

# Regor

## JAVA API Reference Manual





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**Regor JAVA API Reference Manual**  
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# Introduction

This document provides system integrators and developers information about using the Java API Library of the REGOR reader for software system development. Use of Java runtime 1.5 or newer is required.

# Getting Started

This Java API Library comes with a .jar library file, the source code of the library and an example program to demonstrate the use of the library.

A Java-doc is also available in html format for the class structures and methods.

JAR library file: RegorAPI.jar

Source file: inside "src" directory

Example code: inside "example" directory, Main.java

Java-doc: inside "doc" directory, index.html



# Reader API Specification

## Interface:

IRegorAPI – Interface for the API itself

IRegorCallback – Interface for events callback to be implemented by users.

## Classes:

RegorAPI – Implementation of the API interface.

RegorMap – Enum values used in the API class.

## Constructor for RegorAPI:

RegorAPI(String <host ip address>, int< host port>, IRegorCallback <event handler>)

Example:

```
RegorAPI readerObj = new RegorAPI("192.168.9.6", 5578, readerHandler);
```

Please note that an implementation of the IRegorCallback interface has to be included as the last parameter of the Constructor of RegorAPI. The following paragraph will describe how to implement the IRegorCallback interface.

## Implementing IRegorCallback interface:

The IRegorCallback interface provides a basic backbone on how users should catch events triggered by the information sent from the reader.

Example:

```
private static class RegorCallback implements IRegorCallback {
    @Override
    public void onMessage(String msg) {
        //System.out.println("onMessage: " + msg);
    }
    @Override
    public void onTagArrive(String msg) {
        System.out.println("onTagArrive: " + msg);
    }
    @Override
    public void onTagReport(String msg) {
        System.out.println("onTagReport: " + msg);
    }
    @Override
    public void onTagDepart(String msg) {
        System.out.println("onTagDepart: " + msg);
    }
    // Special RSSI Cases
    @Override
```



```
public void onTagArriveWithRSSI(String msg, String rssi) {
    System.out.println("onTagArriveWithRSSI: " + msg + ", RSSI: " +
rssi);
}
@Override
public void onTagReportWithRSSI(String msg, String rssi) {
    System.out.println("onTagReportWithRSSI: " + msg + ", RSSI: " +
rssi);
}
}
```

User can define custom actions or processes to be perform at the above code. In this example, the data captured are being output to the console screen.

### **PROPERTIES, FIELDS and METHODS:**

A list of properties, fields and methods are available in the Java-doc provided, users can refer to the Java-doc for details information and examples about individual properties, fields and methods.

## Example

### Implementing a tag database

This section describes how to apply filters on tag data as to determine what tags information are stored or displayed, while tags information that are not matching the filters' rules will be discarded.

```
List<HashMap> filterList = new ArrayList<HashMap>();
    public final String Filter_Matching = "Matching";
    public final String Filter_notMatching = "Not_Matching";
    public void addFilter(String filterName, String offSet, String pattern, boolean
matchingRule)
    {
        HashMap<String,String> filterSetting = new HashMap<String,String>();
        filterSetting.put("Name",filterName);
        filterSetting.put("OffSet", offSet);
        filterSetting.put("Pattern", pattern);
        if (matchingRule)
            filterSetting.put("Rules", Filter_Matching);
        else
            filterSetting.put("Rules", Filter_notMatching);
        filterList.add(filterSetting);
    }
```

In this example, a list and the elements as hashMap were used to store filters information and settings. Using a list allows virtually unlimited number of filter rules to be set.

The following codes show how filter rules are added:

```
//setting up filters for DB output
db.addFilter("EPC Filtler1", "0", "E200", true);
db.addFilter("EPC Filtler2", "6", "7777", false);
```

In this example, the filter was used to check whether a tag record in the database to be displayed to output if the tag information meets all the filters' criteria.

```
if(useFilter)
    {
        for(HashMap fs: filterList)
        {
            String epc = (String) tr.get("EPC");
            String pattern = (String)fs.get("Pattern");
            int offset = Integer.parseInt((String)
fs.get("OffSet"));
            String subEPC =
epc.substring(offset,pattern.length()+offset);
            if (fs.get("Rules").equals(Filter_Matching))
```



```
{
    if (subEPC.equals(pattern))
        passFilter = true;
}
else
{
    if (!subEPC.equals(pattern))
        passFilter = true;
}
}
```

The above example only account for AND logic processing for all the filters rules in place. Users can define their own logic processing in their implementation. Users can also choose to implement the filters when they are adding records to the tag database.



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# Appendix

This section provides you with safety information, technical support information, and sources for additional product information.

## Safety Information

Your safety is extremely important. Read and follow all warnings and cautions in this document before handling and operating RFID equipment. You can be seriously injured, and equipment and data can be damaged if you do not follow the safety warnings and cautions.

*A caution alerts you to an operating procedure, practice, condition, or statement that must be strictly observed to prevent equipment damage or destruction, or corruption or loss of data.*

**Note:** Notes either provide extra information about a topic or contain special instructions for handling a particular condition or set of circumstances.

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