

# Sybase hints

The following table highlights SQL hints based on Sybase hints optimization.

| Category | Hint                 | Notes                                                                                                                                                                            |
|----------|----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Logical  | distinct             | No explicit implementation.                                                                                                                                                      |
| Logical  | group                | No explicit implementation.                                                                                                                                                      |
| Logical  | g_join               | No explicit implementation.                                                                                                                                                      |
| Logical  | nl_g_join            | Not applicable for: statements with chained queries; select statements with group by clause and having clause or group by clause and order by clause.                            |
| Logical  | m_g_join             | Not applicable for: statements with chained queries; select statements with group by clause and having clause or group by clause and order by clause.                            |
| Logical  | join                 | No explicit implementation.                                                                                                                                                      |
| Logical  | nl_join              | Not applicable for: select statements with group by clause and having clause or group by clause and order by clause.                                                             |
| Logical  | m_join               | Not applicable for: select statements with group by clause and having clause or group by clause and order by clause.                                                             |
| Logical  | h_join               | Not applicable for: select statements with group by clause and having clause or group by clause and order by clause.                                                             |
| Logical  | union                | No explicit implementation.                                                                                                                                                      |
| Logical  | scan                 | No explicit implementation.                                                                                                                                                      |
| Logical  | scalar_agg           | Only used in combination with other operators. It does not change the execution plan itself.                                                                                     |
| Logical  | sequence             | Is a keyword that will be used in the implementation of scalar_agg operator.                                                                                                     |
| Logical  | hints                | We don't support a combination of hints.                                                                                                                                         |
| Logical  | prop                 | Uses a set of pre-defined values.                                                                                                                                                |
| Logical  | table                | Used only in combination with other operators, when referring tables from subqueries.                                                                                            |
| Logical  | work_t               | This operator is applicable only together with store operator.                                                                                                                   |
| Logical  | in                   | Used only in combination with other operators, when referring tables from subqueries.                                                                                            |
| Logical  | subq                 | Used only in combination with other operators, when referring tables from subqueries.                                                                                            |
| Physical | distinct_sorted      | Only for SELECT statements containing DISTINCT, and only for tables.                                                                                                             |
| Physical | distinct_sorting     | Only for SELECT statements containing DISTINCT, and only for tables.                                                                                                             |
| Physical | distinct_hashing     | Only for SELECT statements containing DISTINCT, and only for tables.                                                                                                             |
| Physical | group_sorted         | Only for SELECT statements (not working for views) with no having and no order by clause.                                                                                        |
| Physical | group_hashing        | Only for SELECT statements (not working for views) with no having and no order by clause.                                                                                        |
| Physical | group_interting      | Not implemented.                                                                                                                                                                 |
| Physical | append_union_all     | Not applicable for: UNION chained clauses, nested sub-selects in a from clause, if a group by clause is present or if scalar aggregation is present.                             |
| Physical | merge_union_all      | Not applicable for: UNION ALL chained clauses, nested sub-selects in a from clause, or if a group by clause is present.                                                          |
| Physical | merge_union_distinct | Not applicable for: UNION ALL chained clauses, nested sub-selects in a from clause, or if a group by clause is present.                                                          |
| Physical | hash_union_distinct  | Not applicable for: UNION ALL chained clauses, nested sub-selects in a from clause, if a group by clause is present, or if scalar aggregation is present.                        |
| Physical | i_scan               | Applied to all table references in the from clause of the main select and of the sub select statements except: 1. statement has sub-selects. 2. table references has no indexes. |

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| Physical | t_scan      | <p>Applied to all the table references in the from clause of the main select and of the sub select statements except:</p> <p>On Sybase 12.5 not applied for tables in the main query if:</p> <ol style="list-style-type: none"> <li>1. statement has chained queries.</li> <li>2. Sub queries have group by and having clauses; and not applied to the tables in sub selects if: <ol style="list-style-type: none"> <li>a. has select statements in from clause of the main select.</li> <li>b. sub queries have group by and having clauses.</li> <li>c. statement has select statements in select clause.</li> <li>d. statement has parent statement and insert statement;</li> </ol> </li> </ol> <p>On Sybase 15 not applied for tables in sub selects if:</p> <ol style="list-style-type: none"> <li>1. has select statements in from clause of the main select.</li> <li>2. statement has chained queries.</li> </ol> |
| Physical | m_scan      | <p>Applied for all tables if in the where clause there is a condition like:</p> <p style="padding-left: 40px;">table1.indexedColumn1 condition body OR</p> <p style="padding-left: 40px;">table1.indexedColumn2 condition body;</p> <p>Not applied if the LIKE operator is used. For columns that belong to a primary key only the first column is considered.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Physical | store       | --                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Physical | store_index | --                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Physical | sort        | --                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Physical | xchg        | --                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |