

# Mapper and Reducer API - LifeCycle

## Mapper

org.apache.hadoop.mapreduce

Class Mapper<KEYIN,VALUEIN,KEYOUT,VALUEOUT>

### Method Summary

All Methods	Instance Methods	Concrete Methods
Modifier and Type		Method and Description
protected void		<code>cleanup(org.apache.hadoop.mapreduce.Mapper.Context context)</code> Called once at the end of the task.
protected void		<code>map(KEYIN key, VALUEIN value, org.apache.hadoop.mapreduce.Mapper.Context context)</code> Called once for each key/value pair in the input split.
void		<code>run(org.apache.hadoop.mapreduce.Mapper.Context context)</code> Expert users can override this method for more complete control over the execution of the Mapper.
protected void		<code>setup(org.apache.hadoop.mapreduce.Mapper.Context context)</code> Called once at the beginning of the task.

org.apache.hadoop.mapreduce

## Class Reducer<KEYIN,VALUEIN,KEYOUT,VALUEOUT>

- [java.lang.Object](#)
  - org.apache.hadoop.mapreduce.Reducer<KEYIN,VALUEIN,KEYOUT,VALUEOUT>

### Method Summary

All Methods	Instance Methods	Concrete Methods
Modifier and Type		Method and Description
protected void		<code>cleanup(org.apache.hadoop.mapreduce.Reducer.Context context)</code> Called once at the end of the task.
protected void		<code>reduce(KEYIN key, Iterable&lt;VALUEIN&gt; values, org.apache.hadoop.mapreduce.Reducer.Context context)</code> This method is called once for each key.
void		<code>run(org.apache.hadoop.mapreduce.Reducer.Context context)</code> Advanced application writers can use the <code>run(org.apache.hadoop.mapreduce.Reducer.Context)</code> method to control how the reduce task works.
protected void		<code>setup(org.apache.hadoop.mapreduce.Reducer.Context context)</code> Called once at the start of the task.

P.s. Map-Reduce with hadoop 1.0 is still continued as a different package at [org.apache.hadoop.mapred](http://org.apache.hadoop.mapred)

Note the difference between mapred (V1) vs mapreduce (V2).

Also note the difference between interface and abstract class usage.

Reference:

<https://hadoop.apache.org/docs/r3.2.1/api/index.html>

V2 [org.apache.hadoop.mapreduce](http://org.apache.hadoop.mapreduce)

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Document Last updated: 30th July, 2020