

Intent based communication on Android (v2.0.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 d "com.cognex.mxcom if MX mobile termin |
| "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 |
|---|------------------------------|--|
| <p>"com.cognex.mxconnect.action.FIRMWARE_UPGRADE"</p> | <p>uriString: String</p> | <p>Device's firmware is going to be upgraded with the file that was passed as parameter in uriString. uriString: http/https:// or file:// address</p> |
| | <p>verbose: int</p> | <p>Verbose parameter determines whether notifications should be shown during the process.</p> <ul style="list-style-type: none">• 1 - information in the status bar• 0 - no information |
| | <p>uriString: String</p> | <p>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</p> |

"com.cognex.mxconnect.action.CONFIG_UPLOAD"

verbose: int

Verbose parameter determines whether notifications should be shown during the process.

- 1 - information in the status bar
- 0 - no information

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) | DESCRIPTION |
|--|------------------------|---|
| "com.cognex.mxconnect.status.READER_NOT_AVAILABLE" | | Indicates the reader device is not attached or disconnected. |
| "com.cognex.mxconnect.status.READER_AVAILABLE" | | Indicates the reader device is connected and ready for use. |
| "com.cognex.mxconnect.status.READER_LOCKED" | | Indicates the reader device is locked and cannot be used by other applications (e.g. the Cognex app). |
| "com.cognex.mxconnect.action.MX_ATTACHED" | | Indicates that an MX device has been attached to the system. |

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| | | 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 percen the 'v extra |
| "com.cognex.mxconnect.status.DOWNLOAD_PROGRESS" | status:int | Prov reg inform ab down prog dur firmw upgra config |
| "com.cognex.mxconnect.response.DOWNLOAD_ERROR" | text: String | Prov inform abou failur occu dur downl firmwar fil |
| "com.cognex.mxconnect.response.FILE_ERROR" | text: String | Prov inform abou failur occu during o |

| | | |
|--|--------------|--|
| | | firmware file |
| "com.cognex.mxconnect.status.FIRMWARE_UPGRADE_STARTED" | | Indicates MXConnect started firmware upgrade operation the device |
| "com.cognex.mxconnect.status.FIRMWARE_UPGRADE_FAILED" | text: String | Provides information about failure occurred during firmware upgrade |
| "com.cognex.mxconnect.status.CONFIG_UPLOAD_STARTED" | | Indicates MXConnect started configuration operation the device |
| "com.cognex.mxconnect.status.CONFIG_UPLOAD_FAILED" | text: String | Provides information about failure occurred during upload |

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.

- symbology: String (*in case of good read*)
Decoded barcode's symbol type.
- image: byte[] (*in case of good read*)
Captured camera image.
Only quarter sized JPEG byte data sent due to OS Intent limitations - the app sets this when connected.
- imagegraphics: String (*in case of good read*)
Contains SVG metadata.
- xml: String
Result(s) in XML form.