DR6 RFID Rules for reading ASCII RFID tags

Mike Nichols - 2023-12-08 - AssetCloud

When reading RFID tags, the information in the tag must be properly interpreted and separated from how barcodes are processed. There is also a native driver that must be at the latest version. To accomplish this the following process should be followed.

1. Make sure there is an internet connection.
2. Select the Software Update app.
3. Give the app a few minutes to populate the application list.
4. Select Install All.
5. Download and install the AssetCloud RFID app from the PlayStore.
6. Start the AssetCloud app.
7. On the desktop, under Mobility, select RFID Configuration.
    - Select DR6 RFID Rule
    - Select Duplicate
    - Rename the copied configuration to DR6 RFID Rule 1
    - Replace the information with:

<Device type="DR6" profile="RG768 warehouse">

<!-- To be enhanced to include more connection types like Bluetooth Connection, UART, RS232, ... based on examples -->

<Connection type="RG768UARTConnectionProcessor">

<DeviceIdentifier>

<!-- Allows identifying devices at runtime based on configuration properties | use one or more to identify a device -->

<Identifier name="Name">RG768</Identifier>

<!-- Reserved tags. this will be used in future for different device config-->

<Identifier name="Type" />

</DeviceIdentifier>

<Config>

<!--Power. Default value is 30-->

<Param name="Power">30</Param>

<!-- Session number to use for inventory operation-->

<!-- Use 0 for S0, 1 for S1, 2 for S2 and 3 for S3-->

<Param name="Session">2</Param>

<!-- Target can be set to 0 for A, 1 for B. It enables to increase identification rate-->

<Param name="Target">0</Param>

<!--Q value - parameter used to regulate the probability of tag response. Default value Q value 4.-->

<!-- Dynamic : Reader adjusts Q value automatically when scanning. Fixed : Q value will be constant-->

<!-- Use 0 for Fixed, 1 for Dynamic.-->

<Param name="Q">1</Param>

</Config>

</Connection>

<StreamProcessor type="RG768StreamProcessor">

<DataParser>

<!-- Specify which rule name from scan parsing xml should be used when parsing RFID tags-->

<parseRule>RFID Rule 1</parseRule>

</DataParser>

</StreamProcessor>

<MessageProcessor type="RG768MessageProcessor">

<!-- The following messages represent the various ranges that can be controlled via the UI | these are outbound -
->

<Message type="Outbound" name="Range" value="30" />

<Message type="Outbound" name="Range" value="20" />

<Message type="Outbound" name="Range" value="10" />

</MessageProcessor>

</Device>

1. On the desktop, under Mobility, select Scan Parsing Configuration.
    - Replace the information there with:

<Rules>

<Rule Name="RFID Rule 1">

<Condition>

<Type>Always</Type>

<Length />

<Position>0</Position>

<Character />

<InputField>AssetTag</InputField>

</Condition>

<Fields NumberofFields="1">

<Field Field_ID="Field 1">

<Action>Parse</Action>

<!-- Repeater refers to the character that is repetitive and padded along with

actual data. mode refers whether padding is at the beginning or at the end.-->

<Repeater mode="prefix">0</Repeater>

<Position>0</Position>

<Length>64</Length>

<!-- If tag value is in hex, convert it into ASCII

Conversion will be done if this tag is set to 1-->

<Conversion>1</Conversion>

<Prefix />

<Postfix />

<InputField>AssetTag</InputField>

</Field>

</Fields>

</Rule>

</Rules>

1. On the desktop, make sure that assets have been created using the IDs in the RFID tags. Note their location.
2. On the desktop, in Settings, under Mobile, make sure that Scan Parsing is enabled.
3. On the Android device, start the AssetCloud app and log in using the same credentials as the desktop.
4. On the Android AssetCloud app, Select Settings.
    - Press Download.
    - Under RFID Rule, select DR6 RFID Rule 1.
5. On the Android AssetCloud app, select Audit.
    - Select a site that has RFID tagged assets.
    - Select a location that has RFID tagged assets.
    - Set the date.
    - Select FIND ASSETS at the bottom of the screen.
        - Select the Asset Tag field at the top of the screen.
        - In the middle of the screen, select the scanner icon. This will turn amber after a few seconds.
        - To the left of that icon, touch the dot twice to change 3dB to 30dB.
        - Pull and hold the trigger on the reader as you walk around the location. A tag count should show up.
        - Once you release the trigger, all of the assets found will be checked.
        - Pull the trigger as many times as you need to check all of the boxes.