

StatsComponent

StatsComponent

⚠ Solr1.4

The stats component returns simple statistics for indexed numeric fields within the DocSet.

Parameters

param	description
stats	true – then do stats
stats.field	add one parameter for each field that needs statistics
stats.facet	Return sub results for values within the given facet.

Example

With the example data loaded: <http://localhost:8983/solr/select?q=*.*&stats=true&stats.field=price&stats.field=popularity&rows=0&indent=true>

```
<lst name="stats">
  <lst name="stats_fields">
    <lst name="price">
      <double name="min">0.0</double>
      <double name="max">2199.0</double>
      <double name="sum">5251.2699999999995</double>
      <long name="count">15</long>
      <long name="missing">11</long>
      <double name="sumOfSquares">6038619.160300001</double>
      <double name="mean">350.08466666666664</double>
      <double name="stddev">547.737557906113</double>
    </lst>
    <lst name="popularity">
      <double name="min">0.0</double>
      <double name="max">10.0</double>
      <double name="sum">90.0</double>
      <long name="count">26</long>
      <long name="missing">0</long>
      <double name="sumOfSquares">628.0</double>
      <double name="mean">3.4615384615384617</double>
      <double name="stddev">3.5578731762756157</double>
    </lst>
  </lst>
</lst>
```

Same results faceted on *inStock*:
[&stats.facet=inStock](#)

```

<lst name="stats">
  <lst name="stats_fields">
    <lst name="price">
      <double name="min">0.0</double>
      <double name="max">2199.0</double>
      <double name="sum">5251.2699999999995</double>
      <long name="count">15</long>
      <long name="missing">11</long>
      <double name="sumOfSquares">6038619.160300001</double>
      <double name="mean">350.08466666666664</double>
      <double name="stddev">547.737557906113</double>
    <lst name="facets">
      <lst name="inStock">
        <lst name="false">
          <double name="min">11.5</double>
          <double name="max">649.99</double>
          <double name="sum">1161.39</double>
          <long name="count">4</long>
          <long name="missing">0</long>
          <double name="sumOfSquares">653369.2551</double>
          <double name="mean">290.3475</double>
          <double name="stddev">324.63444676281654</double>
        </lst>
        <lst name="true">
          <double name="min">0.0</double>
          <double name="max">2199.0</double>
          <double name="sum">4089.8799999999999</double>
          <long name="count">11</long>
          <long name="missing">0</long>
          <double name="sumOfSquares">5385249.905200001</double>
          <double name="mean">371.8072727272727</double>
          <double name="stddev">621.6592938755265</double>
        </lst>
      </lst>
    </lst>
  </lst>
</lst>

```

Notes

- The facet field can be selectively applied. That is if you want stats on field "A" and "B", you can facet a on "X" and B on "Y" using &stats.field=A&f.A.stats.facet=X&stats.field=B&f.B.stats.facet=Y
- ⚠ Warning, as implemented, all facet results are returned, be careful what fields you ask for!
- Multi-valued fields and facets may be slow.
- Computing statistics using stats.facet over a multi-valued field does not work properly. <https://issues.apache.org/jira/browse/SOLR-1782>
- Multi-value fields rely on [UnInvertedField.java](#) for implementation. This is like a FieldCache, so be aware of your memory footprint.
- [TrieFields](#) has to use a precisionStep of -1 to avoid using [UnInvertedField.java](#). Consider using one field for doing stats, and one for doing range facetting on.

Results

value	description
min	The minimum value
max	The maximum value
sum	Sum of all values
count	How many (non-null) values
missing	How many null values
sumOfSquares	Sum of all values squared (useful for stddev)
mean	The average (v1+v2...+vN)/N
stddev	Standard Deviation – measuring how widely spread the values in a data set are.