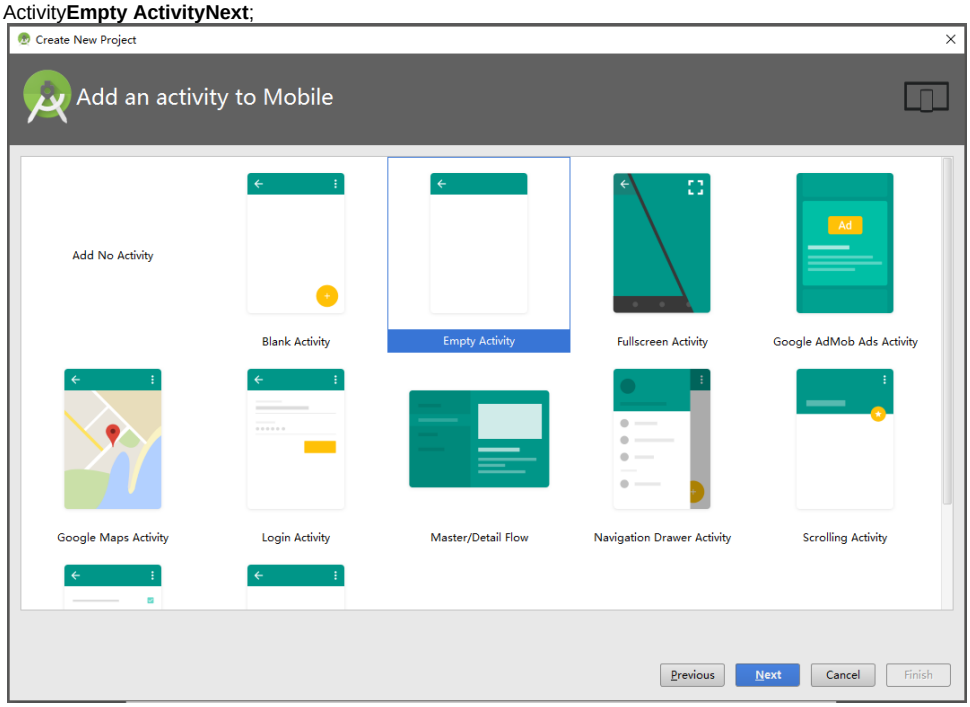
2.


Create New Project
New Project
Android Studio
Configure your new project
Application name:
My Application
Company Domain:
slamtec.com
Package name:
com.slamtec.myapplication
Edit
Project location:
C:\Users\echo.hu\AndroidStudioProjects\MyApplication
Previous
Next
Cancel
Finish

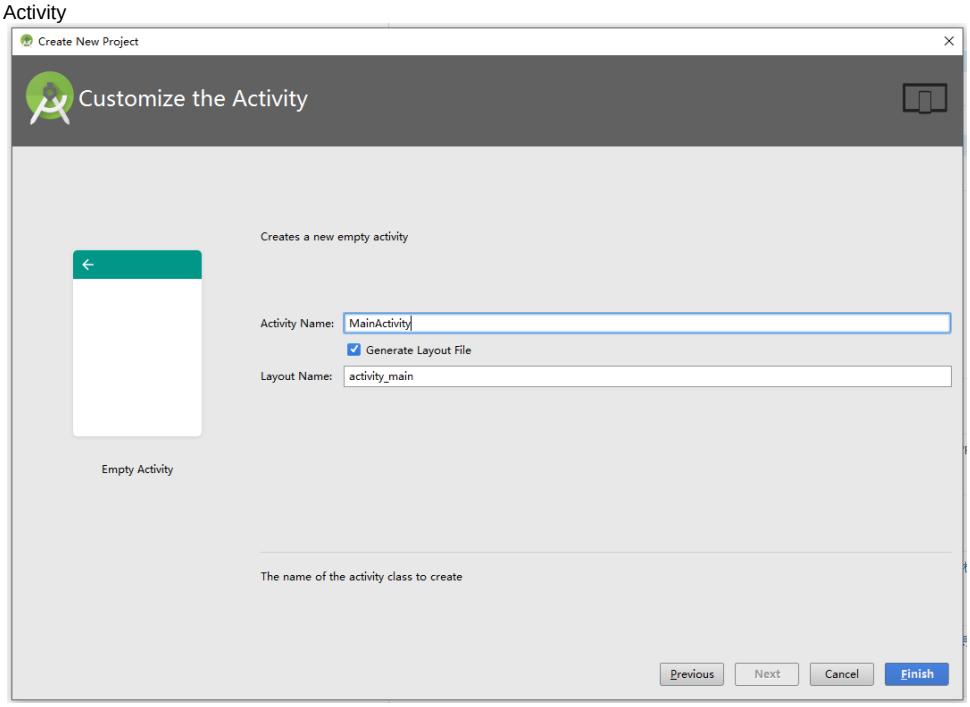
3. **Next**


Create New Project
Target Android Devices
Select the form factors your app will run on
Different platforms may require separate SDKs
Phone and Tablet
Minimum SDK
API 18: Android 4.3 (Jelly Bean)
Lower API levels target more devices, but have fewer features available.
By targeting API 18 and later, your app will run on approximately 76.9% of the devices that are active on the Google Play Store.
Help me choose
Wear
Minimum SDK
API 21: Android 5.0 (Lollipop)
TV
Minimum SDK
API 21: Android 5.0 (Lollipop)
Android Auto
Glass
Minimum SDK
Looking for SDKs available for download...
Previous
Next
Cancel
Finish

4. Activity**Empty Activity****Next**;

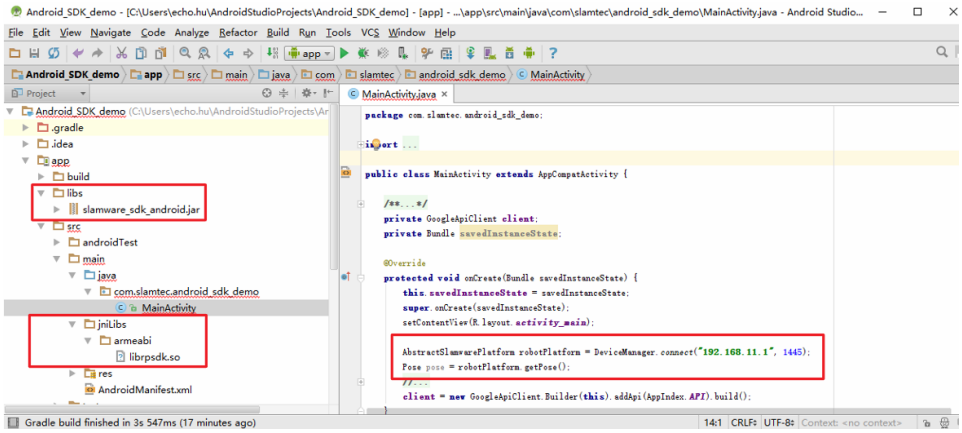


5. Activity



Hello World

1. SDkslamtec_agent.jararmeabi



2. SDP

1. ARM×86
2.

com.slamtec.slamware	slamware
com.slamtec.slamware.action	
com.slamtec.slamware.discovery	
com.slamtec.slamware.FirmwareUpdate	
com.slamtec.slamware.geometry	geometry
com.slamtec.slamware.robot	robot
com.slamtec.slamware.exceptions	
com.slamtec.slamware.message	message
com.slamtec.slamware.sdp	SDP

AbstractDiscover	, abstract discover interface
AbstractDiscover.BleConfigureListener	, BleConfigureListener
AbstractDiscover.DiscoverStatus	DiscoverStatus
AbstractDiscover.DiscoveryListener	DiscoveryListener

AbstractSlamwarePlatform	SLAMWARE
ActionStatus	
BleDevice	BleDevice
CompositeMapHelper	
Device	
DeviceManager	
DepthCameraFrame	
DiscoveryMode	
FirmwareUpdateInfo	
FirmwareUpdateProgress	
HealthInfo	
HealthInfo.BaseError	
IAction	
IMoveAction	
ImpactSensorInfo	
ImpactSensorType	
ImpactSensorValue	
ISweepMoveAction	
LaserPoint	
LaserScan	
Line	
Location	3D
Map(Robot)	
Map(SDP)	SDP
MapKind	
MapLayer	
MapType	
MdnsDevice	MdnsDevice
MoveDirection	

NetworkMode	
Path	
PointF	2D
PointMap	
Pose	
PoseMap	PoseMap
RecoverLocalizationMovement	
RecoverLocalizationOptions	
RestartMode	
Rotation	
SensorType	
Size	Size
SlamwareCorePlatform	Abstract Slamware Platform
SlamwareSdpPlatform	SDP
SlamcoreShutdownParam	
SleepMode	
SystemParameters	

com.slamtec.slamware

AbstractSlamwarePlatform

Abstract Slamware Platform SLAMWARE

SlamwareCorePlatform

`AbstractSlamwarePlatform()`

AbstractSlamwarePlatformDeviceManagerAbstractSlamwarePlatform

`addWall(Line wall)`

SLAMWARE

wall	

`addWalls(java.util.List<Line> walls)`

SLAMWARE

walls	

`clearMap()`

`clearWallById(int id)`

(id idAbstractSlamwarePlatform.getLines(ArtifactUsage var1)line id)

id	id

`clearWalls()`

Slamware

`configureNetwork(int mode, java.util.HashMap<java.lang.String,java.lang.String> options)`

Slamware Coreboolean

mode	
options	

AP	Slamware CoreWiFiWifiWiFiDHCPIP192.168.11.1Slamware Core
Station	Slamware CoreWiFiWiFiSlamware CoreHigh Speed BusIP
Disable	Slamware CoreIPDNSAPI

- Slamware CoreAP

  `Platform.configureNetwork(NetworkMode.NetworkModeAp, new HashMap<String, String>());`

- Slamware CoreSlamtecAP

  ```
  HashMap<String, String> options = newHashMap<String, String>(); options.put("ssid", "Slamtec"); options.
  put("password", "Password"); platform.configureNetwork(NetworkMode.NetworkModeStation,options);
  ```

- Slamware CoreIP192.168.12.13192.168.12.1DNS114.114.114.114

  ```
  HashMap<String, String> options = newHashMap<String, String>(); options.put("ip", "192.168.12.13");
  options.put("mask": "255.255.255.0"); options.put("gateway": "192.168.12.1"); options.put("dns":
  "114.114.114.114"); platform.configureNetwork(NetworkMode.NetworkModeDisabled, options);
  ```

```
disconnect()
```

```
getAvailableMaps()
```

SLAMWARE

```
getBatteryIsCharging()
```

```
getBatteryPercentage()
```

0~100

```
getCurrentAction()
```

```
getDCIsConnected()
```

```
getDeviceId()
```

UUIDstring

```
getFirmwareUpdateInfo()
```

FirmwareUpdateInfo

```
getFirmwareUpdateProgress()
```

FirmwareUpdateProgress

```
getHardwareVersion()
```

string

```
getKnownArea(MapType type)
```

type –

```
getKnownArea(MapType type, MapKind kind)
```

type	
kind	

```
getLaserScan()
```

LASERLASER

```
getLocalizationQuality()
```

```
getLocation()
```

```
getManufacturerId()
```

idint

```
getManuFacturerName()
```

string

```
getMap(MapType type, MapKind kind, android.graphics.RectF area)
```

SLAMWARE

type	
kind	
area	

`getMapLocalization()`

SLAMWARESLAMWARE

`getMapUpdate()`

SLAMWARESLAMWARE

`getModelId()`

idint

`getModelName()`

string

`getNetworkStatus()`

string

`getPose()`

`getRobotHealth()`

`getSDKVersion()`

SLAMWARE SDKSLAMWARESDK

`getSlamwareVersion()`

SLAMWARESLAMWARE

`getSoftwareVersion()`

`getSystemParameter(java.lang.String param)`

param	

`getWalls()`

`goHome()`

`moveBy(MoveDirection direction)`

MoveAction.cancel()moveBy

direction	

```
moveTo(java.util.List<Location> locations)
```

locations	

```
moveTo(java.util.List<Location> locations, boolean appending)
```

locations	
appending	SLAMWARE

```
moveTo(java.util.List<Location> locations, boolean appending, boolean isMilestone)
```

locations	
appending	SLAMWARE
isMilestone	SLAMWAREtruefalse

```
moveTo(Location location)
```

location	

```
moveTo(Location location, boolean appending)
```

location	
appending	SLAMWARE

```
moveTo(Location location, boolean appending, boolean isMilestone)
```

location	
appending	SLAMWARE
isMilestone	SLAMWAREtruefalse

```
restartModule()
```

SLAMWARE

```
restartModule(RestartMode mode)
```

SLAMWARE

mode	SLAMWARE

```
rotate(Rotation rotation)
```

rotation	

```
rotateTo(Rotation orientation)
```

orientation	

```
searchPath(Location location)
```

location	

```
setMap(Map map)
```

SLAMWAREsetPosemoveto

map	

```
setMap(Map map, MapType type)
```

SLAMWAREsetPose

map	
type	

```
setMap(Map map, MapType type, MapKind kind)
```

SLAMWAREsetPose

map	
type	
kind	

`setMapLocalization(boolean v)`

v	SLAMWARE

`setMapUpdate(boolean v)`

v	SLAMWARE

`setPose(Pose pose)`

pose	

`setSystemParameter(java.lang.String param, java.lang.String value)`

param	
value	

`startFirmwareUpdate()`

boolean

`startSweep()`

SLAMWARE Core

`sweepSpot(Location location)`

SLAMWARE Core

ArtifactUsage

`ArtifactUsageVirutalWall`

`ArtifactUsageVirtualTrack`

`List<Line> getLines(ArtifactUsage usage)`

line

usage	

`boolean addLine(ArtifactUsage usage, Line line)`

`boolean addLines(ArtifactUsage usage, List<Line> lines)`

idArraylist<Line> lines = AbstractSlamwarePlatform.getLines(ArtifactUsage usage);

`boolean removeLineById(ArtifactUsage usage, int id)`

`boolean clearLines(ArtifactUsage usage)`

`PowerStatus getPowerStatus()`

`void wakeUp()`

`IMoveAction recoverLocalization(RectF area)`

area20*20

`PointPDF getAuxLocation()`

getAuxLocation()recoverLocalization

```
auto locationPdf = platform. getAuxLocation();
 Location location = locationPdf.location;
 float distant = locationPdf.circular_error_probability;
  area((location.x() - distant), (location.y() - distant), 2*distant, 2*distant);RectangleF
  auto act = platform. recoverLocalization(area);
  act.waitUntilDone();
```

`CompositeMap getCompositeMap()`

`void setCompositeMap(CompositeMap map, Pose pose)`

`Pose getHomePose()`

(0,0)

List<ImpactSensorInfo> getSensors()

list

HashMap<Integer, ImpactSensorValue> getSensorValues()

hashMap

ImpactSensorValue getSensorValue(Integer var1)

key

`IMoveAction moveTo(Location location, MoveOption option, float yaw)`

location moveOption

appending	boolean	SLAMWARE
milestone	boolean	SLAMWAREtruefalse
noSmooth	boolean	
keyPoints	boolean	
precise	boolean	
withYaw	boolean	
yaw	float	
returnUnreachableDirectly	boolean	true
trackWithOA	boolean	trackWithOA true,.(,trackWithOA true,)
speedRatio	Double	,01,(moveBy

IMoveAction moveTo(java.util.List locations, MoveOption option, float yaw)

publishDepthCamFrame(int sensorId,DepthCameraFrame depthCameraFrame)

sensorId sensorId, depthCameraFrame

com. slamtec slamware action

IAction

IMoveAction, ISweepMoveAction

`cancel()`

`getActionName()`

string

`getProgress()`

0~1double

getStatus()

waitUntilDone()

`boolean isEmpty()`

`int getActionId()`

id

`String getReason()`

actionnull0“failed”action, “aborted”action(cancelactionaction)
moveToaction“unreachable”()

IMoveAction IAction

IAction

IAction

ISweepMoveAction

`getRemainingMilestones()`

`getRemainingPath()`

com.slamtec.slamware.action.IAction

cancel, getActionName, getProgress, getStatus, waitUntilDone

ISweepMoveAction

`pause()`

`resume()`

ISweepMoveAction IAction

IMoveAction

IAction, IMoveAction

com.slamtec.slamware.action.IMoveAction

getRemainingMilestones, getRemainingPath

com.slamtec.slamware.action.IAction

cancel, getActionName, getProgress, getStatus, waitUntilDone

path

`Path()`

Path

`Path(Path path)`

pathPath

`Path(java.util.Vector<Location> points)`

pointsPath

`getPoints()`

`setPoints(java.util.Vector<Location> points)`

ActionStatus

public enum ActionStatus, java.lang.Enum<ActionStatus>,

`WAITING_FOR_START`

`RUNNING`

`FINISHED`

`PAUSED`

`STOPPED`

`ERROR`

MoveDirection

public enum MoveDirection, java.lang.Enum<MoveDirection>,

`FORWARD`

`BACKWARD`

`TURN_RIGHT`

`TURN_LEFT`

com.slamtec.slamware.discovery

AbstractDiscover.BleConfigureListener

AbstractDiscover

`onConfigureSuccess()`

`onConfigureFailure(java.lang.String error)`

String error

`BLE_CONFIG_ERROR_BLE_DISCONNECTED`

`BLE_CONFIG_ERROR_WRITTING_FAIL`

`BLE_CONFIG_ERROR_SSID_REQUIRED`

SSID

`BLE_CONFIG_ERROR_UNABLE_CONNECT_WIFI`

WiFi

`BLE_CONFIG_ERROR_INVALID_PWD`

AbstractDiscover

public abstract class AbstractDiscover, abstract discover

DeviceManager

AbstractDiscover.BleConfigureListener

AbstractDiscover.DiscoverStatus

AbstractDiscover.DiscoveryListener

`AbstractDiscover()`

AbstractDiscover

`getMode()`

`setListener(AbstractDiscover.DiscoveryListener listener)`

listener

`getStatus(DiscoveryMode mode)`

`start(DiscoveryMode mode)`

`stop(DiscoveryMode mode)`

AbstractDiscover.DiscoveryListener

AbstractDiscover

`DiscoveryListener()`

DiscoveryListener

`onStartDiscovery(AbstractDiscover discover)`

Discovery

`onStopDiscovery(AbstractDiscover discover)`

Discovey

`onDiscoveryError(AbstractDiscover discover, java.lang.String error)`

Discovery

`onDeviceFound(AbstractDiscover discover, Device device)`

BleDevice

Device

`BleDevice(BluetoothDevice device)`

BleDevice

`getDevice()`

device

`canBeFoundWith(DiscoveryMode mode)`

discovery

Device canBeFoundWith

Device

public abstract class Device,

BleDevice, MdnsDevice

`Device()`

Device

`getManufactureId()`

Manufacture id

`setManufactureId(int manufactureId)`

manufacture id

`getModelId()`

mode id

`setModelId(int modelId)`

mode id

`getManufactureName()`

manufacture name

`setManufactureName(java.lang.String manufactureName)`

manufacture name

`getModelName()`

mode name

`setModelName(java.lang.String modelName)`

mode name

`getHardwareVersion()`

hard ware version

`setHardwareVersion(int hardwareVersion)`

hardware version

`getSoftwareVersion()`

software version

`setSoftwareVersion(int softwareVersion)`

software version

`getSerialNumber()`

serial number

`setSerialNumber(java.lang.String serialNumber)`

serial number

`canBeFoundWith(DiscoveryMode mode)`

discovery

`getDeviceId()`

device id

`setDeviceId(java.util.UUID deviceId)`

device id

`getDeviceName()`

device name

`setDeviceName(java.lang.String deviceName)`

device name

DeviceManager

AbstractDiscover

The manager to manage devices

Nested classes/interfaces inherited from class

com.slamtec.slamware.discovery.AbstractDiscover:

AbstractDiscover.BleConfigureListener,

AbstractDiscover.DiscoverStatus,

AbstractDiscover.DiscoveryListener

```
DeviceManager(Context context)
```

DeivceManager

```
connect(java.lang.String host, int port)
```

SLAMWARE CoreAndroidSLAMWARE Core

host	192.168.11.1
port	

```
connect(Device device)
```

SLAMWARE

device	

```
pair(Device device,java.lang.String wifiSSID, java.lang.String wifiPassword, AbstractDiscover.
BleConfigureListener listener)
```

SSIDSLAMWARE

device	
wifiSSID	WiFiSSID
sifiPassword	WiFi
listener	

```
setListener(AbstractDiscover.DiscoveryListener listener)
```

AbstractDiscover setListener

```
getStatus(DiscoveryMode mode)
```

AbstractDiscovergetStatus

```
start(DiscoveryMode mode)
```

AbstractDiscoverstart

```
stop(DiscoveryMode mode)
```

AbstractDiscoverstop

```
getMode()
```

AbstractDiscovergetMode

MdnsDevice

Device

```
MdnsDevice(java.lang.String addr, int port)
```

MdnsDevice

`getAddr()`

`getPort()`

`canBeFoundWith(DiscoveryMode mode)`

DevicecanBeFoundWith

AbstractDiscover.DiscoverStatus

AbstractDiscover

`STOPPED`

`WORKING`

`ERROR`

DiscoveryMode

`BLE`

`BLE`

`MDNS`

mdns

com.slamtec.slamware.FirmwareUpdate

FirmwareUpdateInfo

public class FirmwareUpdateInfo

`FirmwareUpdateInfo(java.lang.String current, java.lang.String latest, java.lang.String releaseDate, java.lang.String brief)`

FirmwareUpdateInfocurrent/latest/releasedDate/brief

`getBrief()`

, string

`getCurrent()`

, string

`getLatest()`

, string

`getReleaseDate()`

, string

FirmwareUpdateProgress

public class FirmwareUpdateProgress

`FirmwareUpdateProgress(int currentStep, int totalStep, int currentStepProgress, java.lang.String currentStepName)`

FirmwareUpdateProgresscurrentStep/totalStep/currentStepProgress/currentStepName

`getCurrentStep()`

int

`getCurrentStepName()`

string

`getCurrentStepProgress()`

int

`getTotalStep()`

int

com.slamtec.slamware.geometry

Line

public class Line,

`Line(int segmentId, PointF startPoint, PointF endPoint)`

Linesegment idstart pointend point

`Line(int segmentId, float startX, float startY, float endX, float endY)`

Line segment id, startX, startY, endX, endy

`Line(Line line)`

Line Line

`Line(PointF startP, PointF endP)`

Line startPendP

`getStartPoint()`

`setStartPoint(PointF startPointF)`

`getEndPoint()`

`setEndPoint(PointF endPoint)`

`getStartX()`

start x

`getStartY()`

star y

`getEndX()`

end x

`getEndY()`

end y

`getSegmentId()`

segment id

`setSegmentId(int segmentId)`

Segment id

PointF

public class PointF,2d

`PointF()`

PointF

`PointF(float x, float y)`

PointFxy

`PointF(PointF rhs)`

PointFPointF

`getX()`

X

`setX(float x)`

X

`getY()`

Y

`setY(float y)`

Y

Size

public class Size size

`Size()`

Size

`Size(int width, int height)`

Sizewidthheight

`Size(Size rhs)`

SizeSize

`getWidth()`

width

`setWidth(int width)`

width

`getHeight()`

height

`setHeight(int height)`

height

com.slamtec.slamware.robot

HealthInfo

public class HealthInfo

HealthInfo.BaseError

`HealthInfo()`

HealthInfo()

`HealthInfo(boolean warning, boolean error, boolean fatal, java.util.ArrayList<HealthInfo.BaseError> errors)`

HealthInfo()warning/error/fatal/

`getErrors()`

`isError()`

Boolean

`isFatal()`

Boolean

`isWarning()`

Boolean

`setError(boolean error)`

error	

`setErrors(java.util.ArrayList<HealthInfo.BaseError> errors)`

errors	

`setFatal(boolean fatal)`

fatal	

`setWarning(boolean warning)`

warning	

HealthInfo.BaseError

HealthInfo

Fields

BaseErrorLevelHealthy

`BaseErrorComponentMotion`

`BaseErrorComponentPower`

`BaseErrorComponentSensor`

`BaseErrorComponentSystem`

`BaseErrorComponentUnknown`

`BaseErrorComponentUser`

`BaseErrorLevelError`

`BaseErrorLevelFatal`

`BaseErrorLevelUnknown`

`BaseErrorLevelWarn`

`BaseComponentErrorTypeUnknown`

BaseComponentErrorTypeUser

BaseComponentErrorTypeSystemNone
()

BaseComponentErrorTypeSystemEmergencyStop

BaseComponentErrorTypeSystemTemperatureHigh

BaseComponentErrorTypeSystemTemperatureLow

BaseComponentErrorTypeSystemWatchDogOverFlow

BaseComponentErrorTypeSystemCtrlBusDisconnected

BaseComponentErrorTypeSystemSlamwareRebooted
slamware

BaseComponentErrorTypePowerNone
()

BaseComponentErrorTypePowerControllerDown

BaseComponentErrorTypePowerPowerLow

BaseComponentErrorTypePowerOverCurrent

BaseComponentErrorTypeMotionNone
 ()

BaseComponentErrorTypeMotionControllerDown

BaseComponentErrorTypeMotionMotorAlarm

BaseComponentErrorTypeMotionMotorDown

BaseComponentErrorTypeMotionOdometryDown

BaseComponentErrorTypeMotionBrushStall

()

BaseComponentErrorTypeMotionBlowerStall

BaseComponentErrorTypeSensorNone

BaseComponentErrorTypeSensorControllerDown

BaseComponentErrorTypeSensorBumperDown

BaseComponentErrorTypeSensorCliffDown

BaseComponentErrorTypeSensorSonarDown

BaseComponentErrorTypeSensorDustbinBlock

()

BaseComponentErrorTypeSensorDustbinGone

()

BaseComponentErrorTypeSensorWallIrDown

()

BaseComponentErrorTypeSensorMagTapeTriggered

BaseComponentErrorTypeSensorMagSelfTestFailed

BaseError()

BaseError

BaseError(int id, int errorCode, int errorLevel, int errorComponent, int componentErrorCode, java.lang.String errorMessage)

BaseError

error code	
error level	
error component	
componentErrorCode	
errorMessage	

getComponentErrorCode()

int

`getErrorCode()`

int

`getErrorComponent()`

int

`getErrorLevel()`

int

`getErrorMessage()`

string

`getId()`

idint

`setComponentErrorCode(int componentErrorCode)`

int

`setErrorCode(int errorCode)`

int

`setErrorComponent(int errorComponent)`

int

`setErrorLevel(int errorLevel)`

int

`setErrorMessage(java.lang.String errorMessage)`

string

`setId(int id)`

IdIdint

LaserPoint

public class LaserPoint,

`LaserPoint()`

LaserPoint

`LaserPoint(float distance, float angle)`

LaserPoint

`LaserPoint(float distance, float angle, boolean valid)`

LaserPoint

`LaserPoint(LaserPoint rhs)`

LaserPointLaserPoint

`getDistance()`

`setDistance(float distance)`

`getAngle()`

`setAngle(float angle)`

`isValid()`

`setValid(boolean valid)`

LaserScan

public class LaserScan

`LaserScan()`

LaserScan

`LaserScan(java.util.Vector<LaserPoint> laserPoints)`

LaserScanLaserPoints

`LaserScan(java.util.Vector<LaserPoint> laserPointsPose pose)`

LaserScanLaserPointPose

`LaserScan(LaserScan rhs)`

LaserScanLaserScan

`getLaserPoints()`

`setLaserPoints(java.util.Vector<LaserPoint> laserPoints)`

`getPose()`

`setPose(Pose pose)`

Location

public class Location3d

`Location()`

Location

`Location(float x, float y, float z)`

Locationxyz

`Location(Location rhs)`

LocationLocation

`distanceTo(Location that)`

Location

`getX()`

X

`setX(float v)`

X

`getY()`

Y

`setY(float v)`

Y

`getZ()`

Z

`setZ(float v)`

Z

Map

public class Map

`Map(PointF origin, Size dimension, PointF resolution, long timestamp, byte[] data)`

Map

`getOrigin()`

origin

`setOrigin(PointF origin)`

origin

`getDimension()`

dimension

`setDimension(Size dimension)`

dimensions

`getResolution()`

resolution

`setResolution(PointF resolution)`

resolution

`getTimestamp()`

time stamp

`setTimestamp(long timestamp)`

time stamp

`getMapArea()`

map area

`getData()`

data

`setData(byte[] data)`

data

NetworkMode

Fields

`NetworkModeAP`

AP

`NetworkModeStation`

Station

`NetworkModeWifiDisabled`

Wifi

`NetworkMode()`

NetworkMode()

Pose

public class Pose

`Pose()`

Pose

`Pose(Location loc, Rotation rot)`

Poselocros

`Pose(float x, float y, float z, float yaw, float roll, float pitch)`

Posexyzyawrollpitch

`Pose(Pose rhs)`

PosePose

`Location getLocation()`

Location

`setLocation(Location location)`

Location

`getRotation()`

rotation

`setRotation(Rotation rotation)`

rotation

`getX()`

X

`setX(float v)`

X

`getY()`

Y

`setY(float v)`

Y

`getZ()`

Z

`setZ(float v)`

Z

`getYaw()`

yaw

`setYaw(float v)`

yaw

`getRoll()`

roll

`setRoll(float v)`

roll

`getPitch()`

pitch

`setPitch(float v)`

pitch

Rotation

public class Rotation

`Rotation()`

Rotation

`Rotation(float yaw)`

Rotationyaw

`Rotation(float yaw, float pitch, float roll)`

Rotationyawpitchroll

`Rotation(Rotation rhs)`

RotationRotation

`getYaw()`

yaw

`setYaw(float yaw)`

Yaw

`getRoll()`

roll

`setRoll(float roll)`

roll

`getPitch()`

pitch

`setPitch(float pitch)`

pitch

SystemParameters

`SystemParameters()`

SystemParameters

Fields

`SYSPARAM_ROBOT_SPEED`

`SYSVAL_ROBOT_SPEED_HIGH`

`SYSVAL_ROBOT_SPEED_MEDIUM`

`SYSVAL_ROBOT_SPEED_LOW`

SleepMode

`Unknown`

Slamware

Awake

,

WakingUp

(wakeup())

Asleep

,,wakeup()WakingUp,Awake

DockingStatus

`Unknown`

DockingSlamware

`OnDock`

`NotOnDock`

PowerStatus

```
public PowerStatus(boolean isDCConnected, DockingStatus dockingStatus, boolean isCharging,int batteryPercentage,
SleepMode sleepMode)
```

```
public boolean isDCConnected()
```

```
public DockingStatus getDockingStatus()
```

Docking

```
public boolean isCharging()
```

```
public int getBatteryPercentage()
```

0~100

```
public SleepMode getSleepMode()
```

GridMap

```
public Location getOrigin()
```

```
public void setOrigin(Location origin)
```

```
public Size getDimension()
```

grid

```
public void setDimension(Size dimension)
```

grid

```
public PointF getResolution()
```

grid

```
public void setResolution(PointF resolution)
```

grid

```
public byte[] getMapData()
```

grid

```
public void setMapData(byte[] mapData)
```

grid

```
public void clear()
```

grid

CompositeMap

```
public CompositeMap()
```

```
public CompositeMap(CompositeMap another)
```

```
public MapMetaData getMetaData()
```

Composite map

```
public void setMetaData(MapMetaData data)
```

Composite map

```
public ArrayList<MapLayer> getMaps()
```

Composite map

```
public void setMaps(ArrayList<MapLayer> maps)
```

Composite map

MapKind

`EXPLORE_MAP`

SLAM

`SWEEP_MAP`

`UWB_MAP`

UWB

MapType

`BITMAP_8BIT`

8bit integer

MapLayer

`MapLayer()`

MapLayer

`getMetaData()`

`getName()`

`getUsage()`

`clear()`

PoseMap

MapLayer

`PoseMap()`

PoseMap

`getPoses()`

Poses map

`setPoses()`

Poses map

PointMap

`PointMap()`

PointMap

`PointMap(java.util.List points, long timestamp)`

pointstimeStamp

`getMapArea()`

rectF

`getPoints()`

`setPoints()`

RecoverLocalizationMovement

`Unknown`

`NoMove`

`RotateOnly`

`Any`

RecoverLocalizationOptions

`RecoverLocalizationOptions()`

RecoverLocalizationOptions

`getMaxRecoverTimeInMilliSeconds()`

`setMaxRecoverTimeInMilliSeconds(Integer maxRecoverMS)`

`setRecoverMovementType(RecoverLocalizationMovement movementType)`

movement

`RecoverLocalizationMovement getRecoverMovementType()`

movement

SensorType

`Bumper`

`Cliff`

`Sonar`

`DepthCamera`

`WallSensor`

SlamcoreShutdownParam

`SlamcoreShutdownParam()`

SlamcoreShutdownParam

`int getRestartTimeIntervalMinute()`

`setRestartTimeIntervalMinute(int restartTimeIntervalMinute)`

SleepMode

`Unknown`

Awake

,

WakingUp

(wakeup())

Asleep

,,wakeup()WakingUp,Awake

RestartMode

`SOFT`

HARD

LineMap

public HashMap<String, CompositeLine> getLines()

line map

public void setLines(HashMap<String, CompositeLine> lines)

line map

public void clear()

line map

PointsMap

public ArrayList<PointPDF> getPoints()

points map

public void setPoints(ArrayList<PointPDF> points)

points map

public void clear()

points map

ImpactSensorInfo

ImpactSensorInfo(int sensorId, Pose pose, ImpactSensorType type, SensorType coreSensorType, float refreshFreq)

ImpactSensorInfo

getSensorId()

id

getPose()

getKind()

getType()

ImpactSensorType

Digital

Analog

ImpactSensorValue

`ImpactSensorValue(long time, float value)`

timevalue

`getTime()`

`getValue()`

com.slamtec.slamware.exceptions

AlreadyConnectedException

“Already Connected to the device”

ConnectionFailException

“Connection Failed”

ConnectionLostException

“Connection Lost”

ConnectionTimeOutException

“Connection Time Out”

InvalidArgumentException

“Invalid Argument”

OperationFailException

“Operation Failed”

OutOfResourceException

“Out of Resource”

ParseInvalidException

“Failed to parse device data”

PathFindFailException

“Failed to find path”

RequestFailException

“Request Failed”

RequestTimeOutException

“Request Time Out”

UnauthorizedRequestException

“Unauthorized request”

UnsupportedCommandException

“ Unsupported Command”

com.slamtec.slamware.message

DepthCameraFrame

```
DepthCameraFrame()
```

DepthCameraFrame

```
setMinValidDistance(float minValidDistance)
```

```
 float getMinValidDistance()
```

```
setMaxValidDistance()
```

```
float getMaxValidDistance()
```

```
setMinFovPitch(float MinFovPitch)
```

```
float getMinFovPitch()
```

```
setMaxFovPitch(float MaxFovPitch)
```

```
float getMaxFovPitch()
```

```
setMinFovYaw(float MinFovYaw )
```

```
float getMinFovYaw()
```

```
setMaxFovYaw(float MaxFovYaw)
```

```
float getMaxFovYaw()
```

```
setCols(int cols)
```

```
int getCols()
```

setRows(int rows)

int getRows()

setData(ArrayList<Float> data)

*cols*rows float

ArrayList<float> getData()

*cols*rows float

com.slamtec.slamware.sdp

Action

IAction

cancel()

getActionName()

string

getProgress()

0~1double

getStatus()

waitUntilDone()

isEmpty()

action

getActionId()

actionid

String getActionName()

action

String getReason()

actionnull0

"failed"action

"aborted"action(cancelactionaction)

“unreachable”()

“unhealthy",getRobotHealth(

"lifted",,"low_localization_quality"

moveToMoveOptionFlagKeyPointsflag,moveto:
getReason(“blocked[lidar;wall;contact;depth_camera;sonar;cliff]",."[]",",",,().lidar:;wall:;contact:;
depth_camera:;sornar:cliff:

releaseCPointer()

CompositeMapHelper

```
CompositeMapHelper()
CompositeMapHelper


loadFile(String var1)


saveFile(String var1, CompositeMap var2)
```