Intent based communication on Android (v2.1.x)

Overview

Beside the cmbSDK it is possible to communicate with MX-1000 and MX-1502 via Intents on Android devices. This page summarizes the different type of intents that can be used for interaction.

As MX Connect provides the connectivity between your Android device and MX mobile terminal, it is necessary that you install the latest MX Connect app on you device.

Introduction to Android intents and their usage is out of scope for this document.

Request Intents

The following **broadcast** intents can be used in apps to trigger some operation on mobile terminals via MXConnect.

ACTION STRING	PARAMETER (NAME: TYPE)	
"com.cognex.mxconnect.action.START_SCANNING"		Starts sca
"com.cognex.mxconnect.action.STOP_SCANNING"		Stops sca
"com.cognex.mxconnect.query.DEVICE_TYPE"		Queries the de "com.cognex.mxcon if MX mobile termina
"com.cognex.mxconnect.query.BATTERY_CHARGE"		Queries the bat

The following **activity** intents can be used in apps to trigger some operation on mobile

terminals via MXConnect.

Action String	Parameter (name: type)	Description
"com.cognex.mxconnect.action.FIRMWARE_UPGRADE"	uriString: String	Device's firmware is going to be upgraded with the file that was passed as parameter in uriString. uriString: http/https:// or file:// address
	verbose: int	Verbose parameter determines whether notifications should be shown during the process. • 1 - information in the status bar • 0 - no information
	uriString: String	Device's configuration is going to be changed according to the file that was passed as parameter in uriString. uriString: http/https:// or file:// address

	verbose: int	Verbose parameter determines whether notifications should be shown during the process. • 1 - information in the status bar • 0 - no information
"com.cognex.mxconnect.action.CONFIG_UPLOAD"		

Response Intents

MX Connect is sending the following intents as response for some action (e.g. information was requested, availability of the device has been changed,etc.)

ACTION STRING	PARAMETER (NAME: TYPE)	DESCR
"com.cognex.mxconnect.status.READER_NOT_AVAILABLE"		Indicat the re device attach disconr
"com.cognex.mxconnect.status.READER_AVAILABLE"		Indicat the rea connec rea
"com.cognex.mxconnect.status.READER_LOCKED"		Indicat the re devi exclu used app. (e.
"com.cognex.mxconnect.action.MX_ATTACHED"		Indicat an MX

		was at
"com.cognex.mxconnect.action.MX_DETACHED"		Indicat an MX was de
"com.cognex.mxconnect.response.DEVICE_TYPE"	value: String	Respo reque device intent string i 'value fie
"com.cognex.mxconnect.response.BATTERY_CHARGE"	value: String	Respo reque battery intent. (char percer the 'v extra
"com.cognex.mxconnect.status.DOWNLOAD_PROGRESS"	status:int	Prov reg inform abc dowr prog dur firmw upgra config
"com.cognex.mxconnect.response.DOWNLOAD_ERROR"	text: String	Prov inforr abou failur occu dur downl firmwar fil
"com.cognex.mxconnect.response.FILE_ERROR"	text: String	Prov inforr abou failur occu during d

		firmwar fil
"com.cognex.mxconnect.status.FIRMWARE_UPGRADE_STARTED"		Indicat MXCo starte firmw upgr operat the d
"com.cognex.mxconnect.status.FIRMWARE_UPGRADE_FAILED"	text: String	Prov inforn abou failure occu dur firmw upgr
"com.cognex.mxconnect.status.CONFIG_UPLOAD_STARTED"		Indicat MXCo starte config operat the d
"com.cognex.mxconnect.status.CONFIG_UPLOAD_FAILED"	text: String	Prov inforn abou failure occu during uplo

Read Result Intent

Read result is sent with "com.cognex.mxconnect.action.READ_RESULT_RECEIVED" action string.

Parameters (Intent extras)

- goodread: boolean
  Indicates whether result contains a successfully decoded barcode.
- read_string: String *(in case of good read)*
  Decoded read string. If multicode is set, then data formatting is applied for each code

separately and the result is the concatenation of all codes.

- symbology: String *(in case of good read)*
  Decoded barcode's symbol type.

- image: byte[] *(in case of good read)*
  Captured camera image.
  <u>Only quarter sized JPEG byte data sent due to OS Intent limitations - the app sets this when connected.</u>

- imagegraphics: String *(in case of good read)*
  Contains SVG metadata.

- xml: String
  Result(s) in XML form.