



<b>Extent Size Index (KB)</b>	<b>First Extent (Data+Idx)</b>	<b>Next Extent (20%)</b>
59	271	56
59	327	68
58	226	48
58	226	48
59	271	56
170	406	84
371	4371	876
#DIV/0!	#DIV/0!	#DIV/0!
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#DIV/0!	#DIV/0!	#DIV/0!
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## Index Extent Sizes

The database server determines the extent size of an index based on the extent size for the corresponding table, regardless of whether the index is fragmented or not fragmented.

### Estimating Extent Size of Attached Index

For an attached index, the database server uses the ratio of the index key size to the row size to assign an appropriate extent size for the index, as the following formula shows:

$$\text{Index extent size} = (\text{index\_key\_size} / \text{table\_row\_size}) * \text{table\_extent\_size}$$

The database server also uses this same ratio for the next-extent size for the index:

$$\text{Index next extent size} = (\text{index\_key\_size} / \text{table\_row\_size}) * \text{table\_next\_extent\_size}$$

### Estimating Extent Size of Detached Index

For a detached index, the database server uses the ratio of the index key size plus some overhead bytes to the row size to assign an appropriate extent size for the index, as the following formula shows:

$$\text{Detached Index extent size} = ((\text{index\_key\_size} + 9) / \text{table\_row\_size}) * \text{table\_extent\_size}$$

For example, suppose you have the following values:

index\_key\_size = 8 bytes

table\_row\_size = 33 bytes

table\_extent\_size = 150 \* 2-kilobyte page

index\_key\_size is the total widths of the indexed column or columns.

table\_row\_size is the sum of all the columns in the row.

table\_extent\_size is the value that you specify in the EXTENT SIZE keyword of the CREATE TABLE statement.

The above formula calculates the extent size as follows:

$$\begin{aligned} \text{Detached Index extent size} &= ((8 + 9) / 33) * 150 * 2\text{-kilobyte page} \\ &= (17/33) * 300 \text{ kilobytes} \\ &= 154 \text{ kilobytes} \end{aligned}$$