

Group Accumulator Operators

Changed in version 3.2: Some accumulators are now available in the `$project` stage. In previous versions of MongoDB , accumulators are available only for the `$group` stage.

Accumulators, when used in the `$group` stage, maintain their state (e.g. totals, maximums, minimums, and related data) as documents progress through the pipeline.

When used in the `$group` stage, accumulators take as input a single expression, evaluating the expression once for each input document, and maintain their stage for the group of documents that share the same group key.

When used in the `$project` stage, the accumulators do not maintain their state. When used in the `$project` stage, accumulators take as input either a single argument or multiple arguments.

NOTE:

For details on specific operator, including syntax and examples, click on the specific operator to go to its reference page.

Name	Description
<code>\$sum</code>	Returns a sum of numerical values. Ignores non-numeric values. <i>Changed in version 3.2:</i> Available in both <code>\$group</code> and <code>\$project</code> stages.
<code>\$avg</code>	Returns an average of numerical values. Ignores non-numeric values. <i>Changed in version 3.2:</i> Available in both <code>\$group</code> and <code>\$project</code> stages.
<code>\$first</code>	Returns a value from the first document for each group. Order is only defined if the documents are in a defined order. Available in <code>\$group</code> stage only.
<code>\$last</code>	Returns a value from the last document for each group. Order is only defined if the documents are in a defined order. Available in <code>\$group</code> stage only.

Name 	Description
\$max	<p>Returns the highest expression value for each group.</p> <p><i>Changed in version 3.2:</i> Available in both \$group and \$project stages.</p>
\$min	<p>Returns the lowest expression value for each group.</p> <p><i>Changed in version 3.2:</i> Available in both \$group and \$project stages.</p>
\$push	<p>Returns an array of expression values for each group.</p> <p>Available in \$group stage only.</p>
\$addToSet	<p>Returns an array of <i>unique</i> expression values for each group. Order of the array elements is undefined.</p> <p>Available in \$group stage only.</p>
\$stdDevPop	<p>Returns the population standard deviation of the input values.</p> <p><i>Changed in version 3.2:</i> Available in both \$group and \$project stages.</p>
\$stdDevSamp	<p>Returns the sample standard deviation of the input values.</p> <p><i>Changed in version 3.2:</i> Available in both \$group and \$project stages.</p>
<div><div></div></div>	