

Trace file c:\oracle\diag\rdbms\orl12nb\orl12nb\trace\orl12nb_ora_264_LOWEST_COST.trc
Oracle Database 11g Release 11.2.0.1.0 - Production
Windows NT Version V6.1
CPU : 2 - type 586, 1 Physical Cores
Process Affinity : 0x0x00000000
Memory (Avail/Total): Ph:807M/2037M, Ph+PgF:2230M/4074M, VA:1348M/2047M
Instance name: orl12nb
Redo thread mounted by this instance: 1
Oracle process number: 27
Windows thread id: 264, image: ORACLE.EXE (SHAD)

*** 2010-05-27 19:04:40.569
*** SESSION ID:(138.3) 2010-05-27 19:04:40.569
*** CLIENT ID:() 2010-05-27 19:04:40.569
*** SERVICE NAME:(OR112NB) 2010-05-27 19:04:40.569
*** MODULE NAME:(SQL*Plus) 2010-05-27 19:04:40.569
*** ACTION NAME:() 2010-05-27 19:04:40.569

Registered qb: SEL\$1 0xe56362c (PARSER)

QUERY BLOCK SIGNATURE

signature (): qb_name=SEL\$1 nbfros=1 flg=0
fro(0): flg=4 objn=70879 hint_alias="T1"@"SEL\$1"

SPM: current statement disallowed

Automatic degree of parallelism (ADOP)

Automatic degree of parallelism is disabled: statement type.

PM: Considering predicate move-around in query block SEL\$1 (#0)

Predicate Move-Around (PM)

OPTIMIZER INFORMATION

----- Current SQL Statement for this session (sql_id=a438a71u2vbd8) -----
SELECT /* FIND_ME */

*
FROM
 T1
WHERE
 CHAR_COL = 10

Legend

The following abbreviations are used by optimizer trace.

CBQT - cost-based query transformation
JPPD - join predicate push-down
OJPPD - old-style (non-cost-based) JPPD
FPD - filter push-down
PM - predicate move-around
CVM - complex view merging
SPJ - select-project-join
SJC - set join conversion
SU - subquery unnesting
OBYE - order by elimination
OST - old style star transformation
ST - new (cbqt) star transformation
CNT - count(col) to count(*) transformation
JE - Join Elimination
JF - join factorization
SLP - select list pruning
DP - distinct placement
qb - query block
LB - leaf blocks
DK - distinct keys
LB/K - average number of leaf blocks per key
DB/K - average number of data blocks per key
CLUF - clustering factor
NDV - number of distinct values
Resp - response cost
Card - cardinality
Resc - resource cost
NL - nested loops (join)
SM - sort merge (join)
HA - hash (join)
CPUSPEED - CPU Speed
IOTFRSPEED - I/O transfer speed
IOSEKTIM - I/O seek time

SREADTIM - average single block read time
MREADTIM - average multiblock read time
MBRC - average multiblock read count
MAXTHR - maximum I/O system throughput
SLAVETHR - average slave I/O throughput
dmeth - distribution method
1: no partitioning required
2: value partitioned
4: right is random (round-robin)
128: left is random (round-robin)
8: broadcast right and partition left
16: broadcast left and partition right
32: partition left using partitioning of right
64: partition right using partitioning of left
256: run the join in serial
0: invalid distribution method

sel - selectivity

ptn - partition

PARAMETERS USED BY THE OPTIMIZER

PARAMETERS WITH ALTERED VALUES

Compilation Environment Dump

Bug Fix Control Environment

PARAMETERS WITH DEFAULT VALUES

Compilation Environment Dump

optimizer_mode_hinted = false
optimizer_features_hinted = 0.0.0
parallel_execution_enabled = false
parallel_query_forced_dop = 0
parallel_dml_forced_dop = 0
parallel_ddl_forced_degree = 0
parallel_ddl_forced_instances = 0
_query_rewrite_fudge = 90
optimizer_features_enable = 11.2.0.1
_optimizer_search_limit = 5
cpu_count = 2
active_instance_count = 1
parallel_threads_per_cpu = 2
hash_area_size = 131072
bitmap_merge_area_size = 1048576
sort_area_size = 65536
sort_area_retained_size = 0
_sort_elimination_cost_ratio = 0
_optimizer_block_size = 8192
_sort_multiblock_read_count = 2
_hash_multiblock_io_count = 0
_db_file_optimizer_read_count = 8
_optimizer_max_permutations = 2000
pga_aggregate_target = 143360 KB
_pga_max_size = 204800 KB
_query_rewrite_maxdisjunct = 257
_smm_auto_min_io_size = 56 KB
_smm_auto_max_io_size = 248 KB
_smm_min_size = 143 KB
_smm_max_size = 28672 KB
_smm_px_max_size = 71680 KB
_cpu_to_io = 0
_optimizer_undo_cost_change = 11.2.0.1
parallel_query_mode = enabled
parallel_dml_mode = disabled
parallel_ddl_mode = enabled
optimizer_mode = all_rows
sqlstat_enabled = false
_optimizer_percent_parallel = 101
_always_anti_join = choose
_always_semi_join = choose
_optimizer_mode_force = true
_partition_view_enabled = true
_always_star_transformation = false
_query_rewrite_or_error = false
_hash_join_enabled = true
cursor_sharing = exact
_b_tree_bitmap_plans = true
star_transformation_enabled = false
_optimizer_cost_model = choose
_new_sort_cost_estimate = true

```
_complex_view_merging = true
_unnest_subquery = true
_eliminate_common_subexpr = true
_pred_move_around = true
_convert_set_to_join = false
_push_join_predicate = true
_push_join_union_view = true
_fast_full_scan_enabled = true
_optim_enhance_nnull_detection = true
_parallel_broadcast_enabled = true
_px_broadcast_fudge_factor = 100
_ordered_nested_loop = true
_no_or_expansion = false
_optimizer_index_cost_adj = 100
_optimizer_index_caching = 0
_system_index_caching = 0
_disable_datalayer_sampling = false
_query_rewrite_enabled = true
_query_rewrite_integrity = enforced
_query_cost_rewrite = true
_query_rewrite_2 = true
_query_rewrite_1 = true
_query_rewrite_expression = true
_query_rewrite_jmigrate = true
_query_rewrite_fpc = true
_query_rewrite_drj = true
_full_pwise_join_enabled = true
_partial_pwise_join_enabled = true
_left_nested_loops_random = true
_improved_row_length_enabled = true
_index_join_enabled = true
_enable_type_dep_selectivity = true
_improved_outerjoin_card = true
_optimizer_adjust_for_nulls = true
_optimizer_degree = 0
_use_column_stats_for_function = true
_subquery_pruning_enabled = true
_subquery_pruning_mv_enabled = false
_or_expand_nvl_predicate = true
_like_with_bind_as_equality = false
_table_scan_cost_plus_one = true
_cost_equality_semi_join = true
_default_non_equality_sel_check = true
_new_initial_join_orders = true
_oneside_colstat_for_equijoins = true
_optim_peek_user_binds = true
_minimal_stats_aggregation = true
_force_temptables_for_gsets = false
workarea_size_policy = auto
_smm_auto_cost_enabled = true
_gs_anti_semi_join_allowed = true
_optim_new_default_join_sel = true
_optimizer_dynamic_sampling = 2
_pre_rewrite_push_pred = true
_optimizer_new_join_card_computation = true
_union_rewrite_for_gs = yes_gset_mvms
_generalized_pruning_enabled = true
_optim_adjust_for_part_skews = true
_force_datefold_trunc = false
statistics_level = typical
_optimizer_system_stats_usage = true
skip_unusable_indexes = true
_remove_aggr_subquery = true
_optimizer_push_down_distinct = 0
_dml_monitoring_enabled = true
_optimizer_undo_changes = false
_predicate_elimination_enabled = true
_nested_loop_fudge = 100
_project_view_columns = true
_local_communication_costing_enabled = true
_local_communication_ratio = 50
_query_rewrite_vop_cleanup = true
_slave_mapping_enabled = true
_optimizer_cost_based_transformation = linear
_optimizer_mjc_enabled = true
_right_outer_hash_enable = true
_spr_push_pred_refspr = true
_optimizer_cache_stats = false
_optimizer_cbqt_factor = 50
_optimizer_squ_bottomup = true
_fic_area_size = 131072
_optimizer_skip_scan_enabled = true
_optimizer_cost_filter_pred = false
```

```
_optimizer_sortmerge_join_enabled = true
_optimizer_join_sel_sanity_check = true
_mmv_query_rewrite_enabled = true
_bt_mmv_query_rewrite_enabled = true
_add_stale_mv_to_dependency_list = true
_distinct_view_unnesting = false
_optimizer_dim_subq_join_sel = true
_optimizer_disable_strans_sanity_checks = 0
_optimizer_compute_index_stats = true
_push_join_union_view2 = true
_optimizer_ignore_hints = false
_optimizer_random_plan = 0
_query_rewrite_setopgrw_enable = true
_optimizer_correct_sq_selectivity = true
_disable_function_based_index = false
_optimizer_join_order_control = 3
_optimizer_cartesian_enabled = true
_optimizer_starplan_enabled = true
_extended_pruning_enabled = true
_optimizer_push_pred_cost_based = true
_optimizer_null_aware_antijoin = true
_optimizer_extend_jppd_view_types = true
_sql_model_unfold_forloops = run_time
_enable_dml_lock_escalation = false
_bloom_filter_enabled = true
_update_bji_ipdml_enabled = 0
_optimizer_extended_cursor_sharing = udo
_dm_max_shared_pool_pct = 1
_optimizer_cost_hjsmj_multimatch = true
_optimizer_transitivity_retain = true
_px_pwg_enabled = true
optimizer_secure_view_merging = true
_optimizer_join_elimination_enabled = true
flashback_table_rpi = non_fbt
_optimizer_cbqt_no_size_restriction = true
_optimizer_enhanced_filter_push = true
_optimizer_filter_pred_pullup = true
_rowsrc_trace_level = 0
_simple_view_merging = true
_optimizer_rownum_pred_based_fkr = true
_optimizer_better_inlist_costing = all
_optimizer_self_induced_cache_cost = false
_optimizer_min_cache_blocks = 10
_optimizer_or_expansion = depth
_optimizer_order_by_elimination_enabled = true
_optimizer_outer_to_anti_enabled = true
_selfjoin_mv_duplicates = true
_dimension_skip_null = true
_force_rewrite_enable = false
_optimizer_star_tran_in_with_clause = true
_optimizer_complex_pred_selectivity = true
_optimizer_connect_by_cost_based = true
_gby_hash_aggregation_enabled = true
_globalindex_pnum_filter_enabled = true
_px_minus_intersect = true
_fix_control_key = 0
_force_slave_mapping_intra_part_loads = false
_force_tmp_segment_loads = false
_query_mmvrewrite_maxpreds = 10
_query_mmvrewrite_maxintervals = 5
_query_mmvrewrite_maxinlists = 5
_query_mmvrewrite_maxdmaps = 10
_query_mmvrewrite_maxcmaps = 20
_query_mmvrewrite_maxregperm = 512
_query_mmvrewrite_maxmergedcmaps = 50
_query_mmvrewrite_maxqryinlistvals = 500
_disable_parallel_conventional_load = false
_trace_virtual_columns = false
_replace_virtual_columns = true
_virtual_column_overload_allowed = true
_kdt_buffering = true
_first_k_rows_dynamic_proration = true
_optimizer_sortmerge_join_inequality = true
_optimizer_aw_stats_enabled = true
_bloom_pruning_enabled = true
result_cache_mode = MANUAL
_px_ual_serial_input = true
_optimizer_skip_scan_guess = false
_enable_row_shipping = true
_row_shipping_threshold = 80
_row_shipping_explain = false
transaction_isolation_level = read_committed
_optimizer_distinct_elimination = true
```

```
_optimizer_multi_level_push_pred = true
_optimizer_group_by_placement = true
_optimizer_rownum_bind_default = 10
_enable_query_rewrite_on_remote_objs = true
_optimizer_extended_cursor_sharing_rel = simple
_optimizer_adaptive_cursor_sharing = true
_direct_path_insert_features = 0
_optimizer_improve_selectivity = true
_optimizer_use_pending_statistics = false
_optimizer_enable_density_improvements = true
_optimizer_aw_join_push_enabled = true
_optimizer_connect_by_combine_sw = true
_enable_pmo_ctas = 0
_optimizer_native_full_outer_join = force
_bloom_predicate_enabled = true
_optimizer_enable_extended_stats = true
_is_lock_table_for_ddl_wait_lock = 0
_pivot_implementation_method = choose
optimizer_capture_sql_plan_baselines = false
optimizer_use_sql_plan_baselines = true
_optimizer_star_trans_min_cost = 0
_optimizer_star_trans_min_ratio = 0
_with_subquery = OPTIMIZER
_optimizer_fkr_index_cost_bias = 10
_optimizer_use_subheap = true
parallel_degree_policy = manual
parallel_degree = 0
parallel_min_time_threshold = 10
_parallel_time_unit = 10
_optimizer_or_expansion_subheap = true
_optimizer_free_transformation_heap = true
_optimizer_reuse_cost_annotations = true
_result_cache_auto_size_threshold = 100
_result_cache_auto_time_threshold = 1000
_optimizer_nested_rollup_for_gset = 100
_nlj_batching_enabled = 1
parallel_query_default_dop = 0
is_recur_flags = 0
optimizer_use_invisible_indexes = false
flashback_data_archive_internal_cursor = 0
_optimizer_extended_stats_usage_control = 224
_parallel_syspls_obey_force = true
cell_offload_processing = true
_rdbms_internal_fplib_enabled = false
db_file_multiblock_read_count = 46
_bloom_folding_enabled = true
_mv_generalized_oj_refresh_opt = true
cell_offload_compaction = ADAPTIVE
parallel_degree_limit = 65535
parallel_force_local = false
parallel_max_degree = 4
total_cpu_count = 2
cell_offload_plan_display = AUTO
_optimizer_coalesce_subqueries = true
_optimizer_fast_pred_transitivity = true
_optimizer_fast_access_pred_analysis = true
_optimizer_unnest_disjunctive_subq = true
_optimizer_unnest_corr_set_subq = true
_optimizer_distinct_agg_transform = true
_aggregation_optimization_settings = 0
_optimizer_connect_by_elim_dups = true
_optimizer_eliminate_filtering_join = true
_connect_by_use_union_all = true
dst_upgrade_insert_conv = true
advanced_queueing_internal_cursor = 0
_optimizer_unnest_all_subqueries = true
_bloom_predicate_pushdown_to_storage = true
_bloom_vector_elements = 0
_bloom_pushing_max = 524288
parallel_autodop = 0
parallel_ddldml = 0
_parallel_cluster_cache_policy = adaptive
_parallel_scalability = 50
iot_internal_cursor = 0
_optimizer_instance_count = 0
_optimizer_connect_by_cb_whr_only = false
_suppress_scn_chk_for_cqn = nosuppress_1466
_optimizer_join_factorization = true
_optimizer_use_cbqt_star_transformation = true
_optimizer_table_expansion = true
_and_pruning_enabled = true
_deferred_constant_folding_mode = DEFAULT
_optimizer_distinct_placement = true
```

```
partition_pruning_internal_cursor = 0
parallel_hinted = none
_sql_compatibility = 0
_optimizer_use_feedback = true
_optimizer_try_st_before_jppd = true
Bug Fix Control Environment
fix 3834770 = 1
fix 3746511 = enabled
fix 4519016 = enabled
fix 3118776 = enabled
fix 4488689 = enabled
fix 2194204 = disabled
fix 2660592 = enabled
fix 2320291 = enabled
fix 2324795 = enabled
fix 4308414 = enabled
fix 3499674 = disabled
fix 4569940 = enabled
fix 4631959 = enabled
fix 4519340 = enabled
fix 4550003 = enabled
fix 1403283 = enabled
fix 4554846 = enabled
fix 4602374 = enabled
fix 4584065 = enabled
fix 4545833 = enabled
fix 4611850 = enabled
fix 4663698 = enabled
fix 4663804 = enabled
fix 4666174 = enabled
fix 4567767 = enabled
fix 4556762 = 15
fix 4728348 = enabled
fix 4708389 = enabled
fix 4175830 = enabled
fix 4752814 = enabled
fix 4583239 = enabled
fix 4386734 = enabled
fix 4887636 = enabled
fix 4483240 = enabled
fix 4872602 = disabled
fix 4711525 = enabled
fix 4545802 = enabled
fix 4605810 = enabled
fix 4704779 = enabled
fix 4900129 = enabled
fix 4924149 = enabled
fix 4663702 = enabled
fix 4878299 = enabled
fix 4658342 = enabled
fix 4881533 = enabled
fix 4676955 = enabled
fix 4273361 = enabled
fix 4967068 = enabled
fix 4969880 = disabled
fix 5005866 = enabled
fix 5015557 = enabled
fix 4705343 = enabled
fix 4904838 = enabled
fix 4716096 = enabled
fix 4483286 = disabled
fix 4722900 = enabled
fix 4615392 = enabled
fix 5096560 = enabled
fix 5029464 = enabled
fix 4134994 = enabled
fix 4904890 = enabled
fix 5104624 = enabled
fix 5014836 = enabled
fix 4768040 = enabled
fix 4600710 = enabled
fix 5129233 = enabled
fix 4595987 = enabled
fix 4908162 = enabled
fix 5139520 = enabled
fix 5084239 = enabled
fix 5143477 = disabled
fix 2663857 = enabled
fix 4717546 = enabled
fix 5240264 = disabled
fix 5099909 = enabled
fix 5240607 = enabled
fix 5195882 = enabled
```

fix 5220356 = enabled
fix 5263572 = enabled
fix 5385629 = enabled
fix 5302124 = enabled
fix 5391942 = enabled
fix 5384335 = enabled
fix 5482831 = enabled
fix 4158812 = enabled
fix 5387148 = enabled
fix 5383891 = enabled
fix 5466973 = enabled
fix 5396162 = enabled
fix 5394888 = enabled
fix 5395291 = enabled
fix 5236908 = enabled
fix 5509293 = enabled
fix 5449488 = enabled
fix 5567933 = enabled
fix 5570494 = enabled
fix 5288623 = enabled
fix 5505995 = enabled
fix 5505157 = enabled
fix 5112460 = enabled
fix 5554865 = enabled
fix 5112260 = enabled
fix 5112352 = enabled
fix 5547058 = enabled
fix 5618040 = enabled
fix 5585313 = enabled
fix 5547895 = enabled
fix 5634346 = enabled
fix 5620485 = enabled
fix 5483301 = enabled
fix 5657044 = enabled
fix 5694984 = enabled
fix 5868490 = enabled
fix 5650477 = enabled
fix 5611962 = enabled
fix 4279274 = enabled
fix 5741121 = enabled
fix 5714944 = enabled
fix 5391505 = enabled
fix 5762598 = enabled
fix 5578791 = enabled
fix 5259048 = enabled
fix 5882954 = enabled
fix 2492766 = enabled
fix 5707608 = enabled
fix 5891471 = enabled
fix 5884780 = enabled
fix 5680702 = enabled
fix 5371452 = enabled
fix 5838613 = enabled
fix 5949981 = enabled
fix 5624216 = enabled
fix 5741044 = enabled
fix 5976822 = enabled
fix 6006457 = enabled
fix 5872956 = enabled
fix 5923644 = enabled
fix 5943234 = enabled
fix 5844495 = enabled
fix 4168080 = enabled
fix 6020579 = enabled
fix 5842686 = disabled
fix 5996801 = enabled
fix 5593639 = enabled
fix 6133948 = enabled
fix 3151991 = enabled
fix 6146906 = enabled
fix 6239909 = enabled
fix 6267621 = enabled
fix 5909305 = enabled
fix 6279918 = enabled
fix 6141818 = enabled
fix 6151963 = enabled
fix 6251917 = enabled
fix 6282093 = enabled
fix 6119510 = enabled
fix 6119382 = enabled
fix 3801750 = enabled
fix 5705630 = disabled
fix 5944076 = enabled

fix 5406763 = enabled
fix 6070954 = enabled
fix 6282944 = enabled
fix 6138746 = enabled
fix 6082745 = enabled
fix 3426050 = enabled
fix 599680 = enabled
fix 6062266 = enabled
fix 6087237 = enabled
fix 6122894 = enabled
fix 6377505 = enabled
fix 5893768 = enabled
fix 6163564 = enabled
fix 6073325 = enabled
fix 6188881 = enabled
fix 6007259 = enabled
fix 6239971 = enabled
fix 5284200 = disabled
fix 6042205 = enabled
fix 6051211 = enabled
fix 6434668 = enabled
fix 6438752 = enabled
fix 5936366 = enabled
fix 6439032 = enabled
fix 6438892 = enabled
fix 6006300 = enabled
fix 5947231 = enabled
fix 5416118 = 1
fix 6365442 = 1
fix 6239039 = enabled
fix 6502845 = enabled
fix 6913094 = enabled
fix 6029469 = enabled
fix 5919513 = enabled
fix 6057611 = enabled
fix 6469667 = enabled
fix 6608941 = disabled
fix 6368066 = enabled
fix 6329318 = enabled
fix 6656356 = enabled
fix 4507997 = enabled
fix 6671155 = enabled
fix 6694548 = enabled
fix 6688200 = enabled
fix 6612471 = enabled
fix 6708183 = disabled
fix 6326934 = enabled
fix 6520717 = disabled
fix 6714199 = enabled
fix 6681545 = enabled
fix 6748058 = enabled
fix 6167716 = enabled
fix 6674254 = enabled
fix 6468287 = enabled
fix 6503543 = enabled
fix 6808773 = disabled
fix 6766962 = enabled
fix 6120483 = enabled
fix 6670551 = enabled
fix 6771838 = enabled
fix 6626018 = disabled
fix 6530596 = enabled
fix 6778642 = enabled
fix 6699059 = enabled
fix 6376551 = enabled
fix 6429113 = enabled
fix 6782437 = enabled
fix 6776808 = enabled
fix 6765823 = enabled
fix 6768660 = enabled
fix 6782665 = enabled
fix 6610822 = enabled
fix 6514189 = enabled
fix 6818410 = enabled
fix 6827696 = enabled
fix 6773613 = enabled
fix 5902962 = enabled
fix 6956212 = enabled
fix 3056297 = enabled
fix 6440977 = disabled
fix 6972291 = disabled
fix 6904146 = enabled
fix 6221403 = enabled

fix 5475051 = enabled
fix 6845871 = enabled
fix 5468809 = enabled
fix 6917633 = enabled
fix 4444536 = disabled
fix 6955210 = enabled
fix 6994194 = enabled
fix 6399597 = disabled
fix 6951776 = enabled
fix 5648287 = 3
fix 6987082 = disabled
fix 7132036 = enabled
fix 6980350 = enabled
fix 5199213 = enabled
fix 7138405 = enabled
fix 7148689 = enabled
fix 6820988 = enabled
fix 7032684 = enabled
fix 6617866 = enabled
fix 7155968 = enabled
fix 7127980 = enabled
fix 6982954 = enabled
fix 7241819 = enabled
fix 6897034 = enabled
fix 7236148 = enabled
fix 7298570 = enabled
fix 7249095 = enabled
fix 7314499 = enabled
fix 7324224 = enabled
fix 7289023 = enabled
fix 7237571 = enabled
fix 7116357 = enabled
fix 7345484 = enabled
fix 7375179 = enabled
fix 6430500 = disabled
fix 5897486 = enabled
fix 6774209 = enabled
fix 7306637 = enabled
fix 6451322 = enabled
fix 7208131 = enabled
fix 7388652 = enabled
fix 7127530 = enabled
fix 6751206 = enabled
fix 6669103 = enabled
fix 7430474 = enabled
fix 6990305 = enabled
fix 7043307 = enabled
fix 6921505 = enabled
fix 7388457 = enabled
fix 3120429 = enabled
fix 7452823 = disabled
fix 6838105 = enabled
fix 6769711 = enabled
fix 7170213 = enabled
fix 6528872 = enabled
fix 7295298 = enabled
fix 5922070 = enabled
fix 7259468 = enabled
fix 6418552 = enabled
fix 4619997 = enabled
fix 7524366 = enabled
fix 6942476 = enabled
fix 6418771 = enabled
fix 7375077 = enabled
fix 5400639 = enabled
fix 4570921 = enabled
fix 7426911 = enabled
fix 5099019 = disabled
fix 7528216 = enabled
fix 7521266 = enabled
fix 7385140 = enabled
fix 7576516 = enabled
fix 7573526 = enabled
fix 7576476 = enabled
fix 7165898 = enabled
fix 7263214 = enabled
fix 3320140 = enabled
fix 7555510 = enabled
fix 7613118 = enabled
fix 7597059 = enabled
fix 7558911 = enabled
fix 5520732 = enabled
fix 7679490 = disabled

fix 7449971 = enabled
fix 3628118 = enabled
fix 4370840 = enabled
fix 7281191 = enabled
fix 7519687 = enabled
fix 5029592 = 3
fix 6012093 = 1
fix 6053861 = disabled
fix 6941515 = disabled
fix 7696414 = enabled
fix 7272039 = enabled
fix 7834811 = enabled
fix 7640597 = enabled
fix 7341616 = enabled
fix 7168184 = enabled
fix 399198 = enabled
fix 7831070 = enabled
fix 7676897 = disabled
fix 7414637 = enabled
fix 7585456 = enabled
fix 8202421 = enabled
fix 7658097 = disabled
fix 8251486 = enabled
fix 7132684 = enabled
fix 7512227 = enabled
fix 6972987 = enabled
fix 7199035 = enabled
fix 8243446 = enabled
fix 7650462 = enabled
fix 6720701 = enabled
fix 7592673 = enabled
fix 7718694 = enabled
fix 7534027 = enabled
fix 7708267 = enabled
fix 5716785 = enabled
fix 7356191 = enabled
fix 7679161 = enabled
fix 7597159 = enabled
fix 7499258 = enabled
fix 8328363 = enabled
fix 7452863 = enabled
fix 8284930 = enabled
fix 7298626 = enabled
fix 7657126 = enabled
fix 8371884 = enabled
fix 8318020 = enabled
fix 8255423 = enabled
fix 7135745 = enabled
fix 8356253 = enabled
fix 7534257 = enabled
fix 8323407 = enabled
fix 7539815 = enabled
fix 8289316 = enabled
fix 8447850 = enabled
fix 7675944 = enabled
fix 8355120 = enabled
fix 7176746 = enabled
fix 8442891 = enabled
fix 8373261 = enabled
fix 7679164 = enabled
fix 7670533 = enabled
fix 8408665 = enabled
fix 8491399 = enabled
fix 8348392 = enabled
fix 8348585 = enabled
fix 8508056 = enabled
fix 8335178 = enabled
fix 8515269 = enabled
fix 8247017 = enabled
fix 7325597 = enabled
fix 8531490 = enabled
fix 6163600 = enabled
fix 8589278 = disabled
fix 8557992 = enabled
fix 7556098 = enabled
fix 8580883 = enabled
fix 5892599 = disabled
fix 8609714 = enabled
fix 8514561 = enabled
fix 8619631 = disabled

```

PARAMETERS IN OPT_PARAM HINT
*****
*****
Column Usage Monitoring is ON: tracking level = 1
*****

Considering Query Transformations on query block SEL$1 (#0)
*****
Query transformations (QT)
*****
JF: Checking validity of join factorization for query block SEL$1 (#0)
JF: Bypassed: not a UNION or UNION-ALL query block.
ST: not valid since star transformation parameter is FALSE
TE: Checking validity of table expansion for query block SEL$1 (#0)
TE: Bypassed: No partitioned table in query block.
CBQT bypassed for query block SEL$1 (#0): no complex view, sub-queries or UNION (ALL) queries.
CBQT: Validity checks failed for a438a7lu2vbd8.
CSE: Considering common sub-expression elimination in query block SEL$1 (#0)
*****
Common Subexpression elimination (CSE)
*****
CSE: CSE not performed on query block SEL$1 (#0).
OBYE: Considering Order-by Elimination from view SEL$1 (#0)
*****
Order-by elimination (OBYE)
*****
OBYE: OBYE bypassed: no order by to eliminate.
CVM: Considering view merge in query block SEL$1 (#0)
query block SEL$1 (#0) unchanged
Considering Query Transformations on query block SEL$1 (#0)
*****
Query transformations (QT)
*****
JF: Checking validity of join factorization for query block SEL$1 (#0)
JF: Bypassed: not a UNION or UNION-ALL query block.
ST: not valid since star transformation parameter is FALSE
TE: Checking validity of table expansion for query block SEL$1 (#0)
TE: Bypassed: No partitioned table in query block.
CBQT bypassed for query block SEL$1 (#0): no complex view, sub-queries or UNION (ALL) queries.
CBQT: Validity checks failed for a438a7lu2vbd8.
CSE: Considering common sub-expression elimination in query block SEL$1 (#0)
*****
Common Subexpression elimination (CSE)
*****
CSE: CSE not performed on query block SEL$1 (#0).
SU: Considering subquery unnesting in query block SEL$1 (#0)
*****
Subquery Unnest (SU)
*****
SJC: Considering set-join conversion in query block SEL$1 (#0)
*****
Set-Join Conversion (SJC)
*****
SJC: not performed
PM: Considering predicate move-around in query block SEL$1 (#0)
*****
Predicate Move-Around (PM)
*****
PM: PM bypassed: Outer query contains no views.
PM: PM bypassed: Outer query contains no views.
query block SEL$1 (#0) unchanged
FPD: Considering simple filter push in query block SEL$1 (#0)
TO_NUMBER("T1"."CHAR_COL")=10
try to generate transitive predicate from check constraints for query block SEL$1 (#0)
finally: TO_NUMBER("T1"."CHAR_COL")=10

apadrvt-start sqlid=11677000646425161128
:
call(in-use=604, alloc=16360), compile(in-use=50668, alloc=54408), execution(in-use=1448, alloc=4060)
*****
Peeked values of the binds in SQL statement
*****

Final query after transformations:***** UNPARSED QUERY IS *****
SELECT "T1"."CHAR_COL" "CHAR_COL","T1"."C2" "C2" FROM "TESTUSER"."T1" "T1" WHERE TO_NUMBER("T1"."CHAR_COL")=10
kkoqbc: optimizing query block SEL$1 (#0)

:
call(in-use=632, alloc=16360), compile(in-use=51312, alloc=54408), execution(in-use=1448, alloc=4060)

kkoqbc-subheap (create addr=0x0E56FB38)
*****

```

```
QUERY BLOCK TEXT
*****
SELECT /* FIND_ME */
*
FROM
  T1
WHERE
  CHAR_COL = 10
-----
```

QUERY BLOCK SIGNATURE

```
signature (optimizer): qb_name=SEL$1 nbfros=1 flg=0
fro(0): flg=0 objn=70879 hint_alias="T1"@SEL$1"
-----
```

SYSTEM STATISTICS INFORMATION

```
-----
Using NOWORKLOAD Stats
CPUSPEEDNW: 466 millions instructions/sec (default is 100)
IOTFRSPEED: 4096 bytes per millisecond (default is 4096)
IOSEEKTIM: 10 milliseconds (default is 10)
MBRC: -1 blocks (default is 8)
-----
```

BASE STATISTICAL INFORMATION

Table Stats::

```
Table: T1 Alias: T1
#Rows: 1000000 #Blks: 16217 AvgRowLen: 108.00
```

Index Stats::

```
Index: SYS_C0010157 Col#: 1
LVLS: 2 #LB: 3908 #DK: 1000000 LB/K: 1.00 DB/K: 1.00 CLUF: 201245.00
```

Access path analysis for T1

SINGLE TABLE ACCESS PATH

Single Table Cardinality Estimation for T1[T1]

```
Table: T1 Alias: T1
Card: Original: 1000000.000000 Rounded: 1 Computed: 1.00 Non Adjusted: 1.00
```

Access Path: TableScan

```
Cost: 4450.40 Resp: 4450.40 Degree: 0
```

```
Cost_io: 4394.00 Cost_cpu: 315488412
```

```
Resp_io: 4394.00 Resp_cpu: 315488412
```

Best:: AccessPath: TableScan

```
Cost: 4450.40 Degree: 1 Resp: 4450.40 Card: 1.00 Bytes: 0
```

OPTIMIZER STATISTICS AND COMPUTATIONS

GENERAL PLANS

Considering cardinality-based initial join order.

Permutations for Starting Table :0

Join order[1]: T1[T1]#0

Best so far: Table#: 0 cost: 4450.4013 card: 1.0000 bytes: 108

(newjo-stop-1) k:0, spcnt:0, perm:1, maxperm:2000

Number of join permutations tried: 1

Trying or-Expansion on query block SEL\$1 (#0)

Transfer Optimizer annotations for query block SEL\$1 (#0)

id=0 frofand predicate=TO_NUMBER("T1"."CHAR_COL")=10

Final cost for query block SEL\$1 (#0) - All Rows Plan:

Best join order: 1

```
Cost: 4450.4013 Degree: 1 Card: 1.0000 Bytes: 108
```

```
Resc: 4450.4013 Resc_io: 4394.0000 Resc_cpu: 315488412
```

```
Resp: 4450.4013 Resp_io: 4394.0000 Resp_cpu: 315488412
```

kkoqbc-subheap (delete addr=0x0E56FB38, in-use=11524, alloc=14128)

kkoqbc-end:

:

```
call(in-use=7324, alloc=32736), compile(in-use=51924, alloc=54408), execution(in-use=1448, alloc=4060)
```

kkoqbc: finish optimizing query block SEL\$1 (#0)

apadr-end

:

```
call(in-use=7324, alloc=32736), compile(in-use=52572, alloc=54408), execution(in-use=1448, alloc=4060)
```

Starting SQL statement dump

```

user_id=65 user_name=TESTUSER module=SQL*Plus action=
sql_id=a438a71u2vbd8 plan_hash_value=-677275283 problem_type=3
----- Current SQL Statement for this session (sql_id=a438a71u2vbd8) -----
SELECT /* FIND_ME */
*
FROM
  T1
WHERE
  CHAR_COL = 10
sql_text_length=57
sql=SELECT /* FIND_ME */
*
FROM
  T1
WHERE
  CHAR_COL = 10
----- Explain Plan Dump -----
----- Plan Table -----

```

```

=====
Plan Table
=====

```

Id	Operation	Name	Rows	Bytes	Cost	Time
0	SELECT STATEMENT				4450	
1	TABLE ACCESS FULL	T1	1	108	4450	00:00:54

Predicate Information:

```

1 - filter(TO_NUMBER("CHAR_COL")=10)

```

Content of other_xml column

```

=====
db_version      : 11.2.0.1
parse_schema    : TESTUSER
plan_hash       : 3617692013
plan_hash_2     : 3688435342
Outline Data:

```

```

/*+
  BEGIN_OUTLINE_DATA
    IGNORE_OPTIM_EMBEDDED_HINTS
    OPTIMIZER_FEATURES_ENABLE('11.2.0.1')
    DB_VERSION('11.2.0.1')
    ALL_ROWS
    OUTLINE_LEAF(@"SEL$1")
    FULL(@"SEL$1" "T1"@"SEL$1")
  END_OUTLINE_DATA
*/

```

Optimizer state dump:

```

Compilation Environment Dump
optimizer_mode_hinted           = false
optimizer_features_hinted      = 0.0.0
parallel_execution_enabled     = false
parallel_query_forced_dop      = 0
parallel_dml_forced_dop        = 0
parallel_ddl_forced_degree     = 0
parallel_ddl_forced_instances  = 0
_query_rewrite_fudge           = 90
optimizer_features_enable      = 11.2.0.1
_optimizer_search_limit        = 5
cpu_count                       = 2
active_instance_count          = 1
parallel_threads_per_cpu       = 2
hash_area_size                 = 131072
bitmap_merge_area_size        = 1048576
sort_area_size                 = 65536
sort_area_retained_size        = 0
_sort_elimination_cost_ratio   = 0
_optimizer_block_size          = 8192
_sort_multiblock_read_count    = 2
_hash_multiblock_io_count      = 0
_db_file_optimizer_read_count  = 8
_optimizer_max_permutations    = 2000
pga_aggregate_target           = 143360 KB
_pga_max_size                  = 204800 KB
_query_rewrite_maxdisjunct     = 257
_smm_auto_min_io_size         = 56 KB
_smm_auto_max_io_size         = 248 KB
_smm_min_size                  = 143 KB
_smm_max_size                  = 28672 KB

```

_smm_px_max_size = 71680 KB
_cpu_to_io = 0
_optimizer_undo_cost_change = 11.2.0.1
parallel_query_mode = enabled
parallel_dml_mode = disabled
parallel_ddl_mode = enabled
optimizer_mode = all_rows
sqlstat_enabled = false
_optimizer_percent_parallel = 101
_always_anti_join = choose
_always_semi_join = choose
_optimizer_mode_force = true
_partition_view_enabled = true
_always_star_transformation = false
_query_rewrite_or_error = false
_hash_join_enabled = true
cursor_sharing = exact
_b_tree_bitmap_plans = true
star_transformation_enabled = false
_optimizer_cost_model = choose
_new_sort_cost_estimate = true
_complex_view_merging = true
_unnest_subquery = true
_eliminate_common_subexpr = true
_pred_move_around = true
_convert_set_to_join = false
_push_join_predicate = true
_push_join_union_view = true
_fast_full_scan_enabled = true
_optim_enhance_nnull_detection = true
_parallel_broadcast_enabled = true
_px_broadcast_fudge_factor = 100
_ordered_nested_loop = true
_no_or_expansion = false
optimizer_index_cost_adj = 100
optimizer_index_caching = 0
_system_index_caching = 0
_disable_datalayer_sampling = false
query_rewrite_enabled = true
query_rewrite_integrity = enforced
_query_cost_rewrite = true
_query_rewrite_2 = true
_query_rewrite_1 = true
_query_rewrite_expression = true
_query_rewrite_jmigrate = true
_query_rewrite_fpc = true
_query_rewrite_drj = true
_full_pwise_join_enabled = true
_partial_pwise_join_enabled = true
_left_nested_loops_random = true
_improved_row_length_enabled = true
_index_join_enabled = true
_enable_type_dep_selectivity = true
_improved_outerjoin_card = true
_optimizer_adjust_for_nulls = true
_optimizer_degree = 0
_use_column_stats_for_function = true
_subquery_pruning_enabled = true
_subquery_pruning_mv_enabled = false
_or_expand_nvl_predicate = true
_like_with_bind_as_equality = false
_table_scan_cost_plus_one = true
_cost_equality_semi_join = true
_default_non_equality_sel_check = true
_new_initial_join_orders = true
_oneside_colstat_for_equijoins = true
_optim_peek_user_binds = true
_minimal_stats_aggregation = true
_force_temptables_for_gsets = false
workarea_size_policy = auto
_smm_auto_cost_enabled = true
_gs_anti_semi_join_allowed = true
_optim_new_default_join_sel = true
optimizer_dynamic_sampling = 2
_pre_rewrite_push_pred = true
_optimizer_new_join_card_computation = true
_union_rewrite_for_gs = yes_gset_mvms
_generalized_pruning_enabled = true
_optim_adjust_for_part_skews = true
_force_datefold_trunc = false
statistics_level = typical
_optimizer_system_stats_usage = true
skip_unusable_indexes = true

_remove_aggr_subquery = true
_optimizer_push_down_distinct = 0
_dml_monitoring_enabled = true
_optimizer_undo_changes = false
_predicate_elimination_enabled = true
_nested_loop_fudge = 100
_project_view_columns = true
_local_communication_costing_enabled = true
_local_communication_ratio = 50
_query_rewrite_vop_cleanup = true
_slave_mapping_enabled = true
_optimizer_cost_based_transformation = linear
_optimizer_mjc_enabled = true
_right_outer_hash_enable = true
_spr_push_pred_refspr = true
_optimizer_cache_stats = false
_optimizer_cbqt_factor = 50
_optimizer_squ_bottomup = true
_fic_area_size = 131072
_optimizer_skip_scan_enabled = true
_optimizer_cost_filter_pred = false
_optimizer_sortmerge_join_enabled = true
_optimizer_join_sel_sanitary_check = true
_mmv_query_rewrite_enabled = true
_bt_mmv_query_rewrite_enabled = true
_add_stale_mv_to_dependency_list = true
_distinct_view_unnesting = false
_optimizer_dim_subq_join_sel = true
_optimizer_disable_strans_sanitary_checks = 0
_optimizer_compute_index_stats = true
_push_join_union_view2 = true
_optimizer_ignore_hints = false
_optimizer_random_plan = 0
_query_rewrite_setopgrw_enable = true
_optimizer_correct_sq_selectivity = true
_disable_function_based_index = false
_optimizer_join_order_control = 3
_optimizer_cartesian_enabled = true
_optimizer_starplan_enabled = true
_extended_pruning_enabled = true
_optimizer_push_pred_cost_based = true
_optimizer_null_aware_antijoin = true
_optimizer_extend_jppd_view_types = true
_sql_model_unfold_forloops = run_time
_enable_dml_lock_escalation = false
_bloom_filter_enabled = true
_update_bji_ipdml_enabled = 0
_optimizer_extended_cursor_sharing = udo
_dm_max_shared_pool_pct = 1
_optimizer_cost_hjsmj_multimatch = true
_optimizer_transitivity_retain = true
_px_pwg_enabled = true
optimizer_secure_view_merging = true
_optimizer_join_elimination_enabled = true
flashback_table_rpi = non_fbt
_optimizer_cbqt_no_size_restriction = true
_optimizer_enhanced_filter_push = true
_optimizer_filter_pred_pullup = true
_rowsrc_trace_level = 0
_simple_view_merging = true
_optimizer_rownum_pred_based_fkr = true
_optimizer_better_inlist_costing = all
_optimizer_self_induced_cache_cost = false
_optimizer_min_cache_blocks = 10
_optimizer_or_expansion = depth
_optimizer_order_by_elimination_enabled = true
_optimizer_outer_to_anti_enabled = true
_selfjoin_mv_duplicates = true
_dimension_skip_null = true
_force_rewrite_enable = false
_optimizer_star_tran_in_with_clause = true
_optimizer_complex_pred_selectivity = true
_optimizer_connect_by_cost_based = true
_gby_hash_aggregation_enabled = true
_globalindex_pnum_filter_enabled = true
_px_minus_intersect = true
_fix_control_key = 0
_force_slave_mapping_intra_part_loads = false
_force_tmp_segment_loads = false
_query_mmvrewrite_maxpreds = 10
_query_mmvrewrite_maxintervals = 5
_query_mmvrewrite_maxinlists = 5
_query_mmvrewrite_maxdmaps = 10

_query_mmvrewrite_maxcmaps = 20
_query_mmvrewrite_maxregperm = 512
_query_mmvrewrite_maxmergedcmaps = 50
_query_mmvrewrite_maxqryinlistvals = 500
_disable_parallel_conventional_load = false
_trace_virtual_columns = false
_replace_virtual_columns = true
_virtual_column_overload_allowed = true
_kdt_buffering = true
_first_k_rows_dynamic_proration = true
_optimizer_sortmerge_join_inequality = true
_optimizer_aw_stats_enabled = true
_bloom_pruning_enabled = true
result_cache_mode = MANUAL
_px_ual_serial_input = true
_optimizer_skip_scan_guess = false
_enable_row_shipping = true
_row_shipping_threshold = 80
_row_shipping_explain = false
transaction_isolation_level = read_committed
_optimizer_distinct_elimination = true
_optimizer_multi_level_push_pred = true
_optimizer_group_by_placement = true
_optimizer_rownum_bind_default = 10
_enable_query_rewrite_on_remote_objs = true
_optimizer_extended_cursor_sharing_rel = simple
_optimizer_adaptive_cursor_sharing = true
_direct_path_insert_features = 0
_optimizer_improve_selectivity = true
optimizer_use_pending_statistics = false
_optimizer_enable_density_improvements = true
_optimizer_aw_join_push_enabled = true
_optimizer_connect_by_combine_sw = true
_enable_pmo_ctas = 0
_optimizer_native_full_outer_join = force
_bloom_predicate_enabled = true
_optimizer_enable_extended_stats = true
_is_lock_table_for_ddl_wait_lock = 0
_pivot_implementation_method = choose
optimizer_capture_sql_plan_baselines = false
optimizer_use_sql_plan_baselines = true
_optimizer_star_trans_min_cost = 0
_optimizer_star_trans_min_ratio = 0
_with_subquery = OPTIMIZER
_optimizer_fkr_index_cost_bias = 10
_optimizer_use_subheap = true
parallel_degree_policy = manual
parallel_degree = 0
parallel_min_time_threshold = 10
_parallel_time_unit = 10
_optimizer_or_expansion_subheap = true
_optimizer_free_transformation_heap = true
_optimizer_reuse_cost_annotations = true
_result_cache_auto_size_threshold = 100
_result_cache_auto_time_threshold = 1000
_optimizer_nested_rollup_for_gset = 100
_nlj_batching_enabled = 1
parallel_query_default_dop = 0
is_recur_flags = 0
optimizer_use_invisible_indexes = false
flashback_data_archive_internal_cursor = 0
_optimizer_extended_stats_usage_control = 224
_parallel_syspls_obey_force = true
cell_offload_processing = true
_rdbms_internal_fplib_enabled = false
db_file_multiblock_read_count = 46
_bloom_folding_enabled = true
_mv_generalized_oj_refresh_opt = true
cell_offload_compaction = ADAPTIVE
parallel_degree_limit = 65535
parallel_force_local = false
parallel_max_degree = 4
total_cpu_count = 2
cell_offload_plan_display = AUTO
_optimizer_coalesce_subqueries = true
_optimizer_fast_pred_transitivity = true
_optimizer_fast_access_pred_analysis = true
_optimizer_unnest_disjunctive_subq = true
_optimizer_unnest_corr_set_subq = true
_optimizer_distinct_agg_transform = true
_aggregation_optimization_settings = 0
_optimizer_connect_by_elim_dups = true
_optimizer_eliminate_filtering_join = true

_connect_by_use_union_all = true
dst_upgrade_insert_conv = true
advanced_queuing_internal_cursor = 0
_optimizer_unnest_all_subqueries = true
_bloom_predicate_pushdown_to_storage = true
_bloom_vector_elements = 0
_bloom_pushing_max = 524288
parallel_autodop = 0
parallel_ddldml = 0
_parallel_cluster_cache_policy = adaptive
_parallel_scalability = 50
iot_internal_cursor = 0
_optimizer_instance_count = 0
_optimizer_connect_by_cb_whr_only = false
_suppress_scn_chk_for_cqn = nosuppress_1466
_optimizer_join_factorization = true
_optimizer_use_cbqt_star_transformation = true
_optimizer_table_expansion = true
_and_pruning_enabled = true
_deferred_constant_folding_mode = DEFAULT
_optimizer_distinct_placement = true
partition_pruning_internal_cursor = 0
parallel_hinted = none
_sql_compatibility = 0
_optimizer_use_feedback = true
_optimizer_try_st_before_jppd = true

Bug Fix Control Environment

fix 3834770 = 1
fix 3746511 = enabled
fix 4519016 = enabled
fix 3118776 = enabled
fix 4488689 = enabled
fix 2194204 = disabled
fix 2660592 = enabled
fix 2320291 = enabled
fix 2324795 = enabled
fix 4308414 = enabled
fix 3499674 = disabled
fix 4569940 = enabled
fix 4631959 = enabled
fix 4519340 = enabled
fix 4550003 = enabled
fix 1403283 = enabled
fix 4554846 = enabled
fix 4602374 = enabled
fix 4584065 = enabled
fix 4545833 = enabled
fix 4611850 = enabled
fix 4663698 = enabled
fix 4663804 = enabled
fix 4666174 = enabled
fix 4567767 = enabled
fix 4556762 = 15
fix 4728348 = enabled
fix 4708389 = enabled
fix 4175830 = enabled
fix 4752814 = enabled
fix 4583239 = enabled
fix 4386734 = enabled
fix 4887636 = enabled
fix 4483240 = enabled
fix 4872602 = disabled
fix 4711525 = enabled
fix 4545802 = enabled
fix 4605810 = enabled
fix 4704779 = enabled
fix 4900129 = enabled
fix 4924149 = enabled
fix 4663702 = enabled
fix 4878299 = enabled
fix 4658342 = enabled
fix 4881533 = enabled
fix 4676955 = enabled
fix 4273361 = enabled
fix 4967068 = enabled
fix 4969880 = disabled
fix 5005866 = enabled
fix 5015557 = enabled
fix 4705343 = enabled
fix 4904838 = enabled
fix 4716096 = enabled
fix 4483286 = disabled
fix 4722900 = enabled

fix 4615392 = enabled
fix 5096560 = enabled
fix 5029464 = enabled
fix 4134994 = enabled
fix 4904890 = enabled
fix 5104624 = enabled
fix 5014836 = enabled
fix 4768040 = enabled
fix 4600710 = enabled
fix 5129233 = enabled
fix 4595987 = enabled
fix 4908162 = enabled
fix 5139520 = enabled
fix 5084239 = enabled
fix 5143477 = disabled
fix 2663857 = enabled
fix 4717546 = enabled
fix 5240264 = disabled
fix 5099909 = enabled
fix 5240607 = enabled
fix 5195882 = enabled
fix 5220356 = enabled
fix 5263572 = enabled
fix 5385629 = enabled
fix 5302124 = enabled
fix 5391942 = enabled
fix 5384335 = enabled
fix 5482831 = enabled
fix 4158812 = enabled
fix 5387148 = enabled
fix 5383891 = enabled
fix 5466973 = enabled
fix 5396162 = enabled
fix 5394888 = enabled
fix 5395291 = enabled
fix 5236908 = enabled
fix 5509293 = enabled
fix 5449488 = enabled
fix 5567933 = enabled
fix 5570494 = enabled
fix 5288623 = enabled
fix 5505995 = enabled
fix 5505157 = enabled
fix 5112460 = enabled
fix 5554865 = enabled
fix 5112260 = enabled
fix 5112352 = enabled
fix 5547058 = enabled
fix 5618040 = enabled
fix 5585313 = enabled
fix 5547895 = enabled
fix 5634346 = enabled
fix 5620485 = enabled
fix 5483301 = enabled
fix 5657044 = enabled
fix 5694984 = enabled
fix 5868490 = enabled
fix 5650477 = enabled
fix 5611962 = enabled
fix 4279274 = enabled
fix 5741121 = enabled
fix 5714944 = enabled
fix 5391505 = enabled
fix 5762598 = enabled
fix 5578791 = enabled
fix 5259048 = enabled
fix 5882954 = enabled
fix 2492766 = enabled
fix 5707608 = enabled
fix 5891471 = enabled
fix 5884780 = enabled
fix 5680702 = enabled
fix 5371452 = enabled
fix 5838613 = enabled
fix 5949981 = enabled
fix 5624216 = enabled
fix 5741044 = enabled
fix 5976822 = enabled
fix 6006457 = enabled
fix 5872956 = enabled
fix 5923644 = enabled
fix 5943234 = enabled
fix 5844495 = enabled

fix 4168080 = enabled
fix 6020579 = enabled
fix 5842686 = disabled
fix 5996801 = enabled
fix 5593639 = enabled
fix 6133948 = enabled
fix 3151991 = enabled
fix 6146906 = enabled
fix 6239909 = enabled
fix 6267621 = enabled
fix 5909305 = enabled
fix 6279918 = enabled
fix 6141818 = enabled
fix 6151963 = enabled
fix 6251917 = enabled
fix 6282093 = enabled
fix 6119510 = enabled
fix 6119382 = enabled
fix 3801750 = enabled
fix 5705630 = disabled
fix 5944076 = enabled
fix 5406763 = enabled
fix 6070954 = enabled
fix 6282944 = enabled
fix 6138746 = enabled
fix 6082745 = enabled
fix 3426050 = enabled
fix 599680 = enabled
fix 6062266 = enabled
fix 6087237 = enabled
fix 6122894 = enabled
fix 6377505 = enabled
fix 5893768 = enabled
fix 6163564 = enabled
fix 6073325 = enabled
fix 6188881 = enabled
fix 6007259 = enabled
fix 6239971 = enabled
fix 5284200 = disabled
fix 6042205 = enabled
fix 6051211 = enabled
fix 6434668 = enabled
fix 6438752 = enabled
fix 5936366 = enabled
fix 6439032 = enabled
fix 6438892 = enabled
fix 6006300 = enabled
fix 5947231 = enabled
fix 5416118 = 1
fix 6365442 = 1
fix 6239039 = enabled
fix 6502845 = enabled
fix 6913094 = enabled
fix 6029469 = enabled
fix 5919513 = enabled
fix 6057611 = enabled
fix 6469667 = enabled
fix 6608941 = disabled
fix 6368066 = enabled
fix 6329318 = enabled
fix 6656356 = enabled
fix 4507997 = enabled
fix 6671155 = enabled
fix 6694548 = enabled
fix 6688200 = enabled
fix 6612471 = enabled
fix 6708183 = disabled
fix 6326934 = enabled
fix 6520717 = disabled
fix 6714199 = enabled
fix 6681545 = enabled
fix 6748058 = enabled
fix 6167716 = enabled
fix 6674254 = enabled
fix 6468287 = enabled
fix 6503543 = enabled
fix 6808773 = disabled
fix 6766962 = enabled
fix 6120483 = enabled
fix 6670551 = enabled
fix 6771838 = enabled
fix 6626018 = disabled
fix 6530596 = enabled

fix 6778642 = enabled
fix 6699059 = enabled
fix 6376551 = enabled
fix 6429113 = enabled
fix 6782437 = enabled
fix 6776808 = enabled
fix 6765823 = enabled
fix 6768660 = enabled
fix 6782665 = enabled
fix 6610822 = enabled
fix 6514189 = enabled
fix 6818410 = enabled
fix 6827696 = enabled
fix 6773613 = enabled
fix 5902962 = enabled
fix 6956212 = enabled
fix 3056297 = enabled
fix 6440977 = disabled
fix 6972291 = disabled
fix 6904146 = enabled
fix 6221403 = enabled
fix 5475051 = enabled
fix 6845871 = enabled
fix 5468809 = enabled
fix 6917633 = enabled
fix 4444536 = disabled
fix 6955210 = enabled
fix 6994194 = enabled
fix 6399597 = disabled
fix 6951776 = enabled
fix 5648287 = 3
fix 6987082 = disabled
fix 7132036 = enabled
fix 6980350 = enabled
fix 5199213 = enabled
fix 7138405 = enabled
fix 7148689 = enabled
fix 6820988 = enabled
fix 7032684 = enabled
fix 6617866 = enabled
fix 7155968 = enabled
fix 7127980 = enabled
fix 6982954 = enabled
fix 7241819 = enabled
fix 6897034 = enabled
fix 7236148 = enabled
fix 7298570 = enabled
fix 7249095 = enabled
fix 7314499 = enabled
fix 7324224 = enabled
fix 7289023 = enabled
fix 7237571 = enabled
fix 7116357 = enabled
fix 7345484 = enabled
fix 7375179 = enabled
fix 6430500 = disabled
fix 5897486 = enabled
fix 6774209 = enabled
fix 7306637 = enabled
fix 6451322 = enabled
fix 7208131 = enabled
fix 7388652 = enabled
fix 7127530 = enabled
fix 6751206 = enabled
fix 6669103 = enabled
fix 7430474 = enabled
fix 6990305 = enabled
fix 7043307 = enabled
fix 6921505 = enabled
fix 7388457 = enabled
fix 3120429 = enabled
fix 7452823 = disabled
fix 6838105 = enabled
fix 6769711 = enabled
fix 7170213 = enabled
fix 6528872 = enabled
fix 7295298 = enabled
fix 5922070 = enabled
fix 7259468 = enabled
fix 6418552 = enabled
fix 4619997 = enabled
fix 7524366 = enabled
fix 6942476 = enabled

fix 6418771 = enabled
fix 7375077 = enabled
fix 5400639 = enabled
fix 4570921 = enabled
fix 7426911 = enabled
fix 5099019 = disabled
fix 7528216 = enabled
fix 7521266 = enabled
fix 7385140 = enabled
fix 7576516 = enabled
fix 7573526 = enabled
fix 7576476 = enabled
fix 7165898 = enabled
fix 7263214 = enabled
fix 3320140 = enabled
fix 7555510 = enabled
fix 7613118 = enabled
fix 7597059 = enabled
fix 7558911 = enabled
fix 5520732 = enabled
fix 7679490 = disabled
fix 7449971 = enabled
fix 3628118 = enabled
fix 4370840 = enabled
fix 7281191 = enabled
fix 7519687 = enabled
fix 5029592 = 3
fix 6012093 = 1
fix 6053861 = disabled
fix 6941515 = disabled
fix 7696414 = enabled
fix 7272039 = enabled
fix 7834811 = enabled
fix 7640597 = enabled
fix 7341616 = enabled
fix 7168184 = enabled
fix 399198 = enabled
fix 7831070 = enabled
fix 7676897 = disabled
fix 7414637 = enabled
fix 7585456 = enabled
fix 8202421 = enabled
fix 7658097 = disabled
fix 8251486 = enabled
fix 7132684 = enabled
fix 7512227 = enabled
fix 6972987 = enabled
fix 7199035 = enabled
fix 8243446 = enabled
fix 7650462 = enabled
fix 6720701 = enabled
fix 7592673 = enabled
fix 7718694 = enabled
fix 7534027 = enabled
fix 7708267 = enabled
fix 5716785 = enabled
fix 7356191 = enabled
fix 7679161 = enabled
fix 7597159 = enabled
fix 7499258 = enabled
fix 8328363 = enabled
fix 7452863 = enabled
fix 8284930 = enabled
fix 7298626 = enabled
fix 7657126 = enabled
fix 8371884 = enabled
fix 8318020 = enabled
fix 8255423 = enabled
fix 7135745 = enabled
fix 8356253 = enabled
fix 7534257 = enabled
fix 8323407 = enabled
fix 7539815 = enabled
fix 8289316 = enabled
fix 8447850 = enabled
fix 7675944 = enabled
fix 8355120 = enabled
fix 7176746 = enabled
fix 8442891 = enabled
fix 8373261 = enabled
fix 7679164 = enabled
fix 7670533 = enabled
fix 8408665 = enabled

fix 8491399 = enabled
fix 8348392 = enabled
fix 8348585 = enabled
fix 8508056 = enabled
fix 8335178 = enabled
fix 8515269 = enabled
fix 8247017 = enabled
fix 7325597 = enabled
fix 8531490 = enabled
fix 6163600 = enabled
fix 8589278 = disabled
fix 8557992 = enabled
fix 7556098 = enabled
fix 8580883 = enabled
fix 5892599 = disabled
fix 8609714 = enabled
fix 8514561 = enabled
fix 8619631 = disabled

Query Block Registry:

SEL\$1 0xe56362c (PARSER) [FINAL]

:
call(in-use=9340, alloc=32736), compile(in-use=70492, alloc=131992), execution(in-use=3480, alloc=4060)

End of Optimizer State Dump

Dumping Hints

=====

===== END SQL Statement Dump =====

Registered qb: SEL\$1 0x2748c7bc (PARSER)

QUERY BLOCK SIGNATURE

signature (): qb_name=SEL\$1 nbfros=1 flg=0
fro(0): flg=4 objn=70879 hint_alias="T1"@"SEL\$1"

SPM: current statement disallowed

Automatic degree of parallelism (ADOP)

Automatic degree of parallelism is disabled: statement type.

PM: Considering predicate move-around in query block SEL\$1 (#0)

Predicate Move-Around (PM)

OPTIMIZER INFORMATION

----- Current SQL Statement for this session (sql_id=6r74u9wtgmjgp) -----

EXPLAIN PLAN SET STATEMENT_ID='PLUS140864' FOR SELECT /* FIND_ME */

*

FROM

T1

WHERE

CHAR_COL = 10

Legend

The following abbreviations are used by optimizer trace.

CBQT - cost-based query transformation

JPPD - join predicate push-down

OJPPD - old-style (non-cost-based) JPPD

FPD - filter push-down

PM - predicate move-around

CVM - complex view merging

SPJ - select-project-join

SJC - set join conversion

SU - subquery unnesting

OBYE - order by elimination

OST - old style star transformation

ST - new (cbqt) star transformation

CNT - count(col) to count(*) transformation

JE - Join Elimination

JF - join factorization

SLP - select list pruning

DP - distinct placement

qb - query block

LB - leaf blocks

DK - distinct keys

LB/K - average number of leaf blocks per key

DB/K - average number of data blocks per key

CLUF - clustering factor
NDV - number of distinct values
Resp - response cost
Card - cardinality
Resc - resource cost
NL - nested loops (join)
SM - sort merge (join)
HA - hash (join)
CPUSPEED - CPU Speed
IOTFRSPEED - I/O transfer speed
IOSEKTIM - I/O seek time
SREADTIM - average single block read time
MREADTIM - average multiblock read time
MBRC - average multiblock read count
MAXTHR - maximum I/O system throughput
SLAVETHR - average slave I/O throughput
dmeth - distribution method
1: no partitioning required
2: value partitioned
4: right is random (round-robin)
128: left is random (round-robin)
8: broadcast right and partition left
16: broadcast left and partition right
32: partition left using partitioning of right
64: partition right using partitioning of left
256: run the join in serial
0: invalid distribution method

sel - selectivity

ptn - partition

PARAMETERS USED BY THE OPTIMIZER

PARAMETERS WITH ALTERED VALUES

Compilation Environment Dump

Bug Fix Control Environment

PARAMETERS WITH DEFAULT VALUES

Compilation Environment Dump

optimizer_mode_hinted = false
optimizer_features_hinted = 0.0.0
parallel_execution_enabled = false
parallel_query_forced_dop = 0
parallel_dml_forced_dop = 0
parallel_ddl_forced_degree = 0
parallel_ddl_forced_instances = 0
_query_rewrite_fudge = 90
optimizer_features_enable = 11.2.0.1
_optimizer_search_limit = 5
cpu_count = 2
active_instance_count = 1
parallel_threads_per_cpu = 2
hash_area_size = 131072
bitmap_merge_area_size = 1048576
sort_area_size = 65536
sort_area_retained_size = 0
_sort_elimination_cost_ratio = 0
_optimizer_block_size = 8192
_sort_multiblock_read_count = 2
_hash_multiblock_io_count = 0
_db_file_optimizer_read_count = 8
_optimizer_max_permutations = 2000
pga_aggregate_target = 143360 KB
_pga_max_size = 204800 KB
_query_rewrite_maxdisjunct = 257
_smm_auto_min_io_size = 56 KB
_smm_auto_max_io_size = 248 KB
_smm_min_size = 143 KB
_smm_max_size = 28672 KB
_smm_px_max_size = 71680 KB
_cpu_to_io = 0
_optimizer_undo_cost_change = 11.2.0.1
parallel_query_mode = enabled
parallel_dml_mode = disabled
parallel_ddl_mode = enabled
optimizer_mode = all_rows
sqlstat_enabled = false
_optimizer_percent_parallel = 101
_always_anti_join = choose

```
_always_semi_join = choose
_optimizer_mode_force = true
_partition_view_enabled = true
_always_star_transformation = false
_query_rewrite_or_error = false
_hash_join_enabled = true
cursor_sharing = exact
_b_tree_bitmap_plans = true
_star_transformation_enabled = false
_optimizer_cost_model = choose
_new_sort_cost_estimate = true
_complex_view_merging = true
_unnest_subquery = true
_eliminate_common_subexpr = true
_pred_move_around = true
_convert_set_to_join = false
_push_join_predicate = true
_push_join_union_view = true
_fast_full_scan_enabled = true
_optim_enhance_nnull_detection = true
_parallel_broadcast_enabled = true
_px_broadcast_fudge_factor = 100
_ordered_nested_loop = true
_no_or_expansion = false
optimizer_index_cost_adj = 100
optimizer_index_caching = 0
_system_index_caching = 0
_disable_datalayer_sampling = false
query_rewrite_enabled = true
query_rewrite_integrity = enforced
_query_cost_rewrite = true
_query_rewrite_2 = true
_query_rewrite_1 = true
_query_rewrite_expression = true
_query_rewrite_jgmigrate = true
_query_rewrite_fpc = true
_query_rewrite_drj = true
_full_pwise_join_enabled = true
_partial_pwise_join_enabled = true
_left_nested_loops_random = true
_improved_row_length_enabled = true
_index_join_enabled = true
_enable_type_dep_selectivity = true
_improved_outerjoin_card = true
_optimizer_adjust_for_nulls = true
_optimizer_degree = 0
_use_column_stats_for_function = true
_subquery_pruning_enabled = true
_subquery_pruning_mv_enabled = false
_or_expand_nvl_predicate = true
_like_with_bind_as_equality = false
_table_scan_cost_plus_one = true
_cost_equality_semi_join = true
_default_non_equality_sel_check = true
_new_initial_join_orders = true
_oneside_colstat_for_equijoins = true
_optim_peek_user_binds = true
_minimal_stats_aggregation = true
_force temptables_for_gsets = false
workarea_size_policy = auto
_smm_auto_cost_enabled = true
_gs_anti_semi_join_allowed = true
_optim_new_default_join_sel = true
optimizer_dynamic_sampling = 2
_pre_rewrite_push_pred = true
_optimizer_new_join_card_computation = true
_union_rewrite_for_gs = yes_gset_mvms
_generalized_pruning_enabled = true
_optim_adjust_for_part_skews = true
_force_datefold_trunc = false
statistics_level = typical
_optimizer_system_stats_usage = true
skip_unusable_indexes = true
_remove_aggr_subquery = true
_optimizer_push_down_distinct = 0
_dml_monitoring_enabled = true
_optimizer_undo_changes = false
_predicate_elimination_enabled = true
_nested_loop_fudge = 100
_project_view_columns = true
_local_communication_costing_enabled = true
_local_communication_ratio = 50
_query_rewrite_vop_cleanup = true
```



```
_slave_mapping_enabled = true
_optimizer_cost_based_transformation = linear
_optimizer_mjc_enabled = true
_right_outer_hash_enable = true
_spr_push_pred_refspr = true
_optimizer_cache_stats = false
_optimizer_cbqt_factor = 50
_optimizer_squ_bottomup = true
_fic_area_size = 131072
_optimizer_skip_scan_enabled = true
_optimizer_cost_filter_pred = false
_optimizer_sortmerge_join_enabled = true
_optimizer_join_sel_sanity_check = true
_mmv_query_rewrite_enabled = true
_bt_mmv_query_rewrite_enabled = true
_add_stale_mv_to_dependency_list = true
_distinct_view_unnesting = false
_optimizer_dim_subq_join_sel = true
_optimizer_disable_strans_sanity_checks = 0
_optimizer_compute_index_stats = true
_push_join_union_view2 = true
_optimizer_ignore_hints = false
_optimizer_random_plan = 0
_query_rewrite_setopgrw_enable = true
_optimizer_correct_sq_selectivity = true
_disable_function_based_index = false
_optimizer_join_order_control = 3
_optimizer_cartesian_enabled = true
_optimizer_starplan_enabled = true
_extended_pruning_enabled = true
_optimizer_push_pred_cost_based = true
_optimizer_null_aware_antijoin = true
_optimizer_extend_jppd_view_types = true
_sql_model_unfold_forloops = run_time
_enable_dml_lock_escalation = false
_bloom_filter_enabled = true
_update_bji_ipdml_enabled = 0
_optimizer_extended_cursor_sharing = udo
_dm_max_shared_pool_pct = 1
_optimizer_cost_hjsmj_multimatch = true
_optimizer_transitivity_retain = true
_px_pwg_enabled = true
optimizer_secure_view_merging = true
_optimizer_join_elimination_enabled = true
flashback_table_rpi = non_fbt
_optimizer_cbqt_no_size_restriction = true
_optimizer_enhanced_filter_push = true
_optimizer_filter_pred_pullup = true
_rowsrc_trace_level = 0
_simple_view_merging = true
_optimizer_rownum_pred_based_fkr = true
_optimizer_better_inlist_costing = all
_optimizer_self_induced_cache_cost = false
_optimizer_min_cache_blocks = 10
_optimizer_or_expansion = depth
_optimizer_order_by_elimination_enabled = true
_optimizer_outer_to_anti_enabled = true
_selfjoin_mv_duplicates = true
_dimension_skip_null = true
_force_rewrite_enable = false
_optimizer_star_tran_in_with_clause = true
_optimizer_complex_pred_selectivity = true
_optimizer_connect_by_cost_based = true
_gby_hash_aggregation_enabled = true
_globalindex_pnum_filter_enabled = true
_px_minus_intersect = true
_fix_control_key = 0
_force_slave_mapping_intra_part_loads = false
_force_tmp_segment_loads = false
_query_mmvrewrite_maxpreds = 10
_query_mmvrewrite_maxintervals = 5
_query_mmvrewrite_maxinlists = 5
_query_mmvrewrite_maxdmaps = 10
_query_mmvrewrite_maxcmaps = 20
_query_mmvrewrite_maxregperm = 512
_query_mmvrewrite_maxmergedcmaps = 50
_query_mmvrewrite_maxqryinlistvals = 500
_disable_parallel_conventional_load = false
_trace_virtual_columns = false
_replace_virtual_columns = true
_virtual_column_overload_allowed = true
_kdt_buffering = true
_first_k_rows_dynamic_proration = true
```

_optimizer_sortmerge_join_inequality = true
_optimizer_aw_stats_enabled = true
_bloom_pruning_enabled = true
result_cache_mode = MANUAL
_px_ual_serial_input = true
_optimizer_skip_scan_guess = false
_enable_row_shipping = true
_row_shipping_threshold = 80
_row_shipping_explain = false
transaction_isolation_level = read_committed
_optimizer_distinct_elimination = true
_optimizer_multi_level_push_pred = true
_optimizer_group_by_placement = true
_optimizer_rownum_bind_default = 10
_enable_query_rewrite_on_remote_objs = true
_optimizer_extended_cursor_sharing_rel = simple
_optimizer_adaptive_cursor_sharing = true
_direct_path_insert_features = 0
_optimizer_improve_selectivity = true
optimizer_use_pending_statistics = false
_optimizer_enable_density_improvements = true
_optimizer_aw_join_push_enabled = true
_optimizer_connect_by_combine_sw = true
_enable_pmo_ctas = 0
_optimizer_native_full_outer_join = force
_bloom_predicate_enabled = true
_optimizer_enable_extended_stats = true
_is_lock_table_for_ddl_wait_lock = 0
_pivot_implementation_method = choose
optimizer_capture_sql_plan_baselines = false
optimizer_use_sql_plan_baselines = true
_optimizer_star_trans_min_cost = 0
_optimizer_star_trans_min_ratio = 0
_with_subquery = OPTIMIZER
_optimizer_fkr_index_cost_bias = 10
_optimizer_use_subheap = true
parallel_degree_policy = manual
parallel_degree = 0
parallel_min_time_threshold = 10
_parallel_time_unit = 10
_optimizer_or_expansion_subheap = true
_optimizer_free_transformation_heap = true
_optimizer_reuse_cost_annotations = true
_result_cache_auto_size_threshold = 100
_result_cache_auto_time_threshold = 1000
_optimizer_nested_rollup_for_gset = 100
_nlj_batching_enabled = 1
parallel_query_default_dop = 0
is_recur_flags = 0
optimizer_use_invisible_indexes = false
flashback_data_archive_internal_cursor = 0
_optimizer_extended_stats_usage_control = 224
_parallel_syspls_obey_force = true
cell_offload_processing = true
_rdbms_internal_fplib_enabled = false
db_file_multiblock_read_count = 46
_bloom_folding_enabled = true
_mv_generalized_oj_refresh_opt = true
cell_offload_compaction = ADAPTIVE
parallel_degree_limit = 65535
parallel_force_local = false
parallel_max_degree = 4
total_cpu_count = 2
cell_offload_plan_display = AUTO
_optimizer_coalesce_subqueries = true
_optimizer_fast_pred_transitivity = true
_optimizer_fast_access_pred_analysis = true
_optimizer_unnest_disjunctive_subq = true
_optimizer_unnest_corr_set_subq = true
_optimizer_distinct_agg_transform = true
_aggregation_optimization_settings = 0
_optimizer_connect_by_elim_dups = true
_optimizer_eliminate_filtering_join = true
_connect_by_use_union_all = true
dst_upgrade_insert_conv = true
advanced_queuing_internal_cursor = 0
_optimizer_unnest_all_subqueries = true
_bloom_predicate_pushdown_to_storage = true
_bloom_vector_elements = 0
_bloom_pushing_max = 524288
parallel_autodop = 0
parallel_ddldml = 0
_parallel_cluster_cache_policy = adaptive

```
_parallel_scalability           = 50
iot_internal_cursor            = 0
_optimizer_instance_count      = 0
_optimizer_connect_by_cb_whr_only = false
_suppress_scn_chk_for_cqn      = nosuppress_1466
_optimizer_join_factorization  = true
_optimizer_use_cbqt_star_transformation = true
_optimizer_table_expansion     = true
_and_pruning_enabled           = true
_deferred_constant_folding_mode = DEFAULT
_optimizer_distinct_placement  = true
partition_pruning_internal_cursor = 0
parallel_hinted                = none
_sql_compatibility             = 0
_optimizer_use_feedback        = true
_optimizer_try_st_before_jppd  = true
```

Bug Fix Control Environment

```
fix 3834770 = 1
fix 3746511 = enabled
fix 4519016 = enabled
fix 3118776 = enabled
fix 4488689 = enabled
fix 2194204 = disabled
fix 2660592 = enabled
fix 2320291 = enabled
fix 2324795 = enabled
fix 4308414 = enabled
fix 3499674 = disabled
fix 4569940 = enabled
fix 4631959 = enabled
fix 4519340 = enabled
fix 4550003 = enabled
fix 1403283 = enabled
fix 4554846 = enabled
fix 4602374 = enabled
fix 4584065 = enabled
fix 4545833 = enabled
fix 4611850 = enabled
fix 4663698 = enabled
fix 4663804 = enabled
fix 4666174 = enabled
fix 4567767 = enabled
fix 4556762 = 15
fix 4728348 = enabled
fix 4708389 = enabled
fix 4175830 = enabled
fix 4752814 = enabled
fix 4583239 = enabled
fix 4386734 = enabled
fix 4887636 = enabled
fix 4483240 = enabled
fix 4872602 = disabled
fix 4711525 = enabled
fix 4545802 = enabled
fix 4605810 = enabled
fix 4704779 = enabled
fix 4900129 = enabled
fix 4924149 = enabled
fix 4663702 = enabled
fix 4878299 = enabled
fix 4658342 = enabled
fix 4881533 = enabled
fix 4676955 = enabled
fix 4273361 = enabled
fix 4967068 = enabled
fix 4969880 = disabled
fix 5005866 = enabled
fix 5015557 = enabled
fix 4705343 = enabled
fix 4904838 = enabled
fix 4716096 = enabled
fix 4483286 = disabled
fix 4722900 = enabled
fix 4615392 = enabled
fix 5096560 = enabled
fix 5029464 = enabled
fix 4134994 = enabled
fix 4904890 = enabled
fix 5104624 = enabled
fix 5014836 = enabled
fix 4768040 = enabled
fix 4600710 = enabled
fix 5129233 = enabled
```

fix 4595987 = enabled
fix 4908162 = enabled
fix 5139520 = enabled
fix 5084239 = enabled
fix 5143477 = disabled
fix 2663857 = enabled
fix 4717546 = enabled
fix 5240264 = disabled
fix 5099909 = enabled
fix 5240607 = enabled
fix 5195882 = enabled
fix 5220356 = enabled
fix 5263572 = enabled
fix 5385629 = enabled
fix 5302124 = enabled
fix 5391942 = enabled
fix 5384335 = enabled
fix 5482831 = enabled
fix 4158812 = enabled
fix 5387148 = enabled
fix 5383891 = enabled
fix 5466973 = enabled
fix 5396162 = enabled
fix 5394888 = enabled
fix 5395291 = enabled
fix 5236908 = enabled
fix 5509293 = enabled
fix 5449488 = enabled
fix 5567933 = enabled
fix 5570494 = enabled
fix 5288623 = enabled
fix 5505995 = enabled
fix 5505157 = enabled
fix 5112460 = enabled
fix 5554865 = enabled
fix 5112260 = enabled
fix 5112352 = enabled
fix 5547058 = enabled
fix 5618040 = enabled
fix 5585313 = enabled
fix 5547895 = enabled
fix 5634346 = enabled
fix 5620485 = enabled
fix 5483301 = enabled
fix 5657044 = enabled
fix 5694984 = enabled
fix 5868490 = enabled
fix 5650477 = enabled
fix 5611962 = enabled
fix 4279274 = enabled
fix 5741121 = enabled
fix 5714944 = enabled
fix 5391505 = enabled
fix 5762598 = enabled
fix 5578791 = enabled
fix 5259048 = enabled
fix 5882954 = enabled
fix 2492766 = enabled
fix 5707608 = enabled
fix 5891471 = enabled
fix 5884780 = enabled
fix 5680702 = enabled
fix 5371452 = enabled
fix 5838613 = enabled
fix 5949981 = enabled
fix 5624216 = enabled
fix 5741044 = enabled
fix 5976822 = enabled
fix 6006457 = enabled
fix 5872956 = enabled
fix 5923644 = enabled
fix 5943234 = enabled
fix 5844495 = enabled
fix 4168080 = enabled
fix 6020579 = enabled
fix 5842686 = disabled
fix 5996801 = enabled
fix 5593639 = enabled
fix 6133948 = enabled
fix 3151991 = enabled
fix 6146906 = enabled
fix 6239909 = enabled
fix 6267621 = enabled

fix 5909305 = enabled
fix 6279918 = enabled
fix 6141818 = enabled
fix 6151963 = enabled
fix 6251917 = enabled
fix 6282093 = enabled
fix 6119510 = enabled
fix 6119382 = enabled
fix 3801750 = enabled
fix 5705630 = disabled
fix 5944076 = enabled
fix 5406763 = enabled
fix 6070954 = enabled
fix 6282944 = enabled
fix 6138746 = enabled
fix 6082745 = enabled
fix 3426050 = enabled
fix 599680 = enabled
fix 6062266 = enabled
fix 6087237 = enabled
fix 6122894 = enabled
fix 6377505 = enabled
fix 5893768 = enabled
fix 6163564 = enabled
fix 6073325 = enabled
fix 6188881 = enabled
fix 6007259 = enabled
fix 6239971 = enabled
fix 5284200 = disabled
fix 6042205 = enabled
fix 6051211 = enabled
fix 6434668 = enabled
fix 6438752 = enabled
fix 5936366 = enabled
fix 6439032 = enabled
fix 6438892 = enabled
fix 6006300 = enabled
fix 5947231 = enabled
fix 5416118 = 1
fix 6365442 = 1
fix 6239039 = enabled
fix 6502845 = enabled
fix 6913094 = enabled
fix 6029469 = enabled
fix 5919513 = enabled
fix 6057611 = enabled
fix 6469667 = enabled
fix 6608941 = disabled
fix 6368066 = enabled
fix 6329318 = enabled
fix 6656356 = enabled
fix 4507997 = enabled
fix 6671155 = enabled
fix 6694548 = enabled
fix 6688200 = enabled
fix 6612471 = enabled
fix 6708183 = disabled
fix 6326934 = enabled
fix 6520717 = disabled
fix 6714199 = enabled
fix 6681545 = enabled
fix 6748058 = enabled
fix 6167716 = enabled
fix 6674254 = enabled
fix 6468287 = enabled
fix 6503543 = enabled
fix 6808773 = disabled
fix 6766962 = enabled
fix 6120483 = enabled
fix 6670551 = enabled
fix 6771838 = enabled
fix 6626018 = disabled
fix 6530596 = enabled
fix 6778642 = enabled
fix 6699059 = enabled
fix 6376551 = enabled
fix 6429113 = enabled
fix 6782437 = enabled
fix 6776808 = enabled
fix 6765823 = enabled
fix 6768660 = enabled
fix 6782665 = enabled
fix 6610822 = enabled

fix 6514189 = enabled
fix 6818410 = enabled
fix 6827696 = enabled
fix 6773613 = enabled
fix 5902962 = enabled
fix 6956212 = enabled
fix 3056297 = enabled
fix 6440977 = disabled
fix 6972291 = disabled
fix 6904146 = enabled
fix 6221403 = enabled
fix 5475051 = enabled
fix 6845871 = enabled
fix 5468809 = enabled
fix 6917633 = enabled
fix 4444536 = disabled
fix 6955210 = enabled
fix 6994194 = enabled
fix 6399597 = disabled
fix 6951776 = enabled
fix 5648287 = 3
fix 6987082 = disabled
fix 7132036 = enabled
fix 6980350 = enabled
fix 5199213 = enabled
fix 7138405 = enabled
fix 7148689 = enabled
fix 6820988 = enabled
fix 7032684 = enabled
fix 6617866 = enabled
fix 7155968 = enabled
fix 7127980 = enabled
fix 6982954 = enabled
fix 7241819 = enabled
fix 6897034 = enabled
fix 7236148 = enabled
fix 7298570 = enabled
fix 7249095 = enabled
fix 7314499 = enabled
fix 7324224 = enabled
fix 7289023 = enabled
fix 7237571 = enabled
fix 7116357 = enabled
fix 7345484 = enabled
fix 7375179 = enabled
fix 6430500 = disabled
fix 5897486 = enabled
fix 6774209 = enabled
fix 7306637 = enabled
fix 6451322 = enabled
fix 7208131 = enabled
fix 7388652 = enabled
fix 7127530 = enabled
fix 6751206 = enabled
fix 6669103 = enabled
fix 7430474 = enabled
fix 6990305 = enabled
fix 7043307 = enabled
fix 6921505 = enabled
fix 7388457 = enabled
fix 3120429 = enabled
fix 7452823 = disabled
fix 6838105 = enabled
fix 6769711 = enabled
fix 7170213 = enabled
fix 6528872 = enabled
fix 7295298 = enabled
fix 5922070 = enabled
fix 7259468 = enabled
fix 6418552 = enabled
fix 4619997 = enabled
fix 7524366 = enabled
fix 6942476 = enabled
fix 6418771 = enabled
fix 7375077 = enabled
fix 5400639 = enabled
fix 4570921 = enabled
fix 7426911 = enabled
fix 5099019 = disabled
fix 7528216 = enabled
fix 7521266 = enabled
fix 7385140 = enabled
fix 7576516 = enabled

fix 7573526 = enabled
fix 7576476 = enabled
fix 7165898 = enabled
fix 7263214 = enabled
fix 3320140 = enabled
fix 7555510 = enabled
fix 7613118 = enabled
fix 7597059 = enabled
fix 7558911 = enabled
fix 5520732 = enabled
fix 7679490 = disabled
fix 7449971 = enabled
fix 3628118 = enabled
fix 4370840 = enabled
fix 7281191 = enabled
fix 7519687 = enabled
fix 5029592 = 3
fix 6012093 = 1
fix 6053861 = disabled
fix 6941515 = disabled
fix 7696414 = enabled
fix 7272039 = enabled
fix 7834811 = enabled
fix 7640597 = enabled
fix 7341616 = enabled
fix 7168184 = enabled
fix 399198 = enabled
fix 7831070 = enabled
fix 7676897 = disabled
fix 7414637 = enabled
fix 7585456 = enabled
fix 8202421 = enabled
fix 7658097 = disabled
fix 8251486 = enabled
fix 7132684 = enabled
fix 7512227 = enabled
fix 6972987 = enabled
fix 7199035 = enabled
fix 8243446 = enabled
fix 7650462 = enabled
fix 6720701 = enabled
fix 7592673 = enabled
fix 7718694 = enabled
fix 7534027 = enabled
fix 7708267 = enabled
fix 5716785 = enabled
fix 7356191 = enabled
fix 7679161 = enabled
fix 7597159 = enabled
fix 7499258 = enabled
fix 8328363 = enabled
fix 7452863 = enabled
fix 8284930 = enabled
fix 7298626 = enabled
fix 7657126 = enabled
fix 8371884 = enabled
fix 8318020 = enabled
fix 8255423 = enabled
fix 7135745 = enabled
fix 8356253 = enabled
fix 7534257 = enabled
fix 8323407 = enabled
fix 7539815 = enabled
fix 8289316 = enabled
fix 8447850 = enabled
fix 7675944 = enabled
fix 8355120 = enabled
fix 7176746 = enabled
fix 8442891 = enabled
fix 8373261 = enabled
fix 7679164 = enabled
fix 7670533 = enabled
fix 8408665 = enabled
fix 8491399 = enabled
fix 8348392 = enabled
fix 8348585 = enabled
fix 8508056 = enabled
fix 8335178 = enabled
fix 8515269 = enabled
fix 8247017 = enabled
fix 7325597 = enabled
fix 8531490 = enabled
fix 6163600 = enabled

fix 8589278 = disabled
fix 8557992 = enabled
fix 7556098 = enabled
fix 8580883 = enabled
fix 5892599 = disabled
fix 8609714 = enabled
fix 8514561 = enabled
fix 8619631 = disabled

PARAMETERS IN OPT_PARAM HINT

Column Usage Monitoring is ON: tracking level = 1

Considering Query Transformations on query block SEL\$1 (#0)

Query transformations (QT)

JF: Checking validity of join factorization for query block SEL\$1 (#0)
JF: Bypassed: not a UNION or UNION-ALL query block.
ST: not valid since star transformation parameter is FALSE
TE: Checking validity of table expansion for query block SEL\$1 (#0)
TE: Bypassed: No partitioned table in query block.
CBQT bypassed for query block SEL\$1 (#0): no complex view, sub-queries or UNION (ALL) queries.
CBQT: Validity checks failed for 6r74u9wtgmjgp.
CSE: Considering common sub-expression elimination in query block SEL\$1 (#0)

Common Subexpression elimination (CSE)

CSE: CSE not performed on query block SEL\$1 (#0).
OBYE: Considering Order-by Elimination from view SEL\$1 (#0)

Order-by elimination (OBYE)

OBYE: OBYE bypassed: no order by to eliminate.
CVM: Considering view merge in query block SEL\$1 (#0)
query block SEL\$1 (#0) unchanged
Considering Query Transformations on query block SEL\$1 (#0)

Query transformations (QT)

JF: Checking validity of join factorization for query block SEL\$1 (#0)
JF: Bypassed: not a UNION or UNION-ALL query block.
ST: not valid since star transformation parameter is FALSE
TE: Checking validity of table expansion for query block SEL\$1 (#0)
TE: Bypassed: No partitioned table in query block.
CBQT bypassed for query block SEL\$1 (#0): no complex view, sub-queries or UNION (ALL) queries.
CBQT: Validity checks failed for 6r74u9wtgmjgp.
CSE: Considering common sub-expression elimination in query block SEL\$1 (#0)

Common Subexpression elimination (CSE)

CSE: CSE not performed on query block SEL\$1 (#0).
SU: Considering subquery unnesting in query block SEL\$1 (#0)

Subquery Unnest (SU)

SJC: Considering set-join conversion in query block SEL\$1 (#0)

Set-Join Conversion (SJC)

SJC: not performed
PM: Considering predicate move-around in query block SEL\$1 (#0)

Predicate Move-Around (PM)

PM: PM bypassed: Outer query contains no views.
PM: PM bypassed: Outer query contains no views.
query block SEL\$1 (#0) unchanged
FPD: Considering simple filter push in query block SEL\$1 (#0)
TO_NUMBER("T1"."CHAR_COL")=10
try to generate transitive predicate from check constraints for query block SEL\$1 (#0)
finally: TO_NUMBER("T1"."CHAR_COL")=10

apadrvt-start sqlid=7754242323373473333

:

call(in-use=604, alloc=16360), compile(in-use=59652, alloc=60944), execution(in-use=75536, alloc=77548)

Peeked values of the binds in SQL statement

Final query after transformations:***** UNPARSED QUERY IS *****

SELECT "T1"."CHAR_COL" "CHAR_COL","T1"."C2" "C2" FROM "TESTUSER"."T1" "T1" WHERE TO_NUMBER("T1"."CHAR_COL")=10
kkoqbc: optimizing query block SEL\$1 (#0)

:

call(in-use=632, alloc=16360), compile(in-use=60296, alloc=65000), execution(in-use=79612, alloc=81624)

kkoqbc-subheap (create addr=0x0E56FB38)

QUERY BLOCK TEXT

SELECT /* FIND_ME */

*

FROM

T1

WHERE

CHAR_COL = 10

QUERY BLOCK SIGNATURE

signature (optimizer): qb_name=SEL\$1 nbfros=1 flg=0

fro(0): flg=0 objn=70879 hint_alias="T1"@SEL\$1"

SYSTEM STATISTICS INFORMATION

Using NOWORKLOAD Stats

CPUSPEEDNW: 466 millions instructions/sec (default is 100)

IOTFRSPEED: 4096 bytes per millisecond (default is 4096)

IOSEKTIM: 10 milliseconds (default is 10)

MBRC: -1 blocks (default is 8)

BASE STATISTICAL INFORMATION

Table Stats::

Table: T1 Alias: T1

#Rows: 1000000 #Blks: 16217 AvgRowLen: 108.00

Index Stats::

Index: SYS_C0010157 Col#: 1

LVLS: 2 #LB: 3908 #DK: 1000000 LB/K: 1.00 DB/K: 1.00 CLUF: 201245.00

Access path analysis for T1

SINGLE TABLE ACCESS PATH

Single Table Cardinality Estimation for T1[T1]

Table: T1 Alias: T1

Card: Original: 1000000.000000 Rounded: 1 Computed: 1.00 Non Adjusted: 1.00

Access Path: TableScan

Cost: 4450.40 Resp: 4450.40 Degree: 0

Cost_io: 4394.00 Cost_cpu: 315488412

Resp_io: 4394.00 Resp_cpu: 315488412

Best:: AccessPath: TableScan

Cost: 4450.40 Degree: 1 Resp: 4450.40 Card: 1.00 Bytes: 0

OPTIMIZER STATISTICS AND COMPUTATIONS

GENERAL PLANS

Considering cardinality-based initial join order.

Permutations for Starting Table :0

Join order[1]: T1[T1]#0

Best so far: Table#: 0 cost: 4450.4013 card: 1.0000 bytes: 108

(newjo-stop-1) k:0, spcnt:0, perm:1, maxperm:2000

Number of join permutations tried: 1

Trying or-Expansion on query block SEL\$1 (#0)

Transfer Optimizer annotations for query block SEL\$1 (#0)

id=0 frofand predicate=TO_NUMBER("T1"."CHAR_COL")=10

Final cost for query block SEL\$1 (#0) - All Rows Plan:

Best join order: 1

Cost: 4450.4013 Degree: 1 Card: 1.0000 Bytes: 108

Resc: 4450.4013 Resc_io: 4394.0000 Resc_cpu: 315488412

Resp: 4450.4013 Resp_io: 4394.0000 Resc_cpu: 315488412

kkoqbc-subheap (delete addr=0x0E56FB38, in-use=11524, alloc=14128)

```

kkoqbc-end:
:
call(in-use=7324, alloc=32736), compile(in-use=60908, alloc=65000), execution(in-use=79612, alloc=81624)

kkoqbc: finish optimizing query block SEL$1 (#0)
apadrvc-end
:
call(in-use=7324, alloc=32736), compile(in-use=61556, alloc=65000), execution(in-use=79612, alloc=81624)

```

Starting SQL statement dump

```

user_id=65 user_name=TESTUSER module=SQL*Plus action=
sql_id=6r74u9wtgmjgp plan_hash_value=-677275283 problem_type=3
----- Current SQL Statement for this session (sql_id=6r74u9wtgmjgp) -----
EXPLAIN PLAN SET STATEMENT_ID='PLUS140864' FOR SELECT /* FIND_ME */

```

```

*
FROM
  T1
WHERE
  CHAR_COL = 10
sql_text_length=104
sql=EXPLAIN PLAN SET STATEMENT_ID='PLUS140864' FOR SELECT /* FIND_ME */
*
FROM
  T1
WHERE
  CHAR_COL = 10
----- Explain Plan Dump -----
----- Plan Table -----

```

```

=====
Plan Table
=====

```

Id	Operation	Name	Rows	Bytes	Cost	Time
0	SELECT STATEMENT				4450	
1	TABLE ACCESS FULL	T1	1	108	4450	00:00:54

```

Predicate Information:
-----
1 - filter(TO_NUMBER("CHAR_COL")=10)

```

```

Content of other_xml column
=====

```

```

db_version      : 11.2.0.1
parse_schema    : TESTUSER
plan_hash       : 3617692013
plan_hash_2     : 3688435342
Outline Data:
/*+
  BEGIN_OUTLINE_DATA
    IGNORE_OPTIM_EMBEDDED_HINTS
    OPTIMIZER_FEATURES_ENABLE('11.2.0.1')
    DB_VERSION('11.2.0.1')
    ALL_ROWS
    OUTLINE_LEAF(@"SEL$1")
    FULL(@"SEL$1" "T1"@"SEL$1")
  END_OUTLINE_DATA
*/

```

```

Optimizer state dump:
Compilation Environment Dump
optimizer_mode_hinted           = false
optimizer_features_hinted      = 0.0.0
parallel_execution_enabled     = false
parallel_query_forced_dop      = 0
parallel_dml_forced_dop        = 0
parallel_ddl_forced_degree     = 0
parallel_ddl_forced_instances  = 0
_query_rewrite_fudge           = 90
optimizer_features_enable      = 11.2.0.1
_optimizer_search_limit        = 5
cpu_count                       = 2
active_instance_count          = 1
parallel_threads_per_cpu       = 2
hash_area_size                  = 131072

```

```

*** 2010-05-27 19:04:40.913
bitmap_merge_area_size         = 1048576
sort_area_size                  = 65536
sort_area_retained_size        = 0

```

_sort_elimination_cost_ratio = 0
_optimizer_block_size = 8192
_sort_multiblock_read_count = 2
_hash_multiblock_io_count = 0
_db_file_optimizer_read_count = 8
_optimizer_max_permutations = 2000
pga_aggregate_target = 143360 KB
_pga_max_size = 204800 KB
_query_rewrite_maxdisjunct = 257
_smm_auto_min_io_size = 56 KB
_smm_auto_max_io_size = 248 KB
_smm_min_size = 143 KB
_smm_max_size = 28672 KB
_smm_px_max_size = 71680 KB
_cpu_to_io = 0
_optimizer_undo_cost_change = 11.2.0.1
parallel_query_mode = enabled
parallel_dml_mode = disabled
parallel_ddl_mode = enabled
optimizer_mode = all_rows
sqlstat_enabled = false
_optimizer_percent_parallel = 101
_always_anti_join = choose
_always_semi_join = choose
_optimizer_mode_force = true
_partition_view_enabled = true
_always_star_transformation = false
_query_rewrite_or_error = false
_hash_join_enabled = true
cursor_sharing = exact
_b_tree_bitmap_plans = true
star_transformation_enabled = false
_optimizer_cost_model = choose
_new_sort_cost_estimate = true
_complex_view_merging = true
_unnest_subquery = true
_eliminate_common_subexpr = true
_pred_move_around = true
_convert_set_to_join = false
_push_join_predicate = true
_push_join_union_view = true
_fast_full_scan_enabled = true
_optim_enhance_nnull_detection = true
_parallel_broadcast_enabled = true
_px_broadcast_fudge_factor = 100
_ordered_nested_loop = true
_no_or_expansion = false
optimizer_index_cost_adj = 100
optimizer_index_caching = 0
_system_index_caching = 0
_disable_datalayer_sampling = false
query_rewrite_enabled = true
query_rewrite_integrity = enforced
_query_cost_rewrite = true
_query_rewrite_2 = true
_query_rewrite_1 = true
_query_rewrite_expression = true
_query_rewrite_jmigrate = true
_query_rewrite_fpc = true
_query_rewrite_drj = true
_full_pwise_join_enabled = true
_partial_pwise_join_enabled = true
_left_nested_loops_random = true
_improved_row_length_enabled = true
_index_join_enabled = true
_enable_type_dep_selectivity = true
_improved_outerjoin_card = true
_optimizer_adjust_for_nulls = true
_optimizer_degree = 0
_use_column_stats_for_function = true
_subquery_pruning_enabled = true
_subquery_pruning_mv_enabled = false
_or_expand_nvl_predicate = true
_like_with_bind_as_equality = false
_table_scan_cost_plus_one = true
_cost_equality_semi_join = true
_default_non_equality_sel_check = true
_new_initial_join_orders = true
_oneside_colstat_for_equijoins = true
_optim_peek_user_binds = true
_minimal_stats_aggregation = true
_force temptables_for_gsets = false
workarea_size_policy = auto

_smm_auto_cost_enabled = true
_gs_anti_semi_join_allowed = true
_optim_new_default_join_sel = true
optimizer_dynamic_sampling = 2
_pre_rewrite_push_pred = true
_optimizer_new_join_card_computation = true
_union_rewrite_for_gs = yes_gset_mvsv
_generalized_pruning_enabled = true
_optim_adjust_for_part_skews = true
_force_datefold_trunc = false
statistics_level = typical
_optimizer_system_stats_usage = true
skip_unusable_indexes = true
_remove_aggr_subquery = true
_optimizer_push_down_distinct = 0
_dml_monitoring_enabled = true
_optimizer_undo_changes = false
_predicate_elimination_enabled = true
_nested_loop_fudge = 100
_project_view_columns = true
_local_communication_costing_enabled = true
_local_communication_ratio = 50
_query_rewrite_vop_cleanup = true
_slave_mapping_enabled = true
_optimizer_cost_based_transformation = linear
_optimizer_mjc_enabled = true
_right_outer_hash_enable = true
_spr_push_pred_refspr = true
_optimizer_cache_stats = false
_optimizer_cbqt_factor = 50
_optimizer_squ_bottomup = true
_fic_area_size = 131072
_optimizer_skip_scan_enabled = true
_optimizer_cost_filter_pred = false
_optimizer_sortmerge_join_enabled = true
_optimizer_join_sel_sanity_check = true
_mmv_query_rewrite_enabled = true
_bt_mmv_query_rewrite_enabled = true
_add_stale_mv_to_dependency_list = true
_distinct_view_unnesting = false
_optimizer_dim_subq_join_sel = true
_optimizer_disable_strans_sanity_checks = 0
_optimizer_compute_index_stats = true
_push_join_union_view2 = true
_optimizer_ignore_hints = false
_optimizer_random_plan = 0
_query_rewrite_setopgrw_enable = true
_optimizer_correct_sq_selectivity = true
_disable_function_based_index = false
_optimizer_join_order_control = 3
_optimizer_cartesian_enabled = true
_optimizer_starplan_enabled = true
_extended_pruning_enabled = true
_optimizer_push_pred_cost_based = true
_optimizer_null_aware_antijoin = true
_optimizer_extend_jppd_view_types = true
_sql_model_unfold_forloops = run_time
_enable_dml_lock_escalation = false
_bloom_filter_enabled = true
_update_bji_ipdml_enabled = 0
_optimizer_extended_cursor_sharing = udo
_dm_max_shared_pool_pct = 1
_optimizer_cost_hjsmj_multimatch = true
_optimizer_transitivity_retain = true
_px_pwg_enabled = true
optimizer_secure_view_merging = true
_optimizer_join_elimination_enabled = true
flashback_table_rpi = non_fbt
_optimizer_cbqt_no_size_restriction = true
_optimizer_enhanced_filter_push = true
_optimizer_filter_pred_pullup = true
_rowsrc_trace_level = 0
_simple_view_merging = true
_optimizer_rownum_pred_based_fkr = true
_optimizer_better_inlist_costing = all
_optimizer_self_induced_cache_cost = false
_optimizer_min_cache_blocks = 10
_optimizer_or_expansion = depth
_optimizer_order_by_elimination_enabled = true
_optimizer_outer_to_anti_enabled = true
_selfjoin_mv_duplicates = true
_dimension_skip_null = true
_force_rewrite_enable = false

_optimizer_star_tran_in_with_clause = true
_optimizer_complex_pred_selectivity = true
_optimizer_connect_by_cost_based = true
_gby_hash_aggregation_enabled = true
_globalindex_pnum_filter_enabled = true
_px_minus_intersect = true
_fix_control_key = 0
_force_slave_mapping_intra_part_loads = false
_force_tmp_segment_loads = false
_query_mmvrewrite_maxpreds = 10
_query_mmvrewrite_maxintervals = 5
_query_mmvrewrite_maxinlists = 5
_query_mmvrewrite_maxdmaps = 10
_query_mmvrewrite_maxcmaps = 20
_query_mmvrewrite_maxregperm = 512
_query_mmvrewrite_maxmergedcmaps = 50
_query_mmvrewrite_maxqryinlistvals = 500
_disable_parallel_conventional_load = false
_trace_virtual_columns = false
_replace_virtual_columns = true
_virtual_column_overload_allowed = true
_kdt_buffering = true
_first_k_rows_dynamic_proration = true
_optimizer_sortmerge_join_inequality = true
_optimizer_aw_stats_enabled = true
_bloom_pruning_enabled = true
result_cache_mode = MANUAL
_px_ual_serial_input = true
_optimizer_skip_scan_guess = false
_enable_row_shipping = true
_row_shipping_threshold = 80
_row_shipping_explain = false
transaction_isolation_level = read_committed
_optimizer_distinct_elimination = true
_optimizer_multi_level_push_pred = true
_optimizer_group_by_placement = true
_optimizer_rownum_bind_default = 10
_enable_query_rewrite_on_remote_objs = true
_optimizer_extended_cursor_sharing_rel = simple
_optimizer_adaptive_cursor_sharing = true
_direct_path_insert_features = 0
_optimizer_improve_selectivity = true
optimizer_use_pending_statistics = false
_optimizer_enable_density_improvements = true
_optimizer_aw_join_push_enabled = true
_optimizer_connect_by_combine_sw = true
_enable_pmo_ctas = 0
_optimizer_native_full_outer_join = force
_bloom_predicate_enabled = true
_optimizer_enable_extended_stats = true
_is_lock_table_for_ddl_wait_lock = 0
_pivot_implementation_method = choose
optimizer_capture_sql_plan_baselines = false
optimizer_use_sql_plan_baselines = true
_optimizer_star_trans_min_cost = 0
_optimizer_star_trans_min_ratio = 0
_with_subquery = OPTIMIZER
_optimizer_fkr_index_cost_bias = 10
_optimizer_use_subheap = true
parallel_degree_policy = manual
parallel_degree = 0
parallel_min_time_threshold = 10
_parallel_time_unit = 10
_optimizer_or_expansion_subheap = true
_optimizer_free_transformation_heap = true
_optimizer_reuse_cost_annotations = true
_result_cache_auto_size_threshold = 100
_result_cache_auto_time_threshold = 1000
_optimizer_nested_rollup_for_gset = 100
_nlj_batching_enabled = 1
parallel_query_default_dop = 0
is_recur_flags = 0
optimizer_use_invisible_indexes = false
flashback_data_archive_internal_cursor = 0
_optimizer_extended_stats_usage_control = 224
_parallel_syspls_obey_force = true
cell_offload_processing = true
_rdbms_internal_fplib_enabled = false
db_file_multiblock_read_count = 46
_bloom_folding_enabled = true
_mv_generalized_oj_refresh_opt = true
cell_offload_compaction = ADAPTIVE
parallel_degree_limit = 65535

```
parallel_force_local          = false
parallel_max_degree           = 4
total_cpu_count               = 2
cell_offload_plan_display    = AUTO
_optimizer_coalesce_subqueries = true
_optimizer_fast_pred_transitivity = true
_optimizer_fast_access_pred_analysis = true
_optimizer_unnest_disjunctive_subq = true
_optimizer_unnest_corr_set_subq = true
_optimizer_distinct_agg_transform = true
_aggregation_optimization_settings = 0
_optimizer_connect_by_elim_dups = true
_optimizer_eliminate_filtering_join = true
_connect_by_use_union_all     = true
dst_upgrade_insert_conv      = true
advanced_queuing_internal_cursor = 0
_optimizer_unnest_all_subqueries = true
_bloom_predicate_pushdown_to_storage = true
_bloom_vector_elements       = 0
_bloom_pushing_max           = 524288
parallel_autodop              = 0
parallel_ddldml               = 0
_parallel_cluster_cache_policy = adaptive
_parallel_scalability         = 50
iot_internal_cursor           = 0
_optimizer_instance_count     = 0
_optimizer_connect_by_cb_whr_only = false
_suppress_scn_chk_for_cqn     = nosuppress_1466
_optimizer_join_factorization = true
_optimizer_use_cbqt_star_transformation = true
_optimizer_table_expansion     = true
_and_pruning_enabled          = true
_deferred_constant_folding_mode = DEFAULT
_optimizer_distinct_placement = true
partition_pruning_internal_cursor = 0
parallel_hinted               = none
_sql_compatibility            = 0
_optimizer_use_feedback       = true
_optimizer_try_st_before_jppd = true
```

Bug Fix Control Environment

```
fix 3834770 = 1
fix 3746511 = enabled
fix 4519016 = enabled
fix 3118776 = enabled
fix 4488689 = enabled
fix 2194204 = disabled
fix 2660592 = enabled
fix 2320291 = enabled
fix 2324795 = enabled
fix 4308414 = enabled
fix 3499674 = disabled
fix 4569940 = enabled
fix 4631959 = enabled
fix 4519340 = enabled
fix 4550003 = enabled
fix 1403283 = enabled
fix 4554846 = enabled
fix 4602374 = enabled
fix 4584065 = enabled
fix 4545833 = enabled
fix 4611850 = enabled
fix 4663698 = enabled
fix 4663804 = enabled
fix 4666174 = enabled
fix 4567767 = enabled
fix 4556762 = 15
fix 4728348 = enabled
fix 4708389 = enabled
fix 4175830 = enabled
fix 4752814 = enabled
fix 4583239 = enabled
fix 4386734 = enabled
fix 4887636 = enabled
fix 4483240 = enabled
fix 4872602 = disabled
fix 4711525 = enabled
fix 4545802 = enabled
fix 4605810 = enabled
fix 4704779 = enabled
fix 4900129 = enabled
fix 4924149 = enabled
fix 4663702 = enabled
fix 4878299 = enabled
```

fix 4658342 = enabled
fix 4881533 = enabled
fix 4676955 = enabled
fix 4273361 = enabled
fix 4967068 = enabled
fix 4969880 = disabled
fix 5005866 = enabled
fix 5015557 = enabled
fix 4705343 = enabled
fix 4904838 = enabled
fix 4716096 = enabled
fix 4483286 = disabled
fix 4722900 = enabled
fix 4615392 = enabled
fix 5096560 = enabled
fix 5029464 = enabled
fix 4134994 = enabled
fix 4904890 = enabled
fix 5104624 = enabled
fix 5014836 = enabled
fix 4768040 = enabled
fix 4600710 = enabled
fix 5129233 = enabled
fix 4595987 = enabled
fix 4908162 = enabled
fix 5139520 = enabled
fix 5084239 = enabled
fix 5143477 = disabled
fix 2663857 = enabled
fix 4717546 = enabled
fix 5240264 = disabled
fix 5099909 = enabled
fix 5240607 = enabled
fix 5195882 = enabled
fix 5220356 = enabled
fix 5263572 = enabled
fix 5385629 = enabled
fix 5302124 = enabled
fix 5391942 = enabled
fix 5384335 = enabled
fix 5482831 = enabled
fix 4158812 = enabled
fix 5387148 = enabled
fix 5383891 = enabled
fix 5466973 = enabled
fix 5396162 = enabled
fix 5394888 = enabled
fix 5395291 = enabled
fix 5236908 = enabled
fix 5509293 = enabled
fix 5449488 = enabled
fix 5567933 = enabled
fix 5570494 = enabled
fix 5288623 = enabled
fix 5505995 = enabled
fix 5505157 = enabled
fix 5112460 = enabled
fix 5554865 = enabled
fix 5112260 = enabled
fix 5112352 = enabled
fix 5547058 = enabled
fix 5618040 = enabled
fix 5585313 = enabled
fix 5547895 = enabled
fix 5634346 = enabled
fix 5620485 = enabled
fix 5483301 = enabled
fix 5657044 = enabled
fix 5694984 = enabled
fix 5868490 = enabled
fix 5650477 = enabled
fix 5611962 = enabled
fix 4279274 = enabled
fix 5741121 = enabled
fix 5714944 = enabled
fix 5391505 = enabled
fix 5762598 = enabled
fix 5578791 = enabled
fix 5259048 = enabled
fix 5882954 = enabled
fix 2492766 = enabled
fix 5707608 = enabled
fix 5891471 = enabled

fix 5884780 = enabled
fix 5680702 = enabled
fix 5371452 = enabled
fix 5838613 = enabled
fix 5949981 = enabled
fix 5624216 = enabled
fix 5741044 = enabled
fix 5976822 = enabled
fix 6006457 = enabled
fix 5872956 = enabled
fix 5923644 = enabled
fix 5943234 = enabled
fix 5844495 = enabled
fix 4168080 = enabled
fix 6020579 = enabled
fix 5842686 = disabled
fix 5996801 = enabled
fix 5593639 = enabled
fix 6133948 = enabled
fix 3151991 = enabled
fix 6146906 = enabled
fix 6239909 = enabled
fix 6267621 = enabled
fix 5909305 = enabled
fix 6279918 = enabled
fix 6141818 = enabled
fix 6151963 = enabled
fix 6251917 = enabled
fix 6282093 = enabled
fix 6119510 = enabled
fix 6119382 = enabled
fix 3801750 = enabled
fix 5705630 = disabled
fix 5944076 = enabled
fix 5406763 = enabled
fix 6070954 = enabled
fix 6282944 = enabled
fix 6138746 = enabled
fix 6082745 = enabled
fix 3426050 = enabled
fix 599680 = enabled
fix 6062266 = enabled
fix 6087237 = enabled
fix 6122894 = enabled
fix 6377505 = enabled
fix 5893768 = enabled
fix 6163564 = enabled
fix 6073325 = enabled
fix 6188881 = enabled
fix 6007259 = enabled
fix 6239971 = enabled
fix 5284200 = disabled
fix 6042205 = enabled
fix 6051211 = enabled
fix 6434668 = enabled
fix 6438752 = enabled
fix 5936366 = enabled
fix 6439032 = enabled
fix 6438892 = enabled
fix 6006300 = enabled
fix 5947231 = enabled
fix 5416118 = 1
fix 6365442 = 1
fix 6239039 = enabled
fix 6502845 = enabled
fix 6913094 = enabled
fix 6029469 = enabled
fix 5919513 = enabled
fix 6057611 = enabled
fix 6469667 = enabled
fix 6608941 = disabled
fix 6368066 = enabled
fix 6329318 = enabled
fix 6656356 = enabled
fix 4507997 = enabled
fix 6671155 = enabled
fix 6694548 = enabled
fix 6688200 = enabled
fix 6612471 = enabled
fix 6708183 = disabled
fix 6326934 = enabled
fix 6520717 = disabled
fix 6714199 = enabled

fix 6681545 = enabled
fix 6748058 = enabled
fix 6167716 = enabled
fix 6674254 = enabled
fix 6468287 = enabled
fix 6503543 = enabled
fix 6808773 = disabled
fix 6766962 = enabled
fix 6120483 = enabled
fix 6670551 = enabled
fix 6771838 = enabled
fix 6626018 = disabled
fix 6530596 = enabled
fix 6778642 = enabled
fix 6699059 = enabled
fix 6376551 = enabled
fix 6429113 = enabled
fix 6782437 = enabled
fix 6776808 = enabled
fix 6765823 = enabled
fix 6768660 = enabled
fix 6782665 = enabled
fix 6610822 = enabled
fix 6514189 = enabled
fix 6818410 = enabled
fix 6827696 = enabled
fix 6773613 = enabled
fix 5902962 = enabled
fix 6956212 = enabled
fix 3056297 = enabled
fix 6440977 = disabled
fix 6972291 = disabled
fix 6904146 = enabled
fix 6221403 = enabled
fix 5475051 = enabled
fix 6845871 = enabled
fix 5468809 = enabled
fix 6917633 = enabled
fix 4444536 = disabled
fix 6955210 = enabled
fix 6994194 = enabled
fix 6399597 = disabled
fix 6951776 = enabled
fix 5648287 = 3
fix 6987082 = disabled
fix 7132036 = enabled
fix 6980350 = enabled
fix 5199213 = enabled
fix 7138405 = enabled
fix 7148689 = enabled
fix 6820988 = enabled
fix 7032684 = enabled
fix 6617866 = enabled
fix 7155968 = enabled
fix 7127980 = enabled
fix 6982954 = enabled
fix 7241819 = enabled
fix 6897034 = enabled
fix 7236148 = enabled
fix 7298570 = enabled
fix 7249095 = enabled
fix 7314499 = enabled
fix 7324224 = enabled
fix 7289023 = enabled
fix 7237571 = enabled
fix 7116357 = enabled
fix 7345484 = enabled
fix 7375179 = enabled
fix 6430500 = disabled
fix 5897486 = enabled
fix 6774209 = enabled
fix 7306637 = enabled
fix 6451322 = enabled
fix 7208131 = enabled
fix 7388652 = enabled
fix 7127530 = enabled
fix 6751206 = enabled
fix 6669103 = enabled
fix 7430474 = enabled
fix 6990305 = enabled
fix 7043307 = enabled
fix 6921505 = enabled
fix 7388457 = enabled

fix 3120429 = enabled
fix 7452823 = disabled
fix 6838105 = enabled
fix 6769711 = enabled
fix 7170213 = enabled
fix 6528872 = enabled
fix 7295298 = enabled
fix 5922070 = enabled
fix 7259468 = enabled
fix 6418552 = enabled
fix 4619997 = enabled
fix 7524366 = enabled
fix 6942476 = enabled
fix 6418771 = enabled
fix 7375077 = enabled
fix 5400639 = enabled
fix 4570921 = enabled
fix 7426911 = enabled
fix 5099019 = disabled
fix 7528216 = enabled
fix 7521266 = enabled
fix 7385140 = enabled
fix 7576516 = enabled
fix 7573526 = enabled
fix 7576476 = enabled
fix 7165898 = enabled
fix 7263214 = enabled
fix 3320140 = enabled
fix 7555510 = enabled
fix 7613118 = enabled
fix 7597059 = enabled
fix 7558911 = enabled
fix 5520732 = enabled
fix 7679490 = disabled
fix 7449971 = enabled
fix 3628118 = enabled
fix 4370840 = enabled
fix 7281191 = enabled
fix 7519687 = enabled
fix 5029592 = 3
fix 6012093 = 1
fix 6053861 = disabled
fix 6941515 = disabled
fix 7696414 = enabled
fix 7272039 = enabled
fix 7834811 = enabled
fix 7640597 = enabled
fix 7341616 = enabled
fix 7168184 = enabled
fix 399198 = enabled
fix 7831070 = enabled
fix 7676897 = disabled
fix 7414637 = enabled
fix 7585456 = enabled
fix 8202421 = enabled
fix 7658097 = disabled
fix 8251486 = enabled
fix 7132684 = enabled
fix 7512227 = enabled
fix 6972987 = enabled
fix 7199035 = enabled
fix 8243446 = enabled
fix 7650462 = enabled
fix 6720701 = enabled
fix 7592673 = enabled
fix 7718694 = enabled
fix 7534027 = enabled
fix 7708267 = enabled
fix 5716785 = enabled
fix 7356191 = enabled
fix 7679161 = enabled
fix 7597159 = enabled
fix 7499258 = enabled
fix 8328363 = enabled
fix 7452863 = enabled
fix 8284930 = enabled
fix 7298626 = enabled
fix 7657126 = enabled
fix 8371884 = enabled
fix 8318020 = enabled
fix 8255423 = enabled
fix 7135745 = enabled
fix 8356253 = enabled

fix 7534257 = enabled
fix 8323407 = enabled
fix 7539815 = enabled
fix 8289316 = enabled
fix 8447850 = enabled
fix 7675944 = enabled
fix 8355120 = enabled
fix 7176746 = enabled
fix 8442891 = enabled
fix 8373261 = enabled
fix 7679164 = enabled
fix 7670533 = enabled
fix 8408665 = enabled
fix 8491399 = enabled
fix 8348392 = enabled
fix 8348585 = enabled
fix 8508056 = enabled
fix 8335178 = enabled
fix 8515269 = enabled
fix 8247017 = enabled
fix 7325597 = enabled
fix 8531490 = enabled
fix 6163600 = enabled
fix 8589278 = disabled
fix 8557992 = enabled
fix 7556098 = enabled
fix 8580883 = enabled
fix 5892599 = disabled
fix 8609714 = enabled
fix 8514561 = enabled
fix 8619631 = disabled

Query Block Registry:

SEL\$1 0x2748c7bc (PARSER) [FINAL]

:

call(in-use=9340, alloc=32736), compile(in-use=84060, alloc=187352), execution(in-use=204240, alloc=204576)

End of Optimizer State Dump

Dumping Hints

=====

===== END SQL Statement Dump =====

Registered qb: SEL\$1 0xe56362c (PARSER)

QUERY BLOCK SIGNATURE

signature (): qb_name=SEL\$1 nbfros=1 flg=0
fro(0): flg=4 objn=70879 hint_alias="T1"@"SEL\$1"

SPM: current statement disallowed

Automatic degree of parallelism (ADOP)

Automatic degree of parallelism is disabled: statement type.

PM: Considering predicate move-around in query block SEL\$1 (#0)

Predicate Move-Around (PM)

OPTIMIZER INFORMATION

----- Current SQL Statement for this session (sql_id=2ym4vxlyqxvfy) -----

SELECT /*+ INDEX(T1) */ /* FIND_ME */

*

FROM

T1

WHERE

CHAR_COL = 10

Legend

The following abbreviations are used by optimizer trace.

CBQT - cost-based query transformation

JPPD - join predicate push-down

OJPPD - old-style (non-cost-based) JPPD

FPD - filter push-down

PM - predicate move-around

CVM - complex view merging

SPJ - select-project-join

SJC - set join conversion

SU - subquery unnesting

OBYE - order by elimination
 OST - old style star transformation
 ST - new (cbqt) star transformation
 CNT - count(col) to count(*) transformation
 JE - Join Elimination
 JF - join factorization
 SLP - select list pruning
 DP - distinct placement
 qb - query block
 LB - leaf blocks
 DK - distinct keys
 LB/K - average number of leaf blocks per key
 DB/K - average number of data blocks per key
 CLUF - clustering factor
 NDV - number of distinct values
 Resp - response cost
 Card - cardinality
 Resc - resource cost
 NL - nested loops (join)
 SM - sort merge (join)
 HA - hash (join)
 CPUSPEED - CPU Speed
 IOTFRSPEED - I/O transfer speed
 IOSEEKTIM - I/O seek time
 SREADTIM - average single block read time
 MREADTIM - average multiblock read time
 MBRC - average multiblock read count
 MAXTHR - maximum I/O system throughput
 SLAVETHR - average slave I/O throughput
 dmeth - distribution method
 1: no partitioning required
 2: value partitioned
 4: right is random (round-robin)
 128: left is random (round-robin)
 8: broadcast right and partition left
 16: broadcast left and partition right
 32: partition left using partitioning of right
 64: partition right using partitioning of left
 256: run the join in serial
 0: invalid distribution method
 sel - selectivity
 ptn - partition

 PARAMETERS USED BY THE OPTIMIZER

 PARAMETERS WITH ALTERED VALUES

 Compilation Environment Dump
 Bug Fix Control Environment

 PARAMETERS WITH DEFAULT VALUES

Compilation Environment Dump
 optimizer_mode_hinted = false
 optimizer_features_hinted = 0.0.0
 parallel_execution_enabled = false
 parallel_query_forced_dop = 0
 parallel_dml_forced_dop = 0
 parallel_ddl_forced_degree = 0
 parallel_ddl_forced_instances = 0
 _query_rewrite_fudge = 90
 optimizer_features_enable = 11.2.0.1
 _optimizer_search_limit = 5
 cpu_count = 2
 active_instance_count = 1
 parallel_threads_per_cpu = 2
 hash_area_size = 131072
 bitmap_merge_area_size = 1048576
 sort_area_size = 65536
 sort_area_retained_size = 0
 _sort_elimination_cost_ratio = 0
 _optimizer_block_size = 8192
 _sort_multiblock_read_count = 2
 _hash_multiblock_io_count = 0
 _db_file_optimizer_read_count = 8
 _optimizer_max_permutations = 2000
 pga_aggregate_target = 143360 KB
 _pga_max_size = 204800 KB
 _query_rewrite_maxdisjunct = 257
 _smm_auto_min_io_size = 56 KB

```
_smm_auto_max_io_size          = 248 KB
_smm_min_size                  = 143 KB
_smm_max_size                   = 28672 KB
_smm_px_max_size               = 71680 KB
_cpu_to_io                     = 0
_optimizer_undo_cost_change    = 11.2.0.1
parallel_query_mode            = enabled
parallel_dml_mode              = disabled
parallel_ddl_mode              = enabled
optimizer_mode                 = all_rows
sqlstat_enabled                = false
_optimizer_percent_parallel    = 101
_always_anti_join              = choose
_always_semi_join              = choose
_optimizer_mode_force          = true
_partition_view_enabled        = true
_always_star_transformation    = false
_query_rewrite_or_error        = false
_hash_join_enabled             = true
cursor_sharing                 = exact
_b_tree_bitmap_plans           = true
star_transformation_enabled    = false
_optimizer_cost_model          = choose
_new_sort_cost_estimate        = true
_complex_view_merging          = true
_unnest_subquery               = true
_eliminate_common_subexpr      = true
_pred_move_around              = true
_convert_set_to_join           = false
_push_join_predicate           = true
_push_join_union_view          = true
_fast_full_scan_enabled        = true
_optim_enhance_nnull_detection = true
_parallel_broadcast_enabled     = true
_px_broadcast_fudge_factor     = 100
_ordered_nested_loop           = true
_no_or_expansion               = false
optimizer_index_cost_adj       = 100
optimizer_index_caching        = 0
_system_index_caching          = 0
_disable_datalayer_sampling    = false
query_rewrite_enabled          = true
query_rewrite_integrity        = enforced
_query_cost_rewrite            = true
_query_rewrite_2               = true
_query_rewrite_1               = true
_query_rewrite_expression      = true
_query_rewrite_jgmigrate       = true
_query_rewrite_fpc             = true
_query_rewrite_drj             = true
_full_pwise_join_enabled       = true
_partial_pwise_join_enabled    = true
_left_nested_loops_random      = true
_improved_row_length_enabled   = true
_index_join_enabled            = true
_enable_type_dep_selectivity   = true
_improved_outerjoin_card       = true
_optimizer_adjust_for_nulls    = true
_optimizer_degree              = 0
_use_column_stats_for_function = true
_subquery_pruning_enabled      = true
_subquery_pruning_mv_enabled   = false
_or_expand_nvl_predicate       = true
_like_with_bind_as_equality    = false
_table_scan_cost_plus_one      = true
_cost_equality_semi_join       = true
_default_non_equality_sel_check = true
_new_initial_join_orders       = true
_oneside_colstat_for_equijoins = true
_optim_peek_user_binds         = true
_minimal_stats_aggregation     = true
_force_temptables_for_gsets    = false
workarea_size_policy           = auto
_smm_auto_cost_enabled         = true
_gs_anti_semi_join_allowed     = true
_optim_new_default_join_sel    = true
optimizer_dynamic_sampling     = 2
_pre_rewrite_push_pred         = true
_optimizer_new_join_card_computation = true
_union_rewrite_for_gs          = yes_gset_mvms
_generalized_pruning_enabled   = true
_optim_adjust_for_part_skews    = true
_force_datefold_trunc          = false
```

statistics_level = typical
_optimizer_system_stats_usage = true
skip_unusable_indexes = true
_remove_aggr_subquery = true
_optimizer_push_down_distinct = 0
_dml_monitoring_enabled = true
_optimizer_undo_changes = false
_predicate_elimination_enabled = true
_nested_loop_fudge = 100
_project_view_columns = true
_local_communication_costing_enabled = true
_local_communication_ratio = 50
_query_rewrite_vop_cleanup = true
_slave_mapping_enabled = true
_optimizer_cost_based_transformation = linear
_optimizer_mjc_enabled = true
_right_outer_hash_enable = true
_spr_push_pred_refspr = true
_optimizer_cache_stats = false
_optimizer_cbqt_factor = 50
_optimizer_squ_bottomup = true
_fic_area_size = 131072
_optimizer_skip_scan_enabled = true
_optimizer_cost_filter_pred = false
_optimizer_sortmerge_join_enabled = true
_optimizer_join_sel_sanity_check = true
_mmv_query_rewrite_enabled = true
_bt_mmv_query_rewrite_enabled = true
_add_stale_mv_to_dependency_list = true
_distinct_view_unnesting = false
_optimizer_dim_subq_join_sel = true
_optimizer_disable_strans_sanity_checks = 0
_optimizer_compute_index_stats = true
_push_join_union_view2 = true
_optimizer_ignore_hints = false
_optimizer_random_plan = 0
_query_rewrite_setopgrw_enable = true
_optimizer_correct_sq_selectivity = true
_disable_function_based_index = false
_optimizer_join_order_control = 3
_optimizer_cartesian_enabled = true
_optimizer_starplan_enabled = true
_extended_pruning_enabled = true
_optimizer_push_pred_cost_based = true
_optimizer_null_aware_antijoin = true
_optimizer_extend_jppd_view_types = true
_sql_model_unfold_forloops = run_time
_enable_dml_lock_escalation = false
_bloom_filter_enabled = true
_update_bji_ipdml_enabled = 0
_optimizer_extended_cursor_sharing = udo
_dm_max_shared_pool_pct = 1
_optimizer_cost_hjsmj_multimatch = true
_optimizer_transitivity_retain = true
_px_pwg_enabled = true
optimizer_secure_view_merging = true
_optimizer_join_elimination_enabled = true
flashback_table_rpi = non_fbt
_optimizer_cbqt_no_size_restriction = true
_optimizer_enhanced_filter_push = true
_optimizer_filter_pred_pullup = true
_rowsrc_trace_level = 0
_simple_view_merging = true
_optimizer_rownum_pred_based_fkr = true
_optimizer_better_inlist_costing = all
_optimizer_self_induced_cache_cost = false
_optimizer_min_cache_blocks = 10
_optimizer_or_expansion = depth
_optimizer_order_by_elimination_enabled = true
_optimizer_outer_to_anti_enabled = true
_selfjoin_mv_duplicates = true
_dimension_skip_null = true
_force_rewrite_enable = false
_optimizer_star_tran_in_with_clause = true
_optimizer_complex_pred_selectivity = true
_optimizer_connect_by_cost_based = true
_gby_hash_aggregation_enabled = true
_globalindex_pnum_filter_enabled = true
_px_minus_intersect = true
_fix_control_key = 0
_force_slave_mapping_intra_part_loads = false
_force_tmp_segment_loads = false
_query_mmvrewrite_maxpreds = 10

```
_query_mmvrewrite_maxintervals = 5
_query_mmvrewrite_maxinlists = 5
_query_mmvrewrite_maxdmaps = 10
_query_mmvrewrite_maxcmaps = 20
_query_mmvrewrite_maxregperm = 512
_query_mmvrewrite_maxmergedcmaps = 50
_query_mmvrewrite_maxqryinlistvals = 500
_disable_parallel_conventional_load = false
_trace_virtual_columns = false
_replace_virtual_columns = true
_virtual_column_overload_allowed = true
_kdt_buffering = true
_first_k_rows_dynamic_proration = true
_optimizer_sortmerge_join_inequality = true
_optimizer_aw_stats_enabled = true
_bloom_pruning_enabled = true
result_cache_mode = MANUAL
_px_ual_serial_input = true
_optimizer_skip_scan_guess = false
_enable_row_shipping = true
_row_shipping_threshold = 80
_row_shipping_explain = false
transaction_isolation_level = read_committed
_optimizer_distinct_elimination = true
_optimizer_multi_level_push_pred = true
_optimizer_group_by_placement = true
_optimizer_rownum_bind_default = 10
_enable_query_rewrite_on_remote_objs = true
_optimizer_extended_cursor_sharing_rel = simple
_optimizer_adaptive_cursor_sharing = true
_direct_path_insert_features = 0
_optimizer_improve_selectivity = true
optimizer_use_pending_statistics = false
_optimizer_enable_density_improvements = true
_optimizer_aw_join_push_enabled = true
_optimizer_connect_by_combine_sw = true
_enable_pmo_ctas = 0
_optimizer_native_full_outer_join = force
_bloom_predicate_enabled = true
_optimizer_enable_extended_stats = true
_is_lock_table_for_ddl_wait_lock = 0
_pivot_implementation_method = choose
optimizer_capture_sql_plan_baselines = false
optimizer_use_sql_plan_baselines = true
_optimizer_star_trans_min_cost = 0
_optimizer_star_trans_min_ratio = 0
_with_subquery = OPTIMIZER
_optimizer_fkr_index_cost_bias = 10
_optimizer_use_subheap = true
parallel_degree_policy = manual
parallel_degree = 0
parallel_min_time_threshold = 10
_parallel_time_unit = 10
_optimizer_or_expansion_subheap = true
_optimizer_free_transformation_heap = true
_optimizer_reuse_cost_annotations = true
_result_cache_auto_size_threshold = 100
_result_cache_auto_time_threshold = 1000
_optimizer_nested_rollup_for_gset = 100
_nlj_batching_enabled = 1
parallel_query_default_dop = 0
is_recur_flags = 0
optimizer_use_invisible_indexes = false
flashback_data_archive_internal_cursor = 0
_optimizer_extended_stats_usage_control = 224
_parallel_syspls_obey_force = true
cell_offload_processing = true
_rdbms_internal_fplib_enabled = false
db_file_multiblock_read_count = 46
_bloom_folding_enabled = true
_mv_generalized_oj_refresh_opt = true
cell_offload_compaction = ADAPTIVE
parallel_degree_limit = 65535
parallel_force_local = false
parallel_max_degree = 4
total_cpu_count = 2
cell_offload_plan_display = AUTO
_optimizer_coalesce_subqueries = true
_optimizer_fast_pred_transitivity = true
_optimizer_fast_access_pred_analysis = true
_optimizer_unnest_disjunctive_subq = true
_optimizer_unnest_corr_set_subq = true
_optimizer_distinct_agg_transform = true
```

```
_aggregation_optimization_settings = 0
_optimizer_connect_by_elim_dups    = true
_optimizer_eliminate_filtering_join = true
_connect_by_use_union_all          = true
dst_upgrade_insert_conv            = true
advanced_queuing_internal_cursor   = 0
_optimizer_unnest_all_subqueries    = true
_bloom_predicate_pushdown_to_storage = true
_bloom_vector_elements              = 0
_bloom_pushing_max                  = 524288
parallel_autodop                    = 0
parallel_ddldml                     = 0
_parallel_cluster_cache_policy      = adaptive
_parallel_scalability                = 50
iot_internal_cursor                 = 0
_optimizer_instance_count           = 0
_optimizer_connect_by_cb_whr_only   = false
_suppress_scn_chk_for_cqn           = nosuppress_1466
_optimizer_join_factorization       = true
_optimizer_use_cbqt_star_transformation = true
_optimizer_table_expansion           = true
_and_pruning_enabled                 = true
_deferred_constant_folding_mode     = DEFAULT
_optimizer_distinct_placement        = true
partition_pruning_internal_cursor    = 0
parallel_hinted                      = none
_sql_compatibility                  = 0
_optimizer_use_feedback              = true
_optimizer_try_st_before_jppd        = true
```

Bug Fix Control Environment

```
fix 3834770 = 1
fix 3746511 = enabled
fix 4519016 = enabled
fix 3118776 = enabled
fix 4488689 = enabled
fix 2194204 = disabled
fix 2660592 = enabled
fix 2320291 = enabled
fix 2324795 = enabled
fix 4308414 = enabled
fix 3499674 = disabled
fix 4569940 = enabled
fix 4631959 = enabled
fix 4519340 = enabled
fix 4550003 = enabled
fix 1403283 = enabled
fix 4554846 = enabled
fix 4602374 = enabled
fix 4584065 = enabled
fix 4545833 = enabled
fix 4611850 = enabled
fix 4663698 = enabled
fix 4663804 = enabled
fix 4666174 = enabled
fix 4567767 = enabled
fix 4556762 = 15
fix 4728348 = enabled
fix 4708389 = enabled
fix 4175830 = enabled
fix 4752814 = enabled
fix 4583239 = enabled
fix 4386734 = enabled
fix 4887636 = enabled
fix 4483240 = enabled
fix 4872602 = disabled
fix 4711525 = enabled
fix 4545802 = enabled
fix 4605810 = enabled
fix 4704779 = enabled
fix 4900129 = enabled
fix 4924149 = enabled
fix 4663702 = enabled
fix 4878299 = enabled
fix 4658342 = enabled
fix 4881533 = enabled
fix 4676955 = enabled
fix 4273361 = enabled
fix 4967068 = enabled
fix 4969880 = disabled
fix 5005866 = enabled
fix 5015557 = enabled
fix 4705343 = enabled
fix 4904838 = enabled
```


fix 4716096 = enabled
fix 4483286 = disabled
fix 4722900 = enabled
fix 4615392 = enabled
fix 5096560 = enabled
fix 5029464 = enabled
fix 4134994 = enabled
fix 4904890 = enabled
fix 5104624 = enabled
fix 5014836 = enabled
fix 4768040 = enabled
fix 4600710 = enabled
fix 5129233 = enabled
fix 4595987 = enabled
fix 4908162 = enabled
fix 5139520 = enabled
fix 5084239 = enabled
fix 5143477 = disabled
fix 2663857 = enabled
fix 4717546 = enabled
fix 5240264 = disabled
fix 5099909 = enabled
fix 5240607 = enabled
fix 5195882 = enabled
fix 5220356 = enabled
fix 5263572 = enabled
fix 5385629 = enabled
fix 5302124 = enabled
fix 5391942 = enabled
fix 5384335 = enabled
fix 5482831 = enabled
fix 4158812 = enabled
fix 5387148 = enabled
fix 5383891 = enabled
fix 5466973 = enabled
fix 5396162 = enabled
fix 5394888 = enabled
fix 5395291 = enabled
fix 5236908 = enabled
fix 5509293 = enabled
fix 5449488 = enabled
fix 5567933 = enabled
fix 5570494 = enabled
fix 5288623 = enabled
fix 5505995 = enabled
fix 5505157 = enabled
fix 5112460 = enabled
fix 5554865 = enabled
fix 5112260 = enabled
fix 5112352 = enabled
fix 5547058 = enabled
fix 5618040 = enabled
fix 5585313 = enabled
fix 5547895 = enabled
fix 5634346 = enabled
fix 5620485 = enabled
fix 5483301 = enabled
fix 5657044 = enabled
fix 5694984 = enabled
fix 5868490 = enabled
fix 5650477 = enabled
fix 5611962 = enabled
fix 4279274 = enabled
fix 5741121 = enabled
fix 5714944 = enabled
fix 5391505 = enabled
fix 5762598 = enabled
fix 5578791 = enabled
fix 5259048 = enabled
fix 5882954 = enabled
fix 2492766 = enabled
fix 5707608 = enabled
fix 5891471 = enabled
fix 5884780 = enabled
fix 5680702 = enabled
fix 5371452 = enabled
fix 5838613 = enabled
fix 5949981 = enabled
fix 5624216 = enabled
fix 5741044 = enabled
fix 5976822 = enabled
fix 6006457 = enabled
fix 5872956 = enabled

fix 5923644 = enabled
fix 5943234 = enabled
fix 5844495 = enabled
fix 4168080 = enabled
fix 6020579 = enabled
fix 5842686 = disabled
fix 5996801 = enabled
fix 5593639 = enabled
fix 6133948 = enabled
fix 3151991 = enabled
fix 6146906 = enabled
fix 6239909 = enabled
fix 6267621 = enabled
fix 5909305 = enabled
fix 6279918 = enabled
fix 6141818 = enabled
fix 6151963 = enabled
fix 6251917 = enabled
fix 6282093 = enabled
fix 6119510 = enabled
fix 6119382 = enabled
fix 3801750 = enabled
fix 5705630 = disabled
fix 5944076 = enabled
fix 5406763 = enabled
fix 6070954 = enabled
fix 6282944 = enabled
fix 6138746 = enabled
fix 6082745 = enabled
fix 3426050 = enabled
fix 599680 = enabled
fix 6062266 = enabled
fix 6087237 = enabled
fix 6122894 = enabled
fix 6377505 = enabled
fix 5893768 = enabled
fix 6163564 = enabled
fix 6073325 = enabled
fix 6188881 = enabled
fix 6007259 = enabled
fix 6239971 = enabled
fix 5284200 = disabled
fix 6042205 = enabled
fix 6051211 = enabled
fix 6434668 = enabled
fix 6438752 = enabled
fix 5936366 = enabled
fix 6439032 = enabled
fix 6438892 = enabled
fix 6006300 = enabled
fix 5947231 = enabled
fix 5416118 = 1
fix 6365442 = 1
fix 6239039 = enabled
fix 6502845 = enabled
fix 6913094 = enabled
fix 6029469 = enabled
fix 5919513 = enabled
fix 6057611 = enabled
fix 6469667 = enabled
fix 6608941 = disabled
fix 6368066 = enabled
fix 6329318 = enabled
fix 6656356 = enabled
fix 4507997 = enabled
fix 6671155 = enabled
fix 6694548 = enabled
fix 6688200 = enabled
fix 6612471 = enabled
fix 6708183 = disabled
fix 6326934 = enabled
fix 6520717 = disabled
fix 6714199 = enabled
fix 6681545 = enabled
fix 6748058 = enabled
fix 6167716 = enabled
fix 6674254 = enabled
fix 6468287 = enabled
fix 6503543 = enabled
fix 6808773 = disabled
fix 6766962 = enabled
fix 6120483 = enabled
fix 6670551 = enabled

fix 6771838 = enabled
fix 6626018 = disabled
fix 6530596 = enabled
fix 6778642 = enabled
fix 6699059 = enabled
fix 6376551 = enabled
fix 6429113 = enabled
fix 6782437 = enabled
fix 6776808 = enabled
fix 6765823 = enabled
fix 6768660 = enabled
fix 6782665 = enabled
fix 6610822 = enabled
fix 6514189 = enabled
fix 6818410 = enabled
fix 6827696 = enabled
fix 6773613 = enabled
fix 5902962 = enabled
fix 6956212 = enabled
fix 3056297 = enabled
fix 6440977 = disabled
fix 6972291 = disabled
fix 6904146 = enabled
fix 6221403 = enabled
fix 5475051 = enabled
fix 6845871 = enabled
fix 5468809 = enabled
fix 6917633 = enabled
fix 4444536 = disabled
fix 6955210 = enabled
fix 6994194 = enabled
fix 6399597 = disabled
fix 6951776 = enabled
fix 5648287 = 3
fix 6987082 = disabled
fix 7132036 = enabled
fix 6980350 = enabled
fix 5199213 = enabled
fix 7138405 = enabled
fix 7148689 = enabled
fix 6820988 = enabled
fix 7032684 = enabled
fix 6617866 = enabled
fix 7155968 = enabled
fix 7127980 = enabled
fix 6982954 = enabled
fix 7241819 = enabled
fix 6897034 = enabled
fix 7236148 = enabled
fix 7298570 = enabled
fix 7249095 = enabled
fix 7314499 = enabled
fix 7324224 = enabled
fix 7289023 = enabled
fix 7237571 = enabled
fix 7116357 = enabled
fix 7345484 = enabled
fix 7375179 = enabled
fix 6430500 = disabled
fix 5897486 = enabled
fix 6774209 = enabled
fix 7306637 = enabled
fix 6451322 = enabled
fix 7208131 = enabled
fix 7388652 = enabled
fix 7127530 = enabled
fix 6751206 = enabled
fix 6669103 = enabled
fix 7430474 = enabled
fix 6990305 = enabled
fix 7043307 = enabled
fix 6921505 = enabled
fix 7388457 = enabled
fix 3120429 = enabled
fix 7452823 = disabled
fix 6838105 = enabled
fix 6769711 = enabled
fix 7170213 = enabled
fix 6528872 = enabled
fix 7295298 = enabled
fix 5922070 = enabled
fix 7259468 = enabled
fix 6418552 = enabled

fix 4619997 = enabled
fix 7524366 = enabled
fix 6942476 = enabled
fix 6418771 = enabled
fix 7375077 = enabled
fix 5400639 = enabled
fix 4570921 = enabled
fix 7426911 = enabled
fix 5099019 = disabled
fix 7528216 = enabled
fix 7521266 = enabled
fix 7385140 = enabled
fix 7576516 = enabled
fix 7573526 = enabled
fix 7576476 = enabled
fix 7165898 = enabled
fix 7263214 = enabled
fix 3320140 = enabled
fix 7555510 = enabled
fix 7613118 = enabled
fix 7597059 = enabled
fix 7558911 = enabled
fix 5520732 = enabled
fix 7679490 = disabled
fix 7449971 = enabled
fix 3628118 = enabled
fix 4370840 = enabled
fix 7281191 = enabled
fix 7519687 = enabled
fix 5029592 = 3
fix 6012093 = 1
fix 6053861 = disabled
fix 6941515 = disabled
fix 7696414 = enabled
fix 7272039 = enabled
fix 7834811 = enabled
fix 7640597 = enabled
fix 7341616 = enabled
fix 7168184 = enabled
fix 399198 = enabled
fix 7831070 = enabled
fix 7676897 = disabled
fix 7414637 = enabled
fix 7585456 = enabled
fix 8202421 = enabled
fix 7658097 = disabled
fix 8251486 = enabled
fix 7132684 = enabled
fix 7512227 = enabled
fix 6972987 = enabled
fix 7199035 = enabled
fix 8243446 = enabled
fix 7650462 = enabled
fix 6720701 = enabled
fix 7592673 = enabled
fix 7718694 = enabled
fix 7534027 = enabled
fix 7708267 = enabled
fix 5716785 = enabled
fix 7356191 = enabled
fix 7679161 = enabled
fix 7597159 = enabled
fix 7499258 = enabled
fix 8328363 = enabled
fix 7452863 = enabled
fix 8284930 = enabled
fix 7298626 = enabled
fix 7657126 = enabled
fix 8371884 = enabled
fix 8318020 = enabled
fix 8255423 = enabled
fix 7135745 = enabled
fix 8356253 = enabled
fix 7534257 = enabled
fix 8323407 = enabled
fix 7539815 = enabled
fix 8289316 = enabled
fix 8447850 = enabled
fix 7675944 = enabled
fix 8355120 = enabled
fix 7176746 = enabled
fix 8442891 = enabled
fix 8373261 = enabled

fix 7679164 = enabled
fix 7670533 = enabled
fix 8408665 = enabled
fix 8491399 = enabled
fix 8348392 = enabled
fix 8348585 = enabled
fix 8508056 = enabled
fix 8335178 = enabled
fix 8515269 = enabled
fix 8247017 = enabled
fix 7325597 = enabled
fix 8531490 = enabled
fix 6163600 = enabled
fix 8589278 = disabled
fix 8557992 = enabled
fix 7556098 = enabled
fix 8580883 = enabled
fix 5892599 = disabled
fix 8609714 = enabled
fix 8514561 = enabled
fix 8619631 = disabled

PARAMETERS IN OPT_PARAM HINT

Column Usage Monitoring is ON: tracking level = 1

Considering Query Transformations on query block SEL\$1 (#0)

Query transformations (QT)

JF: Checking validity of join factorization for query block SEL\$1 (#0)

JF: Bypassed: not a UNION or UNION-ALL query block.

ST: not valid since star transformation parameter is FALSE

TE: Checking validity of table expansion for query block SEL\$1 (#0)

TE: Bypassed: No partitioned table in query block.

CBQT bypassed for query block SEL\$1 (#0): no complex view, sub-queries or UNION (ALL) queries.

CBQT: Validity checks failed for 2ym4vxlyqxvfy.

CSE: Considering common sub-expression elimination in query block SEL\$1 (#0)

Common Subexpression elimination (CSE)

CSE: CSE not performed on query block SEL\$1 (#0).

OBYE: Considering Order-by Elimination from view SEL\$1 (#0)

Order-by elimination (OBYE)

OBYE: OBYE bypassed: no order by to eliminate.

CVM: Considering view merge in query block SEL\$1 (#0)

query block SEL\$1 (#0) unchanged

Considering Query Transformations on query block SEL\$1 (#0)

Query transformations (QT)

JF: Checking validity of join factorization for query block SEL\$1 (#0)

JF: Bypassed: not a UNION or UNION-ALL query block.

ST: not valid since star transformation parameter is FALSE

TE: Checking validity of table expansion for query block SEL\$1 (#0)

TE: Bypassed: No partitioned table in query block.

CBQT bypassed for query block SEL\$1 (#0): no complex view, sub-queries or UNION (ALL) queries.

CBQT: Validity checks failed for 2ym4vxlyqxvfy.

CSE: Considering common sub-expression elimination in query block SEL\$1 (#0)

Common Subexpression elimination (CSE)

CSE: CSE not performed on query block SEL\$1 (#0).

SU: Considering subquery unnesting in query block SEL\$1 (#0)

Subquery Unnest (SU)

SJC: Considering set-join conversion in query block SEL\$1 (#0)

Set-Join Conversion (SJC)

SJC: not performed

PM: Considering predicate move-around in query block SEL\$1 (#0)

Predicate Move-Around (PM)

PM: PM bypassed: Outer query contains no views.

```

PM:      PM bypassed: Outer query contains no views.
query block SEL$1 (#0) unchanged
FPD: Considering simple filter push in query block SEL$1 (#0)
TO_NUMBER("T1"."CHAR_COL")=10
try to generate transitive predicate from check constraints for query block SEL$1 (#0)
finally: TO_NUMBER("T1"."CHAR_COL")=10

apadrvt-start sqlid=3408270440851762654
:
  call(in-use=604, alloc=16360), compile(in-use=50884, alloc=54408), execution(in-use=1496, alloc=4060)

*****
Peeked values of the binds in SQL statement
*****

Final query after transformations:***** UNPARSED QUERY IS *****
SELECT /*+ INDEX ("T1") */ "T1"."CHAR_COL" "CHAR_COL","T1"."C2" "C2" FROM "TESTUSER"."T1" "T1" WHERE
TO_NUMBER("T1"."CHAR_COL")=10
kkoqbc: optimizing query block SEL$1 (#0)

:
  call(in-use=632, alloc=16360), compile(in-use=51528, alloc=54408), execution(in-use=1496, alloc=4060)

kkoqbc-subheap (create addr=0x0E56FB38)
*****
QUERY BLOCK TEXT
*****
SELECT /*+ INDEX(T1) */ /* FIND_ME */
*
FROM
  T1
WHERE
  CHAR_COL = 10
-----
QUERY BLOCK SIGNATURE
-----
signature (optimizer): qb_name=SEL$1 nbfros=1 flg=0
  fro(0): flg=0 objn=70879 hint_alias="T1"@SEL$1

-----
SYSTEM STATISTICS INFORMATION
-----
Using NOWORKLOAD Stats
CPUSPEEDNW: 466 millions instructions/sec (default is 100)
IOTFRSPEED: 4096 bytes per millisecond (default is 4096)
IOSEEKTIM: 10 milliseconds (default is 10)
MBRC: -1 blocks (default is 8)

*****
BASE STATISTICAL INFORMATION
*****
Table Stats::
  Table: T1 Alias: T1
  #Rows: 1000000 #Blks: 16217 AvgRowLen: 108.00
Index Stats::
  Index: SYS_C0010157 Col#: 1
  LVLS: 2 #LB: 3908 #DK: 1000000 LB/K: 1.00 DB/K: 1.00 CLUF: 201245.00
  User hint to use this index
Access path analysis for T1
*****
SINGLE TABLE ACCESS PATH
Single Table Cardinality Estimation for T1[T1]
Table: T1 Alias: T1
Card: Original: 1000000.000000 Rounded: 1 Computed: 1.00 Non Adjusted: 1.00
kkoqbc: index filter:TO_NUMBER("T1"."CHAR_COL")=10

Access Path: index (FullScan)
  Index: SYS_C0010157
  resc_io: 3911.00 resc_cpu: 227852122
  ix_sel: 1.000000 ix_sel_with_filters: 0.000001
  ***** Logdef predicate Adjustment *****
Final IO cst 0.00 , CPU cst 50.00
  ***** End Logdef Adjustment *****
Cost: 3960.67 Resp: 3960.67 Degree: 1
Best:: AccessPath: IndexRange
Index: SYS_C0010157
Cost: 3960.67 Degree: 1 Resp: 3960.67 Card: 1.00 Bytes: 0

*****

```

```

OPTIMIZER STATISTICS AND COMPUTATIONS
*****

```

GENERAL PLANS

Considering cardinality-based initial join order.

Permutations for Starting Table :0

Join order[1]: T1[T1]#0

Best so far: Table#: 0 cost: 3960.6729 card: 1.0000 bytes: 108

(newjo-stop-1) k:0, spcnt:0, perm:1, maxperm:2000

Number of join permutations tried: 1

Trying or-Expansion on query block SEL\$1 (#0)

Transfer Optimizer annotations for query block SEL\$1 (#0)

id=0 froiand (index only filter) predicate=TO_NUMBER("T1"."CHAR_COL")=10

Final cost for query block SEL\$1 (#0) - All Rows Plan:

Best join order: 1

Cost: 3960.6729 Degree: 1 Card: 1.0000 Bytes: 108

Resc: 3960.6729 Resc_io: 3911.0000 Resc_cpu: 277852122

Resp: 3960.6729 Resp_io: 3911.0000 Resc_cpu: 277852122

kkoqbc-subheap (delete addr=0x0E56FB38, in-use=11612, alloc=14128)

kkoqbc-end:

:

call(in-use=7508, alloc=32736), compile(in-use=52308, alloc=54408), execution(in-use=1496, alloc=4060)

kkoqbc: finish optimizing query block SEL\$1 (#0)

apadr-end

:

call(in-use=7508, alloc=32736), compile(in-use=52972, alloc=54408), execution(in-use=1496, alloc=4060)

Starting SQL statement dump

user_id=65 user_name=TESTUSER module=SQL*Plus action=

sql_id=2ym4vxlyqxvfy plan_hash_value=458899268 problem_type=3

----- Current SQL Statement for this session (sql_id=2ym4vxlyqxvfy) -----

SELECT /*+ INDEX(T1) */ /* FIND_ME */

*

FROM

T1

WHERE

CHAR_COL = 10

sql_text_length=75

sql=SELECT /*+ INDEX(T1) */ /* FIND_ME */

*

FROM

T1

WHERE

CHAR_COL = 10

----- Explain Plan Dump -----

----- Plan Table -----

=====

Plan Table

=====

Id	Operation	Name	Rows	Bytes	Cost	Time
0	SELECT STATEMENT				3961	
1	TABLE ACCESS BY INDEX ROWID	T1	1	108	3961	00:00:48
2	INDEX FULL SCAN	SYS_C0010157	1		3960	00:00:48

Predicate Information:

2 - filter(TO_NUMBER("CHAR_COL")=10)

Content of other_xml column

=====

db_version : 11.2.0.1

parse_schema : TESTUSER

plan_hash : 458899268

plan_hash_2 : 1616696111

Outline Data:

/*+

BEGIN_OUTLINE_DATA

IGNORE_OPTIM_EMBEDDED_HINTS

OPTIMIZER_FEATURES_ENABLE('11.2.0.1')

DB_VERSION('11.2.0.1')

ALL_ROWS

OUTLINE_LEAF(@"SEL\$1")

INDEX(@"SEL\$1" "T1"@"SEL\$1" ("T1"."CHAR_COL"))

END_OUTLINE_DATA

*/

Optimizer state dump:

Compilation Environment Dump

optimizer_mode_hinted = false
optimizer_features_hinted = 0.0.0
parallel_execution_enabled = false
parallel_query_forced_dop = 0
parallel_dml_forced_dop = 0
parallel_ddl_forced_degree = 0
parallel_ddl_forced_instances = 0
_query_rewrite_fudge = 90
optimizer_features_enable = 11.2.0.1
_optimizer_search_limit = 5
cpu_count = 2
active_instance_count = 1
parallel_threads_per_cpu = 2
hash_area_size = 131072
bitmap_merge_area_size = 1048576
sort_area_size = 65536
sort_area_retained_size = 0
_sort_elimination_cost_ratio = 0
_optimizer_block_size = 8192
_sort_multiblock_read_count = 2
_hash_multiblock_io_count = 0
_db_file_optimizer_read_db = 8
_optimizer_max_permutations = 2000
pga_aggregate_target = 143360 KB
_pga_max_size = 204800 KB
_query_rewrite_maxdisjunct = 257
_smm_auto_min_io_size = 56 KB
_smm_auto_max_io_size = 248 KB
_smm_min_size = 143 KB
_smm_max_size = 28672 KB
_smm_px_max_size = 71680 KB
_cpu_to_io = 0
_optimizer_undo_cost_change = 11.2.0.1
parallel_query_mode = enabled
parallel_dml_mode = disabled
parallel_ddl_mode = enabled
optimizer_mode = all_rows
sqlstat_enabled = false
_optimizer_percent_parallel = 101
_always_anti_join = choose
_always_semi_join = choose
_optimizer_mode_force = true
_partition_view_enabled = true
_always_star_transformation = false
_query_rewrite_or_error = false
_hash_join_enabled = true
cursor_sharing = exact
_b_tree_bitmap_plans = true
star_transformation_enabled = false
_optimizer_cost_model = choose
_new_sort_cost_estimate = true
_complex_view_merging = true
_unnest_subquery = true
_eliminate_common_subexpr = true
_pred_move_around = true
_convert_set_to_join = false
_push_join_predicate = true
_push_join_union_view = true
_fast_full_scan_enabled = true
_optim_enhance_nnull_detection = true
_parallel_broadcast_enabled = true
_px_broadcast_fudge_factor = 100
_ordered_nested_loop = true
_no_or_expansion = false
optimizer_index_cost_adj = 100
optimizer_index_caching = 0
_system_index_caching = 0
_disable_datalayer_sampling = false
query_rewrite_enabled = true
query_rewrite_integrity = enforced
_query_cost_rewrite = true
_query_rewrite_2 = true
_query_rewrite_1 = true
_query_rewrite_expression = true
_query_rewrite_jmigrate = true
_query_rewrite_fpc = true
_query_rewrite_drj = true
_full_pwise_join_enabled = true
_partial_pwise_join_enabled = true


```
_left_nested_loops_random           = true
_improved_row_length_enabled        = true
_index_join_enabled                 = true
_enable_type_dep_selectivity        = true
_improved_outerjoin_card            = true
_optimizer_adjust_for_nulls         = true
_optimizer_degree                   = 0
_use_column_stats_for_function      = true
_subquery_pruning_enabled           = true
_subquery_pruning_mv_enabled        = false
_or_expand_nvl_predicate            = true
_like_with_bind_as_equality         = false
_table_scan_cost_plus_one           = true
_cost_equality_semi_join            = true
_default_non_equality_sel_check     = true
_new_initial_join_orders            = true
_oneside_colstat_for_equijoins      = true
_optim_peek_user_binds              = true
_minimal_stats_aggregation          = true
_force_temptables_for_gsets         = false
workarea_size_policy                = auto
_smm_auto_cost_enabled              = true
_gs_anti_semi_join_allowed         = true
_optim_new_default_join_sel         = true
optimizer_dynamic_sampling           = 2
_pre_rewrite_push_pred              = true
_optimizer_new_join_card_computation = true
_union_rewrite_for_gs               = yes_gset_mvs
_generalized_pruning_enabled        = true
_optim_adjust_for_part_skews         = true
_force_datefold_trunc               = false
statistics_level                    = typical
_optimizer_system_stats_usage       = true
skip_unusable_indexes               = true
_remove_aggr_subquery               = true
_optimizer_push_down_distinct       = 0
_dml_monitoring_enabled             = true
_optimizer_undo_changes              = false
_predicate_elimination_enabled      = true
_nested_loop_fudge                  = 100
_project_view_columns               = true
_local_communication_costing_enabled = true
_local_communication_ratio          = 50
_query_rewrite_vop_cleanup           = true
_slave_mapping_enabled              = true
_optimizer_cost_based_transformation = linear
_optimizer_mjc_enabled              = true
_right_outer_hash_enable            = true
_spr_push_pred_refspr              = true
_optimizer_cache_stats               = false
_optimizer_cbqt_factor              = 50
_optimizer_squ_bottomup             = true
_fic_area_size                      = 131072
_optimizer_skip_scan_enabled        = true
_optimizer_cost_filter_pred         = false
_optimizer_sortmerge_join_enabled   = true
_optimizer_join_sel_sanity_check    = true
_mmv_query_rewrite_enabled          = true
_bt_mmv_query_rewrite_enabled       = true
_add_stale_mv_to_dependency_list    = true
_distinct_view_unnesting            = false
_optimizer_dim_subq_join_sel        = true
_optimizer_disable_strans_sanity_checks = 0
_optimizer_compute_index_stats      = true
_push_join_union_view2              = true
_optimizer_ignore_hints              = false
_optimizer_random_plan              = 0
_query_rewrite_setopgrw_enable      = true
_optimizer_correct_sq_selectivity    = true
_disable_function_based_index       = false
_optimizer_join_order_control       = 3
_optimizer_cartesian_enabled        = true
_optimizer_starplan_enabled         = true
_extended_pruning_enabled           = true
_optimizer_push_pred_cost_based     = true
_optimizer_null_aware_antijoin      = true
_optimizer_extend_jppd_view_types   = true
_sql_model_unfold_forloops          = run_time
_enable_dml_lock_escalation         = false
_bloom_filter_enabled               = true
_update_bji_ipdml_enabled           = 0
_optimizer_extended_cursor_sharing  = udo
_dm_max_shared_pool_pct             = 1
```

_optimizer_cost_hjstmj_multimatch = true
_optimizer_transitivity_retain = true
_px_pwg_enabled = true
optimizer_secure_view_merging = true
_optimizer_join_elimination_enabled = true
flashback_table_rpi = non_fbt
_optimizer_cbqt_no_size_restriction = true
_optimizer_enhanced_filter_push = true
_optimizer_filter_pred_pullup = true
_rowsrc_trace_level = 0
_simple_view_merging = true
_optimizer_rownum_pred_based_fkr = true
_optimizer_better_inlist_costing = all
_optimizer_self_induced_cache_cost = false
_optimizer_min_cache_blocks = 10
_optimizer_or_expansion = depth
_optimizer_order_by_elimination_enabled = true
_optimizer_outer_to_anti_enabled = true
_selfjoin_mv_duplicates = true
_dimension_skip_null = true
_force_rewrite_enable = false
_optimizer_star_tran_in_with_clause = true
_optimizer_complex_pred_selectivity = true
_optimizer_connect_by_cost_based = true
_gby_hash_aggregation_enabled = true
_globalindex_pnum_filter_enabled = true
_px_minus_intersect = true
_fix_control_key = 0
_force_slave_mapping_intra_part_loads = false
_force_tmp_segment_loads = false
_query_mmvrewrite_maxpreds = 10
_query_mmvrewrite_maxintervals = 5
_query_mmvrewrite_maxinlists = 5
_query_mmvrewrite_maxdmaps = 10
_query_mmvrewrite_maxcmaps = 20
_query_mmvrewrite_maxregperm = 512
_query_mmvrewrite_maxmergedcmaps = 50
_query_mmvrewrite_maxqryinlistvals = 500
_disable_parallel_conventional_load = false
_trace_virtual_columns = false
_replace_virtual_columns = true
_virtual_column_overload_allowed = true
_kdt_buffering = true
_first_k_rows_dynamic_proration = true
_optimizer_sortmerge_join_inequality = true
_optimizer_aw_stats_enabled = true
_bloom_pruning_enabled = true
result_cache_mode = MANUAL
_px_ual_serial_input = true
_optimizer_skip_scan_guess = false
_enable_row_shipping = true
_row_shipping_threshold = 80
_row_shipping_explain = false
transaction_isolation_level = read_committed
_optimizer_distinct_elimination = true
_optimizer_multi_level_push_pred = true
_optimizer_group_by_placement = true
_optimizer_rownum_bind_default = 10
_enable_query_rewrite_on_remote_objs = true
_optimizer_extended_cursor_sharing_rel = simple
_optimizer_adaptive_cursor_sharing = true
_direct_path_insert_features = 0
_optimizer_improve_selectivity = true
optimizer_use_pending_statistics = false
_optimizer_enable_density_improvements = true
_optimizer_aw_join_push_enabled = true
_optimizer_connect_by_combine_sw = true
_enable_pmo_ctas = 0
_optimizer_native_full_outer_join = force
_bloom_predicate_enabled = true
_optimizer_enable_extended_stats = true
_is_lock_table_for_ddl_wait_lock = 0
_pivot_implementation_method = choose
optimizer_capture_sql_plan_baselines = false
optimizer_use_sql_plan_baselines = true
_optimizer_star_trans_min_cost = 0
_optimizer_star_trans_min_ratio = 0
_with_subquery = OPTIMIZER
_optimizer_fkr_index_cost_bias = 10
_optimizer_use_subheap = true
parallel_degree_policy = manual
parallel_degree = 0
parallel_min_time_threshold = 10

```

_parallel_time_unit = 10
_optimizer_or_expansion_subheap = true
_optimizer_free_transformation_heap = true
_optimizer_reuse_cost_annotations = true
_result_cache_auto_size_threshold = 100
_result_cache_auto_time_threshold = 1000
_optimizer_nested_rollup_for_gset = 100
_nlj_batching_enabled = 1
_parallel_query_default_dop = 0
_is_recur_flags = 0
_optimizer_use_invisible_indexes = false
_flashback_data_archive_internal_cursor = 0
_optimizer_extended_stats_usage_control = 224
_parallel_syspls_obey_force = true
_cell_offload_processing = true
_rdbms_internal_fplib_enabled = false
_db_file_multiblock_read_count = 46
_bloom_folding_enabled = true
_mv_generalized_oj_refresh_opt = true
_cell_offload_compaction = ADAPTIVE
_parallel_degree_limit = 65535
_parallel_force_local = false
_parallel_max_degree = 4
_total_cpu_count = 2
_cell_offload_plan_display = AUTO
_optimizer_coalesce_subqueries = true
_optimizer_fast_pred_transitivity = true
_optimizer_fast_access_pred_analysis = true
_optimizer_unnest_disjunctive_subq = true
_optimizer_unnest_corr_set_subq = true
_optimizer_distinct_agg_transform = true
_aggregation_optimization_settings = 0
_optimizer_connect_by_elim_dups = true
_optimizer_eliminate_filtering_join = true
_connect_by_use_union_all = true
_dst_upgrade_insert_conv = true
_advanced_queuing_internal_cursor = 0
_optimizer_unnest_all_subqueries = true
_bloom_predicate_pushdown_to_storage = true
_bloom_vector_elements = 0
_bloom_pushing_max = 524288
_parallel_autodop = 0
_parallel_ddldml = 0
_parallel_cluster_cache_policy = adaptive
_parallel_scalability = 50
_iot_internal_cursor = 0
_optimizer_instance_count = 0
_optimizer_connect_by_cb_whr_only = false
_suppress_scn_chk_for_cqn = nosuppress_1466
_optimizer_join_factorization = true
_optimizer_use_cbqt_star_transformation = true
_optimizer_table_expansion = true
_and_pruning_enabled = true
_deferred_constant_folding_mode = DEFAULT
_optimizer_distinct_placement = true
_partition_pruning_internal_cursor = 0
_parallel_hinted = none
_sql_compatibility = 0
_optimizer_use_feedback = true
_optimizer_try_st_before_jppd = true
Bug Fix Control Environment
  fix 3834770 = 1
  fix 3746511 = enabled
  fix 4519016 = enabled
  fix 3118776 = enabled
  fix 4488689 = enabled
  fix 2194204 = disabled
  fix 2660592 = enabled
  fix 2320291 = enabled
  fix 2324795 = enabled
  fix 4308414 = enabled
  fix 3499674 = disabled
  fix 4569940 = enabled
  fix 4631959 = enabled
  fix 4519340 = enabled
  fix 4550003 = enabled
  fix 1403283 = enabled
  fix 4554846 = enabled
  fix 4602374 = enabled
  fix 4584065 = enabled
  fix 4545833 = enabled
  fix 4611850 = enabled
  fix 4663698 = enabled

```

fix 4663804 = enabled
fix 4666174 = enabled
fix 4567767 = enabled
fix 4556762 = 15
fix 4728348 = enabled
fix 4708389 = enabled
fix 4175830 = enabled
fix 4752814 = enabled
fix 4583239 = enabled
fix 4386734 = enabled
fix 4887636 = enabled
fix 4483240 = enabled
fix 4872602 = disabled
fix 4711525 = enabled
fix 4545802 = enabled
fix 4605810 = enabled
fix 4704779 = enabled
fix 4900129 = enabled
fix 4924149 = enabled
fix 4663702 = enabled
fix 4878299 = enabled
fix 4658342 = enabled
fix 4881533 = enabled
fix 4676955 = enabled
fix 4273361 = enabled
fix 4967068 = enabled
fix 4969880 = disabled
fix 5005866 = enabled
fix 5015557 = enabled
fix 4705343 = enabled
fix 4904838 = enabled
fix 4716096 = enabled
fix 4483286 = disabled
fix 4722900 = enabled
fix 4615392 = enabled
fix 5096560 = enabled
fix 5029464 = enabled
fix 4134994 = enabled
fix 4904890 = enabled
fix 5104624 = enabled
fix 5014836 = enabled
fix 4768040 = enabled
fix 4600710 = enabled
fix 5129233 = enabled
fix 4595987 = enabled
fix 4908162 = enabled
fix 5139520 = enabled
fix 5084239 = enabled
fix 5143477 = disabled
fix 2663857 = enabled
fix 4717546 = enabled
fix 5240264 = disabled
fix 5099909 = enabled
fix 5240607 = enabled
fix 5195882 = enabled
fix 5220356 = enabled
fix 5263572 = enabled
fix 5385629 = enabled
fix 5302124 = enabled
fix 5391942 = enabled
fix 5384335 = enabled
fix 5482831 = enabled
fix 4158812 = enabled
fix 5387148 = enabled
fix 5383891 = enabled
fix 5466973 = enabled
fix 5396162 = enabled
fix 5394888 = enabled
fix 5395291 = enabled
fix 5236908 = enabled
fix 5509293 = enabled
fix 5449488 = enabled
fix 5567933 = enabled
fix 5570494 = enabled
fix 5288623 = enabled
fix 5505995 = enabled
fix 5505157 = enabled
fix 5112460 = enabled
fix 5554865 = enabled
fix 5112260 = enabled
fix 5112352 = enabled
fix 5547058 = enabled
fix 5618040 = enabled

fix 5585313 = enabled
fix 5547895 = enabled
fix 5634346 = enabled
fix 5620485 = enabled
fix 5483301 = enabled
fix 5657044 = enabled
fix 5694984 = enabled
fix 5868490 = enabled
fix 5650477 = enabled
fix 5611962 = enabled
fix 4279274 = enabled
fix 5741121 = enabled
fix 5714944 = enabled
fix 5391505 = enabled
fix 5762598 = enabled
fix 5578791 = enabled
fix 5259048 = enabled
fix 5882954 = enabled
fix 2492766 = enabled
fix 5707608 = enabled
fix 5891471 = enabled
fix 5884780 = enabled
fix 5680702 = enabled
fix 5371452 = enabled
fix 5838613 = enabled
fix 5949981 = enabled
fix 5624216 = enabled
fix 5741044 = enabled
fix 5976822 = enabled
fix 6006457 = enabled
fix 5872956 = enabled
fix 5923644 = enabled
fix 5943234 = enabled
fix 5844495 = enabled
fix 4168080 = enabled
fix 6020579 = enabled
fix 5842686 = disabled
fix 5996801 = enabled
fix 5593639 = enabled
fix 6133948 = enabled
fix 3151991 = enabled
fix 6146906 = enabled
fix 6239909 = enabled
fix 6267621 = enabled
fix 5909305 = enabled
fix 6279918 = enabled
fix 6141818 = enabled
fix 6151963 = enabled
fix 6251917 = enabled
fix 6282093 = enabled
fix 6119510 = enabled
fix 6119382 = enabled
fix 3801750 = enabled
fix 5705630 = disabled
fix 5944076 = enabled
fix 5406763 = enabled
fix 6070954 = enabled
fix 6282944 = enabled
fix 6138746 = enabled
fix 6082745 = enabled
fix 3426050 = enabled
fix 599680 = enabled
fix 6062266 = enabled
fix 6087237 = enabled
fix 6122894 = enabled
fix 6377505 = enabled
fix 5893768 = enabled
fix 6163564 = enabled
fix 6073325 = enabled
fix 6188881 = enabled
fix 6007259 = enabled
fix 6239971 = enabled
fix 5284200 = disabled
fix 6042205 = enabled
fix 6051211 = enabled
fix 6434668 = enabled
fix 6438752 = enabled
fix 5936366 = enabled
fix 6439032 = enabled
fix 6438892 = enabled
fix 6006300 = enabled
fix 5947231 = enabled
fix 5416118 = 1

fix 6365442 = 1
fix 6239039 = enabled
fix 6502845 = enabled
fix 6913094 = enabled
fix 6029469 = enabled
fix 5919513 = enabled
fix 6057611 = enabled
fix 6469667 = enabled
fix 6608941 = disabled
fix 6368066 = enabled
fix 6329318 = enabled
fix 6656356 = enabled
fix 4507997 = enabled
fix 6671155 = enabled
fix 6694548 = enabled
fix 6688200 = enabled
fix 6612471 = enabled
fix 6708183 = disabled
fix 6326934 = enabled
fix 6520717 = disabled
fix 6714199 = enabled
fix 6681545 = enabled
fix 6748058 = enabled
fix 6167716 = enabled
fix 6674254 = enabled
fix 6468287 = enabled
fix 6503543 = enabled
fix 6808773 = disabled
fix 6766962 = enabled
fix 6120483 = enabled
fix 6670551 = enabled
fix 6771838 = enabled
fix 6626018 = disabled
fix 6530596 = enabled
fix 6778642 = enabled
fix 6699059 = enabled
fix 6376551 = enabled
fix 6429113 = enabled
fix 6782437 = enabled
fix 6776808 = enabled
fix 6765823 = enabled
fix 6768660 = enabled
fix 6782665 = enabled
fix 6610822 = enabled
fix 6514189 = enabled
fix 6818410 = enabled
fix 6827696 = enabled
fix 6773613 = enabled
fix 5902962 = enabled
fix 6956212 = enabled
fix 3056297 = enabled
fix 6440977 = disabled
fix 6972291 = disabled
fix 6904146 = enabled
fix 6221403 = enabled
fix 5475051 = enabled
fix 6845871 = enabled
fix 5468809 = enabled
fix 6917633 = enabled
fix 4444536 = disabled
fix 6955210 = enabled
fix 6994194 = enabled
fix 6399597 = disabled
fix 6951776 = enabled
fix 5648287 = 3
fix 6987082 = disabled
fix 7132036 = enabled
fix 6980350 = enabled
fix 5199213 = enabled
fix 7138405 = enabled
fix 7148689 = enabled
fix 6820988 = enabled
fix 7032684 = enabled
fix 6617866 = enabled
fix 7155968 = enabled
fix 7127980 = enabled
fix 6982954 = enabled
fix 7241819 = enabled
fix 6897034 = enabled
fix 7236148 = enabled
fix 7298570 = enabled
fix 7249095 = enabled
fix 7314499 = enabled

fix 7324224 = enabled
fix 7289023 = enabled
fix 7237571 = enabled
fix 7116357 = enabled
fix 7345484 = enabled
fix 7375179 = enabled
fix 6430500 = disabled
fix 5897486 = enabled
fix 6774209 = enabled
fix 7306637 = enabled
fix 6451322 = enabled
fix 7208131 = enabled
fix 7388652 = enabled
fix 7127530 = enabled
fix 6751206 = enabled
fix 6669103 = enabled
fix 7430474 = enabled
fix 6990305 = enabled
fix 7043307 = enabled
fix 6921505 = enabled
fix 7388457 = enabled
fix 3120429 = enabled
fix 7452823 = disabled
fix 6838105 = enabled
fix 6769711 = enabled
fix 7170213 = enabled
fix 6528872 = enabled
fix 7295298 = enabled
fix 5922070 = enabled
fix 7259468 = enabled
fix 6418552 = enabled
fix 4619997 = enabled
fix 7524366 = enabled
fix 6942476 = enabled
fix 6418771 = enabled
fix 7375077 = enabled
fix 5400639 = enabled
fix 4570921 = enabled
fix 7426911 = enabled
fix 5099019 = disabled
fix 7528216 = enabled
fix 7521266 = enabled
fix 7385140 = enabled
fix 7576516 = enabled
fix 7573526 = enabled
fix 7576476 = enabled
fix 7165898 = enabled
fix 7263214 = enabled
fix 3320140 = enabled
fix 7555510 = enabled
fix 7613118 = enabled
fix 7597059 = enabled
fix 7558911 = enabled
fix 5520732 = enabled
fix 7679490 = disabled
fix 7449971 = enabled
fix 3628118 = enabled
fix 4370840 = enabled
fix 7281191 = enabled
fix 7519687 = enabled
fix 5029592 = 3
fix 6012093 = 1
fix 6053861 = disabled
fix 6941515 = disabled
fix 7696414 = enabled
fix 7272039 = enabled
fix 7834811 = enabled
fix 7640597 = enabled
fix 7341616 = enabled
fix 7168184 = enabled
fix 399198 = enabled
fix 7831070 = enabled
fix 7676897 = disabled
fix 7414637 = enabled
fix 7585456 = enabled
fix 8202421 = enabled
fix 7658097 = disabled
fix 8251486 = enabled
fix 7132684 = enabled
fix 7512227 = enabled
fix 6972987 = enabled
fix 7199035 = enabled
fix 8243446 = enabled

fix 7650462 = enabled
fix 6720701 = enabled
fix 7592673 = enabled
fix 7718694 = enabled
fix 7534027 = enabled
fix 7708267 = enabled
fix 5716785 = enabled
fix 7356191 = enabled
fix 7679161 = enabled
fix 7597159 = enabled
fix 7499258 = enabled
fix 8328363 = enabled
fix 7452863 = enabled
fix 8284930 = enabled
fix 7298626 = enabled
fix 7657126 = enabled
fix 8371884 = enabled
fix 8318020 = enabled
fix 8255423 = enabled
fix 7135745 = enabled
fix 8356253 = enabled
fix 7534257 = enabled
fix 8323407 = enabled
fix 7539815 = enabled
fix 8289316 = enabled
fix 8447850 = enabled
fix 7675944 = enabled
fix 8355120 = enabled
fix 7176746 = enabled
fix 8442891 = enabled
fix 8373261 = enabled
fix 7679164 = enabled
fix 7670533 = enabled
fix 8408665 = enabled
fix 8491399 = enabled
fix 8348392 = enabled
fix 8348585 = enabled
fix 8508056 = enabled
fix 8335178 = enabled
fix 8515269 = enabled
fix 8247017 = enabled
fix 7325597 = enabled
fix 8531490 = enabled
fix 6163600 = enabled
fix 8589278 = disabled
fix 8557992 = enabled
fix 7556098 = enabled
fix 8580883 = enabled
fix 5892599 = disabled
fix 8609714 = enabled
fix 8514561 = enabled
fix 8619631 = disabled

Query Block Registry:

SEL\$1 0xe56362c (PARSER) [FINAL]

:

call(in-use=9564, alloc=32736), compile(in-use=74528, alloc=136748), execution(in-use=4784, alloc=8136)

End of Optimizer State Dump

Dumping Hints

=====

atom_hint=(@=0E561BA0 err=0 resol=1 used=1 token=83 org=1 lvl=3 txt=INDEX ("T1"))

===== END SQL Statement Dump =====

Registered qb: SEL\$1 0x274574a4 (PARSER)

QUERY BLOCK SIGNATURE

signature (): qb_name=SEL\$1 nbfros=1 flg=0
fro(0): flg=4 objn=70879 hint_alias="T1"@"SEL\$1"

SPM: current statement disallowed

Automatic degree of parallelism (ADOP)

Automatic degree of parallelism is disabled: statement type.

PM: Considering predicate move-around in query block SEL\$1 (#0)

Predicate Move-Around (PM)

OPTIMIZER INFORMATION

```

*****
----- Current SQL Statement for this session (sql_id=96z9zttbsw5by) -----
EXPLAIN PLAN SET STATEMENT_ID='PLUS140864' FOR SELECT /*+ INDEX(T1) */ /* FIND_ME */
*
FROM
  T1
WHERE
  CHAR_COL = 10
*****

```

Legend

The following abbreviations are used by optimizer trace.

```

CBQT - cost-based query transformation
JPPD - join predicate push-down
OJPPD - old-style (non-cost-based) JPPD
FPD - filter push-down
PM - predicate move-around
CVM - complex view merging
SPJ - select-project-join
SJC - set join conversion
SU - subquery unnesting
OBYE - order by elimination
OST - old style star transformation
ST - new (cbqt) star transformation
CNT - count(col) to count(*) transformation
JE - Join Elimination
JF - join factorization
SLP - select list pruning
DP - distinct placement
qb - query block
LB - leaf blocks
DK - distinct keys
LB/K - average number of leaf blocks per key
DB/K - average number of data blocks per key
CLUF - clustering factor
NDV - number of distinct values
Resp - response cost
Card - cardinality
Resc - resource cost
NL - nested loops (join)
SM - sort merge (join)
HA - hash (join)
CPUSPEED - CPU Speed
IOTFRSPEED - I/O transfer speed
IOSEKTIM - I/O seek time
SREADTIM - average single block read time
MREADTIM - average multiblock read time
MBRC - average multiblock read count
MAXTHR - maximum I/O system throughput
SLAVETHR - average slave I/O throughput
dmeth - distribution method
  1: no partitioning required
  2: value partitioned
  4: right is random (round-robin)
 128: left is random (round-robin)
  8: broadcast right and partition left
 16: broadcast left and partition right
 32: partition left using partitioning of right
 64: partition right using partitioning of left
256: run the join in serial
  0: invalid distribution method
sel - selectivity
ptn - partition

```

PARAMETERS USED BY THE OPTIMIZER

```

*****

```

PARAMETERS WITH ALTERED VALUES

```

*****

```

Compilation Environment Dump

Bug Fix Control Environment

```

*****

```

PARAMETERS WITH DEFAULT VALUES

```

*****

```

Compilation Environment Dump

```

optimizer_mode_hinted          = false
optimizer_features_hinted      = 0.0.0
parallel_execution_enabled      = false
parallel_query_forced_dop       = 0
parallel_dml_forced_dop         = 0

```

parallel_ddl_forced_degree = 0
parallel_ddl_forced_instances = 0
_query_rewrite_fudge = 90
optimizer_features_enable = 11.2.0.1
_optimizer_search_limit = 5
cpu_count = 2
active_instance_count = 1
parallel_threads_per_cpu = 2
hash_area_size = 131072
bitmap_merge_area_size = 1048576
sort_area_size = 65536
sort_area_retained_size = 0
_sort_elimination_cost_ratio = 0
_optimizer_block_size = 8192
_sort_multiblock_read_count = 2
_hash_multiblock_io_count = 0
_db_file_optimizer_read_count = 8
_optimizer_max_permutations = 2000
pga_aggregate_target = 143360 KB
_pga_max_size = 204800 KB
_query_rewrite_maxdisjunct = 257
_smm_auto_min_io_size = 56 KB
_smm_auto_max_io_size = 248 KB
_smm_min_size = 143 KB
_smm_max_size = 28672 KB
_smm_px_max_size = 71680 KB
_cpu_to_io = 0
_optimizer_undo_cost_change = 11.2.0.1
parallel_query_mode = enabled
parallel_dml_mode = disabled
parallel_ddl_mode = enabled
optimizer_mode = all_rows
sqlstat_enabled = false
_optimizer_percent_parallel = 101
_always_anti_join = choose
_always_semi_join = choose
_optimizer_mode_force = true
_partition_view_enabled = true
_always_star_transformation = false
_query_rewrite_or_error = false
_hash_join_enabled = true
cursor_sharing = exact
_b_tree_bitmap_plans = true
star_transformation_enabled = false
_optimizer_cost_model = choose
_new_sort_cost_estimate = true
_complex_view_merging = true
_unnest_subquery = true
_eliminate_common_subexpr = true
_pred_move_around = true
_convert_set_to_join = false
_push_join_predicate = true
_push_join_union_view = true
_fast_full_scan_enabled = true
_optim_enhance_nnull_detection = true
_parallel_broadcast_enabled = true
_px_broadcast_fudge_factor = 100
_ordered_nested_loop = true
_no_or_expansion = false
optimizer_index_cost_adj = 100
optimizer_index_caching = 0
_system_index_caching = 0
_disable_datalayer_sampling = false
query_rewrite_enabled = true
query_rewrite_integrity = enforced
_query_cost_rewrite = true
_query_rewrite_2 = true
_query_rewrite_1 = true
_query_rewrite_expression = true
_query_rewrite_jgmmigrate = true
_query_rewrite_fpc = true
_query_rewrite_drj = true
_full_pwise_join_enabled = true
_partial_pwise_join_enabled = true
_left_nested_loops_random = true
_improved_row_length_enabled = true
_index_join_enabled = true
_enable_type_dep_selectivity = true
_improved_outerjoin_card = true
_optimizer_adjust_for_nulls = true
_optimizer_degree = 0
_use_column_stats_for_function = true
_subquery_pruning_enabled = true

```

_subquery_pruning_mv_enabled      = false
_or_expand_nvl_predicate         = true
_like_with_bind_as_equality      = false
_table_scan_cost_plus_one       = true
_cost_equality_semi_join        = true
_default_non_equality_sel_check  = true
_new_initial_join_orders        = true
_oneside_colstat_for_equijoins   = true
_optim_peek_user_binds          = true
_minimal_stats_aggregation       = true
_force_temptables_for_gsets     = false
workarea_size_policy            = auto
_smm_auto_cost_enabled          = true
_gs_anti_semi_join_allowed      = true
_optim_new_default_join_sel     = true
optimizer_dynamic_sampling       = 2
_pre_rewrite_push_pred          = true
_optimizer_new_join_card_computation = true
_union_rewrite_for_gs           = yes_gset_mvsv
_generalized_pruning_enabled     = true
_optim_adjust_for_part_skews     = true
_force_datefold_trunc           = false
statistics_level                 = typical
_optimizer_system_stats_usage    = true
_skip_unusable_indexes          = true
_remove_aggr_subquery           = true
_optimizer_push_down_distinct   = 0
_dml_monitoring_enabled         = true
_optimizer_undo_changes         = false
_predicate_elimination_enabled  = true
_nested_loop_fudge              = 100
_project_view_columns            = true
_local_communication_costing_enabled = true
_local_communication_ratio      = 50
_query_rewrite_vop_cleanup       = true
_slave_mapping_enabled          = true
_optimizer_cost_based_transformation = linear
_optimizer_mjc_enabled          = true
_right_outer_hash_enable        = true
_spr_push_pred_refspr          = true
_optimizer_cache_stats          = false
_optimizer_cbqt_factor          = 50
_optimizer_squ_bottomup         = true
_fic_area_size                  = 131072
_optimizer_skip_scan_enabled     = true
_optimizer_cost_filter_pred     = false
_optimizer_sortmerge_join_enabled = true
_optimizer_join_sel_sanity_check = true
_mmv_query_rewrite_enabled      = true
_bt_mmv_query_rewrite_enabled   = true
_add_stale_mv_to_dependency_list = true
_distinct_view_unnesting        = false
_optimizer_dim_subq_join_sel    = true
_optimizer_disable_strans_sanity_checks = 0
_optimizer_compute_index_stats  = true
_push_join_union_view2         = true
_optimizer_ignore_hints         = false
_optimizer_random_plan          = 0
_query_rewrite_setopgrw_enable  = true
_optimizer_correct_sq_selectivity = true
_disable_function_based_index   = false
_optimizer_join_order_control   = 3
_optimizer_cartesian_enabled    = true
_optimizer_starplan_enabled     = true
_extended_pruning_enabled       = true
_optimizer_push_pred_cost_based = true
_optimizer_null_aware_antijoin  = true
_optimizer_extend_jppd_view_types = true
_sql_model_unfold_forloops      = run_time
_enable_dml_lock_escalation     = false
_bloom_filter_enabled           = true
_update_bji_ipdml_enabled       = 0
_optimizer_extended_cursor_sharing = udo
_dm_max_shared_pool_pct         = 1
_optimizer_cost_hjsmj_multimatch = true
_optimizer_transitivity_retain  = true
_px_pwg_enabled                 = true
optimizer_secure_view_merging   = true
_optimizer_join_elimination_enabled = true
flashback_table_rpi             = non_fbt
_optimizer_cbqt_no_size_restriction = true
_optimizer_enhanced_filter_push = true
_optimizer_filter_pred_pullup   = true

```

```
_rowsrc_trace_level = 0
_simple_view_merging = true
_optimizer_rownum_pred_based_fkr = true
_optimizer_better_inlist_costing = all
_optimizer_self_induced_cache_cost = false
_optimizer_min_cache_blocks = 10
_optimizer_or_expansion = depth
_optimizer_order_by_elimination_enabled = true
_optimizer_outer_to_anti_enabled = true
_selfjoin_mv_duplicates = true
_dimension_skip_null = true
_force_rewrite_enable = false
_optimizer_star_tran_in_with_clause = true
_optimizer_complex_pred_selectivity = true
_optimizer_connect_by_cost_based = true
_gby_hash_aggregation_enabled = true
_globalindex_pnum_filter_enabled = true
_px_minus_intersect = true
_fix_control_key = 0
_force_slave_mapping_intra_part_loads = false
_force_tmp_segment_loads = false
_query_mmvrewrite_maxpreds = 10
_query_mmvrewrite_maxintervals = 5
_query_mmvrewrite_maxinlists = 5
_query_mmvrewrite_maxdmaps = 10
_query_mmvrewrite_maxcmaps = 20
_query_mmvrewrite_maxregperm = 512
_query_mmvrewrite_maxmergedcmaps = 50
_query_mmvrewrite_maxqryinlistvals = 500
_disable_parallel_conventional_load = false
_trace_virtual_columns = false
_replace_virtual_columns = true
_virtual_column_overload_allowed = true
_kdt_buffering = true
_first_k_rows_dynamic_proration = true
_optimizer_sortmerge_join_inequality = true
_optimizer_aw_stats_enabled = true
_bloom_pruning_enabled = true
result_cache_mode = MANUAL
_px_ual_serial_input = true
_optimizer_skip_scan_guess = false
_enable_row_shipping = true
_row_shipping_threshold = 80
_row_shipping_explain = false
transaction_isolation_level = read_committed
_optimizer_distinct_elimination = true
_optimizer_multi_level_push_pred = true
_optimizer_group_by_placement = true
_optimizer_rownum_bind_default = 10
_enable_query_rewrite_on_remote_objs = true
_optimizer_extended_cursor_sharing_rel = simple
_optimizer_adaptive_cursor_sharing = true
_direct_path_insert_features = 0
_optimizer_improve_selectivity = true
optimizer_use_pending_statistics = false
_optimizer_enable_density_improvements = true
_optimizer_aw_join_push_enabled = true
_optimizer_connect_by_combine_sw = true
_enable_pmo_ctas = 0
_optimizer_native_full_outer_join = force
_bloom_predicate_enabled = true
_optimizer_enable_extended_stats = true
_is_lock_table_for_ddl_wait_lock = 0
_pivot_implementation_method = choose
optimizer_capture_sql_plan_baselines = false
optimizer_use_sql_plan_baselines = true
_optimizer_star_trans_min_cost = 0
_optimizer_star_trans_min_ratio = 0
_with_subquery = OPTIMIZER
_optimizer_fkr_index_cost_bias = 10
_optimizer_use_subheap = true
parallel_degree_policy = manual
parallel_degree = 0
parallel_min_time_threshold = 10
_parallel_time_unit = 10
_optimizer_or_expansion_subheap = true
_optimizer_free_transformation_heap = true
_optimizer_reuse_cost_annotations = true
_result_cache_auto_size_threshold = 100
_result_cache_auto_time_threshold = 1000
_optimizer_nested_rollup_for_gset = 100
_nlj_batching_enabled = 1
parallel_query_default_dop = 0
```

is_recur_flags = 0
optimizer_use_invisible_indexes = false
flashback_data_archive_internal_cursor = 0
_optimizer_extended_stats_usage_control = 224
_parallel_syspls_obey_force = true
cell_offload_processing = true
_rdbms_internal_fplib_enabled = false
db_file_multiblock_read_count = 46
_bloom_folding_enabled = true
_mv_generalized_oj_refresh_opt = true
cell_offload_compaction = ADAPTIVE
parallel_degree_limit = 65535
parallel_force_local = false
parallel_max_degree = 4
total_cpu_count = 2
cell_offload_plan_display = AUTO
_optimizer_coalesce_subqueries = true
_optimizer_fast_pred_transitivity = true
_optimizer_fast_access_pred_analysis = true
_optimizer_unnest_disjunctive_subq = true
_optimizer_unnest_corr_set_subq = true
_optimizer_distinct_agg_transform = true
_aggregation_optimization_settings = 0
_optimizer_connect_by_elim_dups = true
_optimizer_eliminate_filtering_join = true
_connect_by_use_union_all = true
dst_upgrade_insert_conv = true
advanced_queuing_internal_cursor = 0
_optimizer_unnest_all_subqueries = true
_bloom_predicate_pushdown_to_storage = true
_bloom_vector_elements = 0
_bloom_pushing_max = 524288
parallel_autodop = 0
parallel_ddldml = 0
_parallel_cluster_cache_policy = adaptive
_parallel_scalability = 50
iot_internal_cursor = 0
_optimizer_instance_count = 0
_optimizer_connect_by_cb_whr_only = false
_suppress_scn_chk_for_cqn = nosuppress_1466
_optimizer_join_factorization = true
_optimizer_use_cbqt_star_transformation = true
_optimizer_table_expansion = true
_and_pruning_enabled = true
_deferred_constant_folding_mode = DEFAULT
_optimizer_distinct_placement = true
partition_pruning_internal_cursor = 0
parallel_hinted = none
_sql_compatibility = 0
_optimizer_use_feedback = true
_optimizer_try_st_before_jppd = true

Bug Fix Control Environment

fix 3834770 = 1
fix 3746511 = enabled
fix 4519016 = enabled
fix 3118776 = enabled
fix 4488689 = enabled
fix 2194204 = disabled
fix 2660592 = enabled
fix 2320291 = enabled
fix 2324795 = enabled
fix 4308414 = enabled
fix 3499674 = disabled
fix 4569940 = enabled
fix 4631959 = enabled
fix 4519340 = enabled
fix 4550003 = enabled
fix 1403283 = enabled
fix 4554846 = enabled
fix 4602374 = enabled
fix 4584065 = enabled
fix 4545833 = enabled
fix 4611850 = enabled
fix 4663698 = enabled
fix 4663804 = enabled
fix 4666174 = enabled
fix 4567767 = enabled
fix 4556762 = 15
fix 4728348 = enabled
fix 4708389 = enabled
fix 4175830 = enabled
fix 4752814 = enabled
fix 4583239 = enabled

fix 4386734 = enabled
fix 4887636 = enabled
fix 4483240 = enabled
fix 4872602 = disabled
fix 4711525 = enabled
fix 4545802 = enabled
fix 4605810 = enabled
fix 4704779 = enabled
fix 4900129 = enabled
fix 4924149 = enabled
fix 4663702 = enabled
fix 4878299 = enabled
fix 4658342 = enabled
fix 4881533 = enabled
fix 4676955 = enabled
fix 4273361 = enabled
fix 4967068 = enabled
fix 4969880 = disabled
fix 5005866 = enabled
fix 5015557 = enabled
fix 4705343 = enabled
fix 4904838 = enabled
fix 4716096 = enabled
fix 4483286 = disabled
fix 4722900 = enabled
fix 4615392 = enabled
fix 5096560 = enabled
fix 5029464 = enabled
fix 4134994 = enabled
fix 4904890 = enabled
fix 5104624 = enabled
fix 5014836 = enabled
fix 4768040 = enabled
fix 4600710 = enabled
fix 5129233 = enabled
fix 4595987 = enabled
fix 4908162 = enabled
fix 5139520 = enabled
fix 5084239 = enabled
fix 5143477 = disabled
fix 2663857 = enabled
fix 4717546 = enabled
fix 5240264 = disabled
fix 5099909 = enabled
fix 5240607 = enabled
fix 5195882 = enabled
fix 5220356 = enabled
fix 5263572 = enabled
fix 5385629 = enabled
fix 5302124 = enabled
fix 5391942 = enabled
fix 5384335 = enabled
fix 5482831 = enabled
fix 4158812 = enabled
fix 5387148 = enabled
fix 5383891 = enabled
fix 5466973 = enabled
fix 5396162 = enabled
fix 5394888 = enabled
fix 5395291 = enabled
fix 5236908 = enabled
fix 5509293 = enabled
fix 5449488 = enabled
fix 5567933 = enabled
fix 5570494 = enabled
fix 5288623 = enabled
fix 5505995 = enabled
fix 5505157 = enabled
fix 5112460 = enabled
fix 5554865 = enabled
fix 5112260 = enabled
fix 5112352 = enabled
fix 5547058 = enabled
fix 5618040 = enabled
fix 5585313 = enabled
fix 5547895 = enabled
fix 5634346 = enabled
fix 5620485 = enabled
fix 5483301 = enabled
fix 5657044 = enabled
fix 5694984 = enabled
fix 5868490 = enabled
fix 5650477 = enabled

fix 5611962 = enabled
fix 4279274 = enabled
fix 5741121 = enabled
fix 5714944 = enabled
fix 5391505 = enabled
fix 5762598 = enabled
fix 5578791 = enabled
fix 5259048 = enabled
fix 5882954 = enabled
fix 2492766 = enabled
fix 5707608 = enabled
fix 5891471 = enabled
fix 5884780 = enabled
fix 5680702 = enabled
fix 5371452 = enabled
fix 5838613 = enabled
fix 5949981 = enabled
fix 5624216 = enabled
fix 5741044 = enabled
fix 5976822 = enabled
fix 6006457 = enabled
fix 5872956 = enabled
fix 5923644 = enabled
fix 5943234 = enabled
fix 5844495 = enabled
fix 4168080 = enabled
fix 6020579 = enabled
fix 5842686 = disabled
fix 5996801 = enabled
fix 5593639 = enabled
fix 6133948 = enabled
fix 3151991 = enabled
fix 6146906 = enabled
fix 6239909 = enabled
fix 6267621 = enabled
fix 5909305 = enabled
fix 6279918 = enabled
fix 6141818 = enabled
fix 6151963 = enabled
fix 6251917 = enabled
fix 6282093 = enabled
fix 6119510 = enabled
fix 6119382 = enabled
fix 3801750 = enabled
fix 5705630 = disabled
fix 5944076 = enabled
fix 5406763 = enabled
fix 6070954 = enabled
fix 6282944 = enabled
fix 6138746 = enabled
fix 6082745 = enabled
fix 3426050 = enabled
fix 599680 = enabled
fix 6062266 = enabled
fix 6087237 = enabled
fix 6122894 = enabled
fix 6377505 = enabled
fix 5893768 = enabled
fix 6163564 = enabled
fix 6073325 = enabled
fix 6188881 = enabled
fix 6007259 = enabled
fix 6239971 = enabled
fix 5284200 = disabled
fix 6042205 = enabled
fix 6051211 = enabled
fix 6434668 = enabled
fix 6438752 = enabled
fix 5936366 = enabled
fix 6439032 = enabled
fix 6438892 = enabled
fix 6006300 = enabled
fix 5947231 = enabled
fix 5416118 = 1
fix 6365442 = 1
fix 6239039 = enabled
fix 6502845 = enabled
fix 6913094 = enabled
fix 6029469 = enabled
fix 5919513 = enabled
fix 6057611 = enabled
fix 6469667 = enabled
fix 6608941 = disabled

fix 6368066 = enabled
fix 6329318 = enabled
fix 6656356 = enabled
fix 4507997 = enabled
fix 6671155 = enabled
fix 6694548 = enabled
fix 6688200 = enabled
fix 6612471 = enabled
fix 6708183 = disabled
fix 6326934 = enabled
fix 6520717 = disabled
fix 6714199 = enabled
fix 6681545 = enabled
fix 6748058 = enabled
fix 6167716 = enabled
fix 6674254 = enabled
fix 6468287 = enabled
fix 6503543 = enabled
fix 6808773 = disabled
fix 6766962 = enabled
fix 6120483 = enabled
fix 6670551 = enabled
fix 6771838 = enabled
fix 6626018 = disabled
fix 6530596 = enabled
fix 6778642 = enabled
fix 6699059 = enabled
fix 6376551 = enabled
fix 6429113 = enabled
fix 6782437 = enabled
fix 6776808 = enabled
fix 6765823 = enabled
fix 6768660 = enabled
fix 6782665 = enabled
fix 6610822 = enabled
fix 6514189 = enabled
fix 6818410 = enabled
fix 6827696 = enabled
fix 6773613 = enabled
fix 5902962 = enabled
fix 6956212 = enabled
fix 3056297 = enabled
fix 6440977 = disabled
fix 6972291 = disabled
fix 6904146 = enabled
fix 6221403 = enabled
fix 5475051 = enabled
fix 6845871 = enabled
fix 5468809 = enabled
fix 6917633 = enabled
fix 4444536 = disabled
fix 6955210 = enabled
fix 6994194 = enabled
fix 6399597 = disabled
fix 6951776 = enabled
fix 5648287 = 3
fix 6987082 = disabled
fix 7132036 = enabled
fix 6980350 = enabled
fix 5199213 = enabled
fix 7138405 = enabled
fix 7148689 = enabled
fix 6820988 = enabled
fix 7032684 = enabled
fix 6617866 = enabled
fix 7155968 = enabled
fix 7127980 = enabled
fix 6982954 = enabled
fix 7241819 = enabled
fix 6897034 = enabled
fix 7236148 = enabled
fix 7298570 = enabled
fix 7249095 = enabled
fix 7314499 = enabled
fix 7324224 = enabled
fix 7289023 = enabled
fix 7237571 = enabled
fix 7116357 = enabled
fix 7345484 = enabled
fix 7375179 = enabled
fix 6430500 = disabled
fix 5897486 = enabled
fix 6774209 = enabled

fix 7306637 = enabled
fix 6451322 = enabled
fix 7208131 = enabled
fix 7388652 = enabled
fix 7127530 = enabled
fix 6751206 = enabled
fix 6669103 = enabled
fix 7430474 = enabled
fix 6990305 = enabled
fix 7043307 = enabled
fix 6921505 = enabled
fix 7388457 = enabled
fix 3120429 = enabled
fix 7452823 = disabled
fix 6838105 = enabled
fix 6769711 = enabled
fix 7170213 = enabled
fix 6528872 = enabled
fix 7295298 = enabled
fix 5922070 = enabled
fix 7259468 = enabled
fix 6418552 = enabled
fix 4619997 = enabled
fix 7524366 = enabled
fix 6942476 = enabled
fix 6418771 = enabled
fix 7375077 = enabled
fix 5400639 = enabled
fix 4570921 = enabled
fix 7426911 = enabled
fix 5099019 = disabled
fix 7528216 = enabled
fix 7521266 = enabled
fix 7385140 = enabled
fix 7576516 = enabled
fix 7573526 = enabled
fix 7576476 = enabled
fix 7165898 = enabled
fix 7263214 = enabled
fix 3320140 = enabled
fix 7555510 = enabled
fix 7613118 = enabled
fix 7597059 = enabled
fix 7558911 = enabled
fix 5520732 = enabled
fix 7679490 = disabled
fix 7449971 = enabled
fix 3628118 = enabled
fix 4370840 = enabled
fix 7281191 = enabled
fix 7519687 = enabled
fix 5029592 = 3
fix 6012093 = 1
fix 6053861 = disabled
fix 6941515 = disabled
fix 7696414 = enabled
fix 7272039 = enabled
fix 7834811 = enabled
fix 7640597 = enabled
fix 7341616 = enabled
fix 7168184 = enabled
fix 399198 = enabled
fix 7831070 = enabled
fix 7676897 = disabled
fix 7414637 = enabled
fix 7585456 = enabled
fix 8202421 = enabled
fix 7658097 = disabled
fix 8251486 = enabled
fix 7132684 = enabled
fix 7512227 = enabled
fix 6972987 = enabled
fix 7199035 = enabled
fix 8243446 = enabled
fix 7650462 = enabled
fix 6720701 = enabled
fix 7592673 = enabled
fix 7718694 = enabled
fix 7534027 = enabled
fix 7708267 = enabled
fix 5716785 = enabled
fix 7356191 = enabled
fix 7679161 = enabled

fix 7597159 = enabled
fix 7499258 = enabled
fix 8328363 = enabled
fix 7452863 = enabled
fix 8284930 = enabled
fix 7298626 = enabled
fix 7657126 = enabled
fix 8371884 = enabled
fix 8318020 = enabled
fix 8255423 = enabled
fix 7135745 = enabled
fix 8356253 = enabled
fix 7534257 = enabled
fix 8323407 = enabled
fix 7539815 = enabled
fix 8289316 = enabled
fix 8447850 = enabled
fix 7675944 = enabled
fix 8355120 = enabled
fix 7176746 = enabled
fix 8442891 = enabled
fix 8373261 = enabled
fix 7679164 = enabled
fix 7670533 = enabled
fix 8408665 = enabled
fix 8491399 = enabled
fix 8348392 = enabled
fix 8348585 = enabled
fix 8508056 = enabled
fix 8335178 = enabled
fix 8515269 = enabled
fix 8247017 = enabled
fix 7325597 = enabled
fix 8531490 = enabled
fix 6163600 = enabled
fix 8589278 = disabled
fix 8557992 = enabled
fix 7556098 = enabled
fix 8580883 = enabled
fix 5892599 = disabled
fix 8609714 = enabled
fix 8514561 = enabled
fix 8619631 = disabled

PARAMETERS IN OPT_PARAM HINT

Column Usage Monitoring is ON: tracking level = 1

Considering Query Transformations on query block SEL\$1 (#0)

Query transformations (QT)

JF: Checking validity of join factorization for query block SEL\$1 (#0)

JF: Bypassed: not a UNION or UNION-ALL query block.

ST: not valid since star transformation parameter is FALSE

TE: Checking validity of table expansion for query block SEL\$1 (#0)

TE: Bypassed: No partitioned table in query block.

CBQT bypassed for query block SEL\$1 (#0): no complex view, sub-queries or UNION (ALL) queries.

CBQT: Validity checks failed for 96z9zttbsw5by.

CSE: Considering common sub-expression elimination in query block SEL\$1 (#0)

Common Subexpression elimination (CSE)

CSE: CSE not performed on query block SEL\$1 (#0).

OBYE: Considering Order-by Elimination from view SEL\$1 (#0)

Order-by elimination (OBYE)

OBYE: OBYE bypassed: no order by to eliminate.

CVM: Considering view merge in query block SEL\$1 (#0)

query block SEL\$1 (#0) unchanged

Considering Query Transformations on query block SEL\$1 (#0)

Query transformations (QT)

JF: Checking validity of join factorization for query block SEL\$1 (#0)

JF: Bypassed: not a UNION or UNION-ALL query block.

ST: not valid since star transformation parameter is FALSE

TE: Checking validity of table expansion for query block SEL\$1 (#0)

```

TE: Bypassed: No partitioned table in query block.
CBQT bypassed for query block SEL$1 (#0): no complex view, sub-queries or UNION (ALL) queries.
CBQT: Validity checks failed for 96z9zttbsw5by.
CSE: Considering common sub-expression elimination in query block SEL$1 (#0)
*****
Common Subexpression elimination (CSE)
*****
CSE: CSE not performed on query block SEL$1 (#0).
SU: Considering subquery unnesting in query block SEL$1 (#0)
*****
Subquery Unnest (SU)
*****
SJC: Considering set-join conversion in query block SEL$1 (#0)
*****
Set-Join Conversion (SJC)
*****
SJC: not performed
PM: Considering predicate move-around in query block SEL$1 (#0)
*****
Predicate Move-Around (PM)
*****
PM: PM bypassed: Outer query contains no views.
PM: PM bypassed: Outer query contains no views.
query block SEL$1 (#0) unchanged
FPD: Considering simple filter push in query block SEL$1 (#0)
TO_NUMBER("T1"."CHAR_COL")=10
try to generate transitive predicate from check constraints for query block SEL$1 (#0)
finally: TO_NUMBER("T1"."CHAR_COL")=10

apadrv-start sqlid=10627720851128980862
:
  call(in-use=604, alloc=16360), compile(in-use=60324, alloc=60944), execution(in-use=75604, alloc=77548)

*****
Peeked values of the binds in SQL statement
*****

Final query after transformations:***** UNPARSED QUERY IS *****
SELECT /*+ INDEX ("T1") */ "T1"."CHAR_COL" "CHAR_COL", "T1"."C2" "C2" FROM "TESTUSER"."T1" "T1" WHERE
TO_NUMBER("T1"."CHAR_COL")=10
kkoqbc: optimizing query block SEL$1 (#0)

:
  call(in-use=632, alloc=16360), compile(in-use=60968, alloc=65000), execution(in-use=79680, alloc=81624)

kkoqbc-subheap (create addr=0x0E56FB38)
*****
QUERY BLOCK TEXT
*****
SELECT /*+ INDEX(T1) */ /* FIND_ME */
*
FROM
  T1
WHERE
  CHAR_COL = 10
-----
QUERY BLOCK SIGNATURE
-----
signature (optimizer): qb_name=SEL$1 nbfros=1 flg=0
fro(0): flg=0 objn=70879 hint_alias="T1"@SEL$1"

-----
SYSTEM STATISTICS INFORMATION
-----
Using NOWORKLOAD Stats
CPUSPEEDNW: 466 millions instructions/sec (default is 100)
IOTFRSPEED: 4096 bytes per millisecond (default is 4096)
IOSEEKTIM: 10 milliseconds (default is 10)
MBRC: -1 blocks (default is 8)

*****
BASE STATISTICAL INFORMATION
*****
Table Stats::
  Table: T1 Alias: T1
  #Rows: 1000000 #Blks: 16217 AvgRowLen: 108.00
Index Stats::
  Index: SYS_C0010157 Col#: 1
  LVLs: 2 #LB: 3908 #DK: 1000000 LB/K: 1.00 DB/K: 1.00 CLUF: 201245.00
  User hint to use this index
Access path analysis for T1
*****
SINGLE TABLE ACCESS PATH

```

Single Table Cardinality Estimation for T1[T1]
 Table: T1 Alias: T1
 Card: Original: 1000000.000000 Rounded: 1 Computed: 1.00 Non Adjusted: 1.00
 kkofmx: index filter:TO_NUMBER("T1"."CHAR_COL")=10

Access Path: index (FullScan)
 Index: SYS_C0010157
 resc_io: 3911.00 resc_cpu: 227852122
 ix_sel: 1.000000 ix_sel_with_filters: 0.000001
 ***** Logdef predicate Adjustment *****
 Final IO cst 0.00 , CPU cst 50.00
 ***** End Logdef Adjustment *****
 Cost: 3960.67 Resp: 3960.67 Degree: 1
 Best:: AccessPath: IndexRange
 Index: SYS_C0010157
 Cost: 3960.67 Degree: 1 Resp: 3960.67 Card: 1.00 Bytes: 0

OPTIMIZER STATISTICS AND COMPUTATIONS

GENERAL PLANS

Considering cardinality-based initial join order.
 Permutations for Starting Table :0
 Join order[1]: T1[T1]#0

 Best so far: Table#: 0 cost: 3960.6729 card: 1.0000 bytes: 108

 (newjo-stop-1) k:0, spcnt:0, perm:1, maxperm:2000

Number of join permutations tried: 1

 Trying or-Expansion on query block SEL\$1 (#0)
 Transfer Optimizer annotations for query block SEL\$1 (#0)
 id=0 froiand (index only filter) predicate=TO_NUMBER("T1"."CHAR_COL")=10
 Final cost for query block SEL\$1 (#0) - All Rows Plan:

Best join order: 1
 Cost: 3960.6729 Degree: 1 Card: 1.0000 Bytes: 108
 Resc: 3960.6729 Resc_io: 3911.0000 Resc_cpu: 277852122
 Resp: 3960.6729 Resp_io: 3911.0000 Resc_cpu: 277852122
 kkoqbc-subheap (delete addr=0x0E56FB38, in-use=11612, alloc=14128)
 kkoqbc-end:

call(in-use=7508, alloc=32736), compile(in-use=61748, alloc=65000), execution(in-use=79680, alloc=81624)

kkoqbc: finish optimizing query block SEL\$1 (#0)
 apadr-end

call(in-use=7508, alloc=32736), compile(in-use=62396, alloc=65000), execution(in-use=79680, alloc=81624)

Starting SQL statement dump

```

user_id=65 user_name=TESTUSER module=SQL*Plus action=
sql_id=96z9zttbsw5by plan_hash_value=458899268 problem_type=3
----- Current SQL Statement for this session (sql_id=96z9zttbsw5by) -----
EXPLAIN PLAN SET STATEMENT_ID='PLUS140864' FOR SELECT /*+ INDEX(T1) */ /* FIND_ME */
*
FROM
  T1
WHERE
  CHAR_COL = 10
sql_text_length=122
sql=EXPLAIN PLAN SET STATEMENT_ID='PLUS140864' FOR SELECT /*+ INDEX(T1) */ /* FIND_ME */
*
FROM
  T1
WHERE
  CHAR_COL = 10
----- Explain Plan Dump -----
----- Plan Table -----

```

=====
 Plan Table
 =====

Id	Operation	Name	Rows	Bytes	Cost	Time
0	SELECT STATEMENT				3961	
1	TABLE ACCESS BY INDEX ROWID	T1	1	108	3961	00:00:48

Predicate Information:

2 - filter(TO_NUMBER("CHAR_COL")=10)

Content of other_xml column

=====

db_version : 11.2.0.1
parse_schema : TESTUSER
plan_hash : 458899268
plan_hash_2 : 1616696111

Outline Data:

```
/*+  
  BEGIN_OUTLINE_DATA  
    IGNORE_OPTIM_EMBEDDED_HINTS  
    OPTIMIZER_FEATURES_ENABLE('11.2.0.1')  
    DB_VERSION('11.2.0.1')  
    ALL_ROWS  
    OUTLINE_LEAF(@"SEL$1")  
    INDEX(@"SEL$1" "T1"@"SEL$1" ("T1"."CHAR_COL"))  
  END_OUTLINE_DATA  
*/
```

Optimizer state dump:

Compilation Environment Dump

optimizer_mode_hinted = false
optimizer_features_hinted = 0.0.0
parallel_execution_enabled = false
parallel_query_forced_dop = 0
parallel_dml_forced_dop = 0
parallel_ddl_forced_degree = 0
parallel_ddl_forced_instances = 0
_query_rewrite_fudge = 90
optimizer_features_enable = 11.2.0.1
_optimizer_search_limit = 5
cpu_count = 2
active_instance_count = 1
parallel_threads_per_cpu = 2
hash_area_size = 131072
bitmap_merge_area_size = 1048576
sort_area_size = 65536
sort_area_retained_size = 0
_sort_elimination_cost_ratio = 0
_optimizer_block_size = 8192
_sort_multiblock_read_count = 2
_hash_multiblock_io_count = 0
_db_file_optimizer_read_count = 8
_optimizer_max_permutations = 2000
pga_aggregate_target = 143360 KB
_pga_max_size = 204800 KB
_query_rewrite_maxdisjunct = 257
_smm_auto_min_io_size = 56 KB
_smm_auto_max_io_size = 248 KB
_smm_min_size = 143 KB
_smm_max_size = 28672 KB
_smm_px_max_size = 71680 KB
_cpu_to_io = 0
_optimizer_undo_cost_change = 11.2.0.1
parallel_query_mode = enabled
parallel_dml_mode = disabled
parallel_ddl_mode = enabled
optimizer_mode = all_rows
sqlstat_enabled = false
_optimizer_percent_parallel = 101
_always_anti_join = choose
_always_semi_join = choose
_optimizer_mode_force = true
_partition_view_enabled = true
_always_star_transformation = false
_query_rewrite_or_error = false
_hash_join_enabled = true
cursor_sharing = exact
_b_tree_bitmap_plans = true
star_transformation_enabled = false
_optimizer_cost_model = choose
_new_sort_cost_estimate = true
_complex_view_merging = true
_unnest_subquery = true
_eliminate_common_subexpr = true
_pred_move_around = true
_convert_set_to_join = false
_push_join_predicate = true

_push_join_union_view = true
_fast_full_scan_enabled = true
_optim_enhance_nnull_detection = true
_parallel_broadcast_enabled = true
_px_broadcast_fudge_factor = 100
_ordered_nested_loop = true
_no_or_expansion = false
optimizer_index_cost_adj = 100
optimizer_index_caching = 0
_system_index_caching = 0
_disable_datalayer_sampling = false
query_rewrite_enabled = true
query_rewrite_integrity = enforced
_query_cost_rewrite = true
_query_rewrite_2 = true
_query_rewrite_1 = true
_query_rewrite_expression = true
_query_rewrite_jmigrate = true
_query_rewrite_fpc = true
_query_rewrite_drj = true
_full_pwise_join_enabled = true
_partial_pwise_join_enabled = true
_left_nested_loops_random = true
_improved_row_length_enabled = true
_index_join_enabled = true
_enable_type_dep_selectivity = true
_improved_outerjoin_card = true
_optimizer_adjust_for_nulls = true
_optimizer_degree = 0
_use_column_stats_for_function = true
_subquery_pruning_enabled = true
_subquery_pruning_mv_enabled = false
_or_expand_nvl_predicate = true
_like_with_bind_as_equality = false
_table_scan_cost_plus_one = true
_cost_equality_semi_join = true
_default_non_equality_sel_check = true
_new_initial_join_orders = true
_oneside_colstat_for_equijoins = true
_optim_peek_user_binds = true
_minimal_stats_aggregation = true
_force_temptables_for_gsets = false
workarea_size_policy = auto
_smm_auto_cost_enabled = true
_gs_anti_semi_join_allowed = true
_optim_new_default_join_sel = true
optimizer_dynamic_sampling = 2
_pre_rewrite_push_pred = true
_optimizer_new_join_card_computation = true
_union_rewrite_for_gs = yes_gset_mvsv
_generalized_pruning_enabled = true
_optim_adjust_for_part_skews = true
_force_datefold_trunc = false
statistics_level = typical
_optimizer_system_stats_usage = true
skip_unusable_indexes = true
_remove_aggr_subquery = true
_optimizer_push_down_distinct = 0
_dml_monitoring_enabled = true
_optimizer_undo_changes = false
_predicate_elimination_enabled = true
_nested_loop_fudge = 100
_project_view_columns = true
_local_communication_costing_enabled = true
_local_communication_ratio = 50
_query_rewrite_vop_cleanup = true
_slave_mapping_enabled = true
_optimizer_cost_based_transformation = linear
_optimizer_mjc_enabled = true
_right_outer_hash_enable = true
_spr_push_pred_refspr = true
_optimizer_cache_stats = false
_optimizer_cbqt_factor = 50
_optimizer_squ_bottomup = true
_fic_area_size = 131072
_optimizer_skip_scan_enabled = true
_optimizer_cost_filter_pred = false
_optimizer_sortmerge_join_enabled = true
_optimizer_join_sel_sanity_check = true
_mmv_query_rewrite_enabled = true
_bt_mmv_query_rewrite_enabled = true
_add_stale_mv_to_dependency_list = true
_distinct_view_unnesting = false

```
_optimizer_dim_subq_join_sel           = true
_optimizer_disable_strans_sanity_checks = 0
_optimizer_compute_index_stats         = true
_push_join_union_view2                 = true
_optimizer_ignore_hints                 = false
_optimizer_random_plan                  = 0
_query_rewrite_setopgrw_enable         = true
_optimizer_correct_sq_selectivity       = true
_disable_function_based_index          = false
_optimizer_join_order_control           = 3
_optimizer_cartesian_enabled            = true
_optimizer_starplan_enabled             = true
_extended_pruning_enabled               = true
_optimizer_push_pred_cost_based         = true
_optimizer_null_aware_antijoin         = true
_optimizer_extend_jppd_view_types       = true
_sql_model_unfold_forloops              = run_time
_enable_dml_lock_escalation             = false
_bloom_filter_enabled                   = true
_update_bji_ipdml_enabled               = 0
_optimizer_extended_cursor_sharing      = udo
_dm_max_shared_pool_pct                 = 1
_optimizer_cost_hjsmj_multimatch        = true
_optimizer_transitivity_retain          = true
_px_pwg_enabled                          = true
_optimizer_secure_view_merging           = true
_optimizer_join_elimination_enabled     = true
flashback_table_rpi                     = non_fbt
_optimizer_cbqt_no_size_restriction     = true
_optimizer_enhanced_filter_push         = true
_optimizer_filter_pred_pullup           = true
_rowsrc_trace_level                     = 0
_simple_view_merging                     = true
_optimizer_rownum_pred_based_fkr        = true
_optimizer_better_inlist_costing        = all
_optimizer_self_induced_cache_cost      = false
_optimizer_min_cache_blocks              = 10
_optimizer_or_expansion                  = depth
_optimizer_order_by_elimination_enabled = true
_optimizer_outer_to_anti_enabled         = true
_selfjoin_mv_duplicates                 = true
_dimension_skip_null                     = true
_force_rewrite_enable                    = false
_optimizer_star_tran_in_with_clause     = true
_optimizer_complex_pred_selectivity     = true
_optimizer_connect_by_cost_based        = true
_gby_hash_aggregation_enabled           = true
_globalindex_pnum_filter_enabled         = true
_px_minus_intersect                      = true
_fix_control_key                         = 0
_force_slave_mapping_intra_part_loads   = false
_force_tmp_segment_loads                 = false
_query_mmvrewrite_maxpreeds              = 10
_query_mmvrewrite_maxintervals           = 5
_query_mmvrewrite_maxinlists            = 5
_query_mmvrewrite_maxdmaps              = 10
_query_mmvrewrite_maxcmaps              = 20
_query_mmvrewrite_maxregperm            = 512
_query_mmvrewrite_maxmergedcmaps        = 50
_query_mmvrewrite_maxqryinlistvals      = 500
_disable_parallel_conventional_load     = false
_trace_virtual_columns                   = false
_replace_virtual_columns                 = true
_virtual_column_overload_allowed         = true
_kdt_buffering                           = true
_first_k_rows_dynamic_proration         = true
_optimizer_sortmerge_join_inequality    = true
_optimizer_aw_stats_enabled              = true
_bloom_pruning_enabled                   = true
result_cache_mode                        = MANUAL
_px_ual_serial_input                     = true
_optimizer_skip_scan_guess               = false
_enable_row_shipping                     = true
_row_shipping_threshold                  = 80
_row_shipping_explain                    = false
transaction_isolation_level              = read_committed
_optimizer_distinct_elimination          = true
_optimizer_multi_level_push_pred         = true
_optimizer_group_by_placement            = true
_optimizer_rownum_bind_default           = 10
_enable_query_rewrite_on_remote_objs    = true
_optimizer_extended_cursor_sharing_rel  = simple
_optimizer_adaptive_cursor_sharing      = true
```

```

_direct_path_insert_features          = 0
_optimizer_improve_selectivity       = true
optimizer_use_pending_statistics     = false
_optimizer_enable_density_improvements = true
_optimizer_await_join_push_enabled   = true
_optimizer_connect_by_combine_sw     = true
_enable_pmo_ctas                     = 0
_optimizer_native_full_outer_join    = force
_bloom_predicate_enabled             = true
_optimizer_enable_extended_stats     = true
_is_lock_table_for_ddl_wait_lock    = 0
_pivot_implementation_method        = choose
optimizer_capture_sql_plan_baselines = false
optimizer_use_sql_plan_baselines    = true
_optimizer_star_trans_min_cost       = 0
_optimizer_star_trans_min_ratio      = 0
_with_subquery                       = OPTIMIZER
_optimizer_fkr_index_cost_bias       = 10
_optimizer_use_subheap               = true
parallel_degree_policy               = manual
parallel_degree                      = 0
parallel_min_time_threshold          = 10
_parallel_time_unit                  = 10
_optimizer_or_expansion_subheap      = true
_optimizer_free_transformation_heap  = true
_optimizer_reuse_cost_annotations    = true
_result_cache_auto_size_threshold   = 100
_result_cache_auto_time_threshold   = 1000
_optimizer_nested_rollup_for_gset    = 100
_nlj_batching_enabled                = 1
parallel_query_default_dop           = 0
is_recur_flags                       = 0
optimizer_use_invisible_indexes     = false
flashback_data_archive_internal_cursor = 0
_optimizer_extended_stats_usage_control = 224
_parallel_syspls_obey_force          = true
cell_offload_processing              = true
_rdbms_internal_fplib_enabled       = false
db_file_multiblock_read_count       = 46
_bloom_folding_enabled               = true
_mv_generalized_oj_refresh_opt       = true
cell_offload_compaction              = ADAPTIVE
parallel_degree_limit                = 65535
parallel_force_local                 = false
parallel_max_degree                  = 4
total_cpu_count                      = 2
cell_offload_plan_display            = AUTO
_optimizer_coalesce_subqueries       = true
_optimizer_fast_pred_transitivity    = true
_optimizer_fast_access_pred_analysis = true
_optimizer_unnest_disjunctive_subq   = true
_optimizer_unnest_corr_set_subq     = true
_optimizer_distinct_agg_transform    = true
_aggregation_optimization_settings  = 0
_optimizer_connect_by_elim_dups      = true
_optimizer_eliminate_filtering_join  = true
_connect_by_use_union_all            = true
dst_upgrade_insert_conv              = true
advanced_queuing_internal_cursor     = 0
_optimizer_unnest_all_subqueries     = true
_bloom_predicate_pushdown_to_storage = true
_bloom_vector_elements               = 0
_bloom_pushing_max                   = 524288
parallel_autodop                     = 0
parallel_ddldml                      = 0
_parallel_cluster_cache_policy       = adaptive
_parallel_scalability                = 50
iot_internal_cursor                  = 0
_optimizer_instance_count            = 0
_optimizer_connect_by_cb_whr_only    = false
_suppress_scn_chk_for_cqn            = nosuppress_1466
_optimizer_join_factorization        = true
_optimizer_use_cbqt_star_transformation = true
_optimizer_table_expansion           = true
_and_pruning_enabled                 = true
_deferred_constant_folding_mode     = DEFAULT
_optimizer_distinct_placement        = true
partition_pruning_internal_cursor    = 0
parallel_hinted                      = none
_sql_compatibility                   = 0
_optimizer_use_feedback              = true
_optimizer_try_st_before_jppd        = true
Bug Fix Control Environment

```


fix 3834770 = 1
fix 3746511 = enabled
fix 4519016 = enabled
fix 3118776 = enabled
fix 4488689 = enabled
fix 2194204 = disabled
fix 2660592 = enabled
fix 2320291 = enabled
fix 2324795 = enabled
fix 4308414 = enabled
fix 3499674 = disabled
fix 4569940 = enabled
fix 4631959 = enabled
fix 4519340 = enabled
fix 4550003 = enabled
fix 1403283 = enabled
fix 4554846 = enabled
fix 4602374 = enabled
fix 4584065 = enabled
fix 4545833 = enabled
fix 4611850 = enabled
fix 4663698 = enabled
fix 4663804 = enabled
fix 4666174 = enabled
fix 4567767 = enabled
fix 4556762 = 15
fix 4728348 = enabled
fix 4708389 = enabled
fix 4175830 = enabled
fix 4752814 = enabled
fix 4583239 = enabled
fix 4386734 = enabled
fix 4887636 = enabled
fix 4483240 = enabled
fix 4872602 = disabled
fix 4711525 = enabled
fix 4545802 = enabled
fix 4605810 = enabled
fix 4704779 = enabled
fix 4900129 = enabled
fix 4924149 = enabled
fix 4663702 = enabled
fix 4878299 = enabled
fix 4658342 = enabled
fix 4881533 = enabled
fix 4676955 = enabled
fix 4273361 = enabled
fix 4967068 = enabled
fix 4969880 = disabled
fix 5005866 = enabled
fix 5015557 = enabled
fix 4705343 = enabled
fix 4904838 = enabled
fix 4716096 = enabled
fix 4483286 = disabled
fix 4722900 = enabled
fix 4615392 = enabled
fix 5096560 = enabled
fix 5029464 = enabled
fix 4134994 = enabled
fix 4904890 = enabled
fix 5104624 = enabled
fix 5014836 = enabled
fix 4768040 = enabled
fix 4600710 = enabled
fix 5129233 = enabled
fix 4595987 = enabled
fix 4908162 = enabled
fix 5139520 = enabled
fix 5084239 = enabled
fix 5143477 = disabled
fix 2663857 = enabled
fix 4717546 = enabled
fix 5240264 = disabled
fix 5099909 = enabled
fix 5240607 = enabled
fix 5195882 = enabled
fix 5220356 = enabled
fix 5263572 = enabled
fix 5385629 = enabled
fix 5302124 = enabled
fix 5391942 = enabled
fix 5384335 = enabled

fix 5482831 = enabled
fix 4158812 = enabled
fix 5387148 = enabled
fix 5383891 = enabled
fix 5466973 = enabled
fix 5396162 = enabled
fix 5394888 = enabled
fix 5395291 = enabled
fix 5236908 = enabled
fix 5509293 = enabled
fix 5449488 = enabled
fix 5567933 = enabled
fix 5570494 = enabled
fix 5288623 = enabled
fix 5505995 = enabled
fix 5505157 = enabled
fix 5112460 = enabled
fix 5554865 = enabled
fix 5112260 = enabled
fix 5112352 = enabled
fix 5547058 = enabled
fix 5618040 = enabled
fix 5585313 = enabled
fix 5547895 = enabled
fix 5634346 = enabled
fix 5620485 = enabled
fix 5483301 = enabled
fix 5657044 = enabled
fix 5694984 = enabled
fix 5868490 = enabled
fix 5650477 = enabled
fix 5611962 = enabled
fix 4279274 = enabled
fix 5741121 = enabled
fix 5714944 = enabled
fix 5391505 = enabled
fix 5762598 = enabled
fix 5578791 = enabled
fix 5259048 = enabled
fix 5882954 = enabled
fix 2492766 = enabled
fix 5707608 = enabled
fix 5891471 = enabled
fix 5884780 = enabled
fix 5680702 = enabled
fix 5371452 = enabled
fix 5838613 = enabled
fix 5949981 = enabled
fix 5624216 = enabled
fix 5741044 = enabled
fix 5976822 = enabled
fix 6006457 = enabled
fix 5872956 = enabled
fix 5923644 = enabled
fix 5943234 = enabled
fix 5844495 = enabled
fix 4168080 = enabled
fix 6020579 = enabled
fix 5842686 = disabled
fix 5996801 = enabled
fix 5593639 = enabled
fix 6133948 = enabled
fix 3151991 = enabled
fix 6146906 = enabled
fix 6239909 = enabled
fix 6267621 = enabled
fix 5909305 = enabled
fix 6279918 = enabled
fix 6141818 = enabled
fix 6151963 = enabled
fix 6251917 = enabled
fix 6282093 = enabled
fix 6119510 = enabled
fix 6119382 = enabled
fix 3801750 = enabled
fix 5705630 = disabled
fix 5944076 = enabled
fix 5406763 = enabled
fix 6070954 = enabled
fix 6282944 = enabled
fix 6138746 = enabled
fix 6082745 = enabled
fix 3426050 = enabled

fix 599680 = enabled
fix 6062266 = enabled
fix 6087237 = enabled
fix 6122894 = enabled
fix 6377505 = enabled
fix 5893768 = enabled
fix 6163564 = enabled
fix 6073325 = enabled
fix 6188881 = enabled
fix 6007259 = enabled
fix 6239971 = enabled
fix 5284200 = disabled
fix 6042205 = enabled
fix 6051211 = enabled
fix 6434668 = enabled
fix 6438752 = enabled
fix 5936366 = enabled
fix 6439032 = enabled
fix 6438892 = enabled
fix 6006300 = enabled
fix 5947231 = enabled
fix 5416118 = 1
fix 6365442 = 1
fix 6239039 = enabled
fix 6502845 = enabled
fix 6913094 = enabled
fix 6029469 = enabled
fix 5919513 = enabled
fix 6057611 = enabled
fix 6469667 = enabled
fix 6608941 = disabled
fix 6368066 = enabled
fix 6329318 = enabled
fix 6656356 = enabled
fix 4507997 = enabled
fix 6671155 = enabled
fix 6694548 = enabled
fix 6688200 = enabled
fix 6612471 = enabled
fix 6708183 = disabled
fix 6326934 = enabled
fix 6520717 = disabled
fix 6714199 = enabled
fix 6681545 = enabled
fix 6748058 = enabled
fix 6167716 = enabled
fix 6674254 = enabled
fix 6468287 = enabled
fix 6503543 = enabled
fix 6808773 = disabled
fix 6766962 = enabled
fix 6120483 = enabled
fix 6670551 = enabled
fix 6771838 = enabled
fix 6626018 = disabled
fix 6530596 = enabled
fix 6778642 = enabled
fix 6699059 = enabled
fix 6376551 = enabled
fix 6429113 = enabled
fix 6782437 = enabled
fix 6776808 = enabled
fix 6765823 = enabled
fix 6768660 = enabled
fix 6782665 = enabled
fix 6610822 = enabled
fix 6514189 = enabled
fix 6818410 = enabled
fix 6827696 = enabled
fix 6773613 = enabled
fix 5902962 = enabled
fix 6956212 = enabled
fix 3056297 = enabled
fix 6440977 = disabled
fix 6972291 = disabled
fix 6904146 = enabled
fix 6221403 = enabled
fix 5475051 = enabled
fix 6845871 = enabled
fix 5468809 = enabled
fix 6917633 = enabled
fix 4444536 = disabled
fix 6955210 = enabled

fix 6994194 = enabled
fix 6399597 = disabled
fix 6951776 = enabled
fix 5648287 = 3
fix 6987082 = disabled
fix 7132036 = enabled
fix 6980350 = enabled
fix 5199213 = enabled
fix 7138405 = enabled
fix 7148689 = enabled
fix 6820988 = enabled
fix 7032684 = enabled
fix 6617866 = enabled
fix 7155968 = enabled
fix 7127980 = enabled
fix 6982954 = enabled
fix 7241819 = enabled
fix 6897034 = enabled
fix 7236148 = enabled
fix 7298570 = enabled
fix 7249095 = enabled
fix 7314499 = enabled
fix 7324224 = enabled
fix 7289023 = enabled
fix 7237571 = enabled
fix 7116357 = enabled
fix 7345484 = enabled
fix 7375179 = enabled
fix 6430500 = disabled
fix 5897486 = enabled
fix 6774209 = enabled
fix 7306637 = enabled
fix 6451322 = enabled
fix 7208131 = enabled
fix 7388652 = enabled
fix 7127530 = enabled
fix 6751206 = enabled
fix 6669103 = enabled
fix 7430474 = enabled
fix 6990305 = enabled
fix 7043307 = enabled
fix 6921505 = enabled
fix 7388457 = enabled
fix 3120429 = enabled
fix 7452823 = disabled
fix 6838105 = enabled
fix 6769711 = enabled
fix 7170213 = enabled
fix 6528872 = enabled
fix 7295298 = enabled
fix 5922070 = enabled
fix 7259468 = enabled
fix 6418552 = enabled
fix 4619997 = enabled
fix 7524366 = enabled
fix 6942476 = enabled
fix 6418771 = enabled
fix 7375077 = enabled
fix 5400639 = enabled
fix 4570921 = enabled
fix 7426911 = enabled
fix 5099019 = disabled
fix 7528216 = enabled
fix 7521266 = enabled
fix 7385140 = enabled
fix 7576516 = enabled
fix 7573526 = enabled
fix 7576476 = enabled
fix 7165898 = enabled
fix 7263214 = enabled
fix 3320140 = enabled
fix 7555510 = enabled
fix 7613118 = enabled
fix 7597059 = enabled
fix 7558911 = enabled
fix 5520732 = enabled
fix 7679490 = disabled
fix 7449971 = enabled
fix 3628118 = enabled
fix 4370840 = enabled
fix 7281191 = enabled
fix 7519687 = enabled
fix 5029592 = 3

fix 6012093 = 1
fix 6053861 = disabled
fix 6941515 = disabled
fix 7696414 = enabled
fix 7272039 = enabled
fix 7834811 = enabled
fix 7640597 = enabled
fix 7341616 = enabled
fix 7168184 = enabled
fix 399198 = enabled
fix 7831070 = enabled
fix 7676897 = disabled
fix 7414637 = enabled
fix 7585456 = enabled
fix 8202421 = enabled
fix 7658097 = disabled
fix 8251486 = enabled
fix 7132684 = enabled
fix 7512227 = enabled
fix 6972987 = enabled
fix 7199035 = enabled
fix 8243446 = enabled
fix 7650462 = enabled
fix 6720701 = enabled
fix 7592673 = enabled
fix 7718694 = enabled
fix 7534027 = enabled
fix 7708267 = enabled
fix 5716785 = enabled
fix 7356191 = enabled
fix 7679161 = enabled
fix 7597159 = enabled
fix 7499258 = enabled
fix 8328363 = enabled
fix 7452863 = enabled
fix 8284930 = enabled
fix 7298626 = enabled
fix 7657126 = enabled
fix 8371884 = enabled
fix 8318020 = enabled
fix 8255423 = enabled
fix 7135745 = enabled
fix 8356253 = enabled
fix 7534257 = enabled
fix 8323407 = enabled
fix 7539815 = enabled
fix 8289316 = enabled
fix 8447850 = enabled
fix 7675944 = enabled
fix 8355120 = enabled
fix 7176746 = enabled
fix 8442891 = enabled
fix 8373261 = enabled
fix 7679164 = enabled
fix 7670533 = enabled
fix 8408665 = enabled
fix 8491399 = enabled
fix 8348392 = enabled
fix 8348585 = enabled
fix 8508056 = enabled
fix 8335178 = enabled
fix 8515269 = enabled
fix 8247017 = enabled
fix 7325597 = enabled
fix 8531490 = enabled
fix 6163600 = enabled
fix 8589278 = disabled
fix 8557992 = enabled
fix 7556098 = enabled
fix 8580883 = enabled
fix 5892599 = disabled
fix 8609714 = enabled
fix 8514561 = enabled
fix 8619631 = disabled

Query Block Registry:

SEL\$1 0x274574a4 (PARSER) [FINAL]

:

call(in-use=9564, alloc=32736), compile(in-use=87164, alloc=187352), execution(in-use=205448, alloc=208652)

End of Optimizer State Dump

Dumping Hints

=====

atom_hint=(@=2745667C err=0 resol=1 used=1 token=83 org=1 lvl=3 txt=INDEX ("T1")
===== END SQL Statement Dump =====

Registered qb: SEL\$1 0xe56362c (PARSER)

QUERY BLOCK SIGNATURE

signature (): qb_name=SEL\$1 nbfros=1 flg=0
fro(0): flg=4 objn=70879 hint_alias="T1"@"SEL\$1"

SPM: current statement disallowed

Automatic degree of parallelism (ADOP)

Automatic degree of parallelism is disabled: statement type.

PM: Considering predicate move-around in query block SEL\$1 (#0)

Predicate Move-Around (PM)

OPTIMIZER INFORMATION

----- Current SQL Statement for this session (sql_id=ayzr498gpsdms) -----

SELECT /* FIND_ME */

*

FROM

T1

WHERE

CHAR_COL = '10'

Legend

The following abbreviations are used by optimizer trace.

- CBQT - cost-based query transformation
- JPPD - join predicate push-down
- OJPPD - old-style (non-cost-based) JPPD
- FPD - filter push-down
- PM - predicate move-around
- CVM - complex view merging
- SPJ - select-project-join
- SJC - set join conversion
- SU - subquery unnesting
- OBYE - order by elimination
- OST - old style star transformation
- ST - new (cbqt) star transformation
- CNT - count(col) to count(*) transformation
- JE - Join Elimination
- JF - join factorization
- SLP - select list pruning
- DP - distinct placement
- qb - query block
- LB - leaf blocks
- DK - distinct keys
- LB/K - average number of leaf blocks per key
- DB/K - average number of data blocks per key
- CLUF - clustering factor
- NDV - number of distinct values
- Resp - response cost
- Card - cardinality
- Resc - resource cost
- NL - nested loops (join)
- SM - sort merge (join)
- HA - hash (join)
- CPUSPEED - CPU Speed
- IOTFRSPEED - I/O transfer speed
- IOSEKTIM - I/O seek time
- SREADTIM - average single block read time
- MREADTIM - average multiblock read time
- MBRC - average multiblock read count
- MAXTHR - maximum I/O system throughput
- SLAVETHR - average slave I/O throughput
- dmeth - distribution method
 - 1: no partitioning required
 - 2: value partitioned
 - 4: right is random (round-robin)
 - 128: left is random (round-robin)
 - 8: broadcast right and partition left
 - 16: broadcast left and partition right
 - 32: partition left using partitioning of right
 - 64: partition right using partitioning of left
 - 256: run the join in serial

0: invalid distribution method

sel - selectivity

ptn - partition

PARAMETERS USED BY THE OPTIMIZER

PARAMETERS WITH ALTERED VALUES

Compilation Environment Dump

Bug Fix Control Environment

PARAMETERS WITH DEFAULT VALUES

Compilation Environment Dump

optimizer_mode_hinted	= false
optimizer_features_hinted	= 0.0.0
parallel_execution_enabled	= false
parallel_query_forced_dop	= 0
parallel_dml_forced_dop	= 0
parallel_ddl_forced_degree	= 0
parallel_ddl_forced_instances	= 0
_query_rewrite_fudge	= 90
optimizer_features_enable	= 11.2.0.1
_optimizer_search_limit	= 5
cpu_count	= 2
active_instance_count	= 1
parallel_threads_per_cpu	= 2
hash_area_size	= 131072
bitmap_merge_area_size	= 1048576
sort_area_size	= 65536
sort_area_retained_size	= 0
_sort_elimination_cost_ratio	= 0
_optimizer_block_size	= 8192
_sort_multiblock_read_count	= 2
_hash_multiblock_io_count	= 0
_db_file_optimizer_read_count	= 8
_optimizer_max_permutations	= 2000
pga_aggregate_target	= 143360 KB
pga_max_size	= 204800 KB
_query_rewrite_maxdisjunct	= 257
_smm_auto_min_io_size	= 56 KB
_smm_auto_max_io_size	= 248 KB
_smm_min_size	= 143 KB
_smm_max_size	= 28672 KB
_smm_px_max_size	= 71680 KB
_cpu_to_io	= 0
_optimizer_undo_cost_change	= 11.2.0.1
parallel_query_mode	= enabled
parallel_dml_mode	= disabled
parallel_ddl_mode	= enabled
optimizer_mode	= all_rows
sqlstat_enabled	= false
_optimizer_percent_parallel	= 101
_always_anti_join	= choose
_always_semi_join	= choose
_optimizer_mode_force	= true
_partition_view_enabled	= true
_always_star_transformation	= false
_query_rewrite_or_error	= false
_hash_join_enabled	= true
cursor_sharing	= exact
_b_tree_bitmap_plans	= true
star_transformation_enabled	= false
_optimizer_cost_model	= choose
_new_sort_cost_estimate	= true
_complex_view_merging	= true
_unnest_subquery	= true
_eliminate_common_subexpr	= true
_pred_move_around	= true
_convert_set_to_join	= false
_push_join_predicate	= true
_push_join_union_view	= true
_fast_full_scan_enabled	= true
_optim_enhance_nnull_detection	= true
_parallel_broadcast_enabled	= true
_px_broadcast_fudge_factor	= 100
_ordered_nested_loop	= true
_no_or_expansion	= false
optimizer_index_cost_adj	= 100
optimizer_index_caching	= 0

```
_system_index_caching = 0
_disable_datalayer_sampling = false
query_rewrite_enabled = true
query_rewrite_integrity = enforced
_query_cost_rewrite = true
_query_rewrite_2 = true
_query_rewrite_1 = true
_query_rewrite_expression = true
_query_rewrite_jmigrate = true
_query_rewrite_fpc = true
_query_rewrite_drj = true
_full_pwise_join_enabled = true
_partial_pwise_join_enabled = true
_left_nested_loops_random = true
_improved_row_length_enabled = true
_index_join_enabled = true
_enable_type_dep_selectivity = true
_improved_outerjoin_card = true
_optimizer_adjust_for_nulls = true
_optimizer_degree = 0
_use_column_stats_for_function = true
_subquery_pruning_enabled = true
_subquery_pruning_mv_enabled = false
_or_expand_nvl_predicate = true
_like_with_bind_as_equality = false
_table_scan_cost_plus_one = true
_cost_equality_semi_join = true
_default_non_equality_sel_check = true
_new_initial_join_orders = true
_oneside_colstat_for_equijoins = true
_optim_peek_user_binds = true
_minimal_stats_aggregation = true
_force_temptables_for_gsets = false
workarea_size_policy = auto
_smm_auto_cost_enabled = true
_gs_anti_semi_join_allowed = true
_optim_new_default_join_sel = true
optimizer_dynamic_sampling = 2
_pre_rewrite_push_pred = true
_optimizer_new_join_card_computation = true
_union_rewrite_for_gs = yes_gset_mvms
_generalized_pruning_enabled = true
_optim_adjust_for_part_skews = true
_force_datefold_trunc = false
statistics_level = typical
_optimizer_system_stats_usage = true
_skip_unusable_indexes = true
_remove_aggr_subquery = true
_optimizer_push_down_distinct = 0
_dml_monitoring_enabled = true
_optimizer_undo_changes = false
_predicate_elimination_enabled = true
_nested_loop_fudge = 100
_project_view_columns = true
_local_communication_costing_enabled = true
_local_communication_ratio = 50
_query_rewrite_vop_cleanup = true
_slave_mapping_enabled = true
_optimizer_cost_based_transformation = linear
_optimizer_mjc_enabled = true
_right_outer_hash_enable = true
_spr_push_pred_refspr = true
_optimizer_cache_stats = false
_optimizer_cbqt_factor = 50
_optimizer_squ_bottomup = true
_fic_area_size = 131072
_optimizer_skip_scan_enabled = true
_optimizer_cost_filter_pred = false
_optimizer_sortmerge_join_enabled = true
_optimizer_join_sel_sanity_check = true
_mmv_query_rewrite_enabled = true
_bt_mmv_query_rewrite_enabled = true
_add_stale_mv_to_dependency_list = true
_distinct_view_unnesting = false
_optimizer_dim_subq_join_sel = true
_optimizer_disable_strans_sanity_checks = 0
_optimizer_compute_index_stats = true
_push_join_union_view2 = true
_optimizer_ignore_hints = false
_optimizer_random_plan = 0
_query_rewrite_setopgrw_enable = true
_optimizer_correct_sq_selectivity = true
_disable_function_based_index = false
```


_optimizer_join_order_control = 3
_optimizer_cartesian_enabled = true
_optimizer_starplan_enabled = true
_extended_pruning_enabled = true
_optimizer_push_pred_cost_based = true
_optimizer_null_aware_antijoin = true
_optimizer_extend_jppd_view_types = true
_sql_model_unfold_forloops = run_time
_enable_dml_lock_escalation = false
_bloom_filter_enabled = true
_update_bji_ipdml_enabled = 0
_optimizer_extended_cursor_sharing = udo
_dm_max_shared_pool_pct = 1
_optimizer_cost_hjsmj_multimatch = true
_optimizer_transitivity_retain = true
_px_pwg_enabled = true
optimizer_secure_view_merging = true
_optimizer_join_elimination_enabled = true
flashback_table_rpi = non_fbt
_optimizer_cbqt_no_size_restriction = true
_optimizer_enhanced_filter_push = true
_optimizer_filter_pred_pullup = true
_rowsrc_trace_level = 0
_simple_view_merging = true
_optimizer_rownum_pred_based_fkr = true
_optimizer_better_inlist_costing = all
_optimizer_self_induced_cache_cost = false
_optimizer_min_cache_blocks = 10
_optimizer_or_expansion = depth
_optimizer_order_by_elimination_enabled = true
_optimizer_outer_to_anti_enabled = true
_selfjoin_mv_duplicates = true
_dimension_skip_null = true
_force_rewrite_enable = false
_optimizer_star_tran_in_with_clause = true
_optimizer_complex_pred_selectivity = true
_optimizer_connect_by_cost_based = true
_gby_hash_aggregation_enabled = true
_globalindex_pnum_filter_enabled = true
_px_minus_intersect = true
_fix_control_key = 0
_force_slave_mapping_intra_part_loads = false
_force_tmp_segment_loads = false
_query_mmvrewrite_maxpreds = 10
_query_mmvrewrite_maxintervals = 5
_query_mmvrewrite_maxinlists = 5
_query_mmvrewrite_maxdmaps = 10
_query_mmvrewrite_maxcmaps = 20
_query_mmvrewrite_maxregperm = 512
_query_mmvrewrite_maxmergedcmaps = 50
_query_mmvrewrite_maxqryinlistvals = 500
_disable_parallel_conventional_load = false
_trace_virtual_columns = false
_replace_virtual_columns = true
_virtual_column_overload_allowed = true
_kdt_buffering = true
_first_k_rows_dynamic_proration = true
_optimizer_sortmerge_join_inequality = true
_optimizer_aw_stats_enabled = true
_bloom_pruning_enabled = true
result_cache_mode = MANUAL
_px_ual_serial_input = true
_optimizer_skip_scan_guess = false
_enable_row_shipping = true
_row_shipping_threshold = 80
_row_shipping_explain = false
transaction_isolation_level = read_committed
_optimizer_distinct_elimination = true
_optimizer_multi_level_push_pred = true
_optimizer_group_by_placement = true
_optimizer_rownum_bind_default = 10
_enable_query_rewrite_on_remote_objs = true
_optimizer_extended_cursor_sharing_rel = simple
_optimizer_adaptive_cursor_sharing = true
_direct_path_insert_features = 0
_optimizer_improve_selectivity = true
optimizer_use_pending_statistics = false
_optimizer_enable_density_improvements = true
_optimizer_aw_join_push_enabled = true
_optimizer_connect_by_combine_sw = true
_enable_pmo_ctas = 0
_optimizer_native_full_outer_join = force
_bloom_predicate_enabled = true

```

_optimizer_enable_extended_stats = true
_is_lock_table_for_ddl_wait_lock = 0
_pivot_implementation_method = choose
optimizer_capture_sql_plan_baselines = false
optimizer_use_sql_plan_baselines = true
_optimizer_star_trans_min_cost = 0
_optimizer_star_trans_min_ratio = 0
_with_subquery = OPTIMIZER
_optimizer_fkr_index_cost_bias = 10
_optimizer_use_subheap = true
parallel_degree_policy = manual
parallel_degree = 0
parallel_min_time_threshold = 10
_parallel_time_unit = 10
_optimizer_or_expansion_subheap = true
_optimizer_free_transformation_heap = true
_optimizer_reuse_cost_annotations = true
_result_cache_auto_size_threshold = 100
_result_cache_auto_time_threshold = 1000
_optimizer_nested_rollup_for_gset = 100
_nlj_batching_enabled = 1
parallel_query_default_dop = 0
is_recur_flags = 0
optimizer_use_invisible_indexes = false
flashback_data_archive_internal_cursor = 0
_optimizer_extended_stats_usage_control = 224
_parallel_syspls_obey_force = true
cell_offload_processing = true
_rdbms_internal_fplib_enabled = false
db_file_multiblock_read_count = 46
_bloom_folding_enabled = true
_mv_generalized_oj_refresh_opt = true
cell_offload_compaction = ADAPTIVE
parallel_degree_limit = 65535
parallel_force_local = false
parallel_max_degree = 4
total_cpu_count = 2
cell_offload_plan_display = AUTO
_optimizer_coalesce_subqueries = true
_optimizer_fast_pred_transitivity = true
_optimizer_fast_access_pred_analysis = true
_optimizer_unnest_disjunctive_subq = true
_optimizer_unnest_corr_set_subq = true
_optimizer_distinct_agg_transform = true
_aggregation_optimization_settings = 0
_optimizer_connect_by_elim_dups = true
_optimizer_eliminate_filtering_join = true
_connect_by_use_union_all = true
dst_upgrade_insert_conv = true
advanced_queuing_internal_cursor = 0
_optimizer_unnest_all_subqueries = true
_bloom_predicate_pushdown_to_storage = true
_bloom_vector_elements = 0
_bloom_pushing_max = 524288
parallel_autodop = 0
parallel_ddldml = 0
_parallel_cluster_cache_policy = adaptive
_parallel_scalability = 50
iot_internal_cursor = 0
_optimizer_instance_count = 0
_optimizer_connect_by_cb_whr_only = false
_suppress_scn_chk_for_cqn = nosuppress_1466
_optimizer_join_factorization = true
_optimizer_use_cbqt_star_transformation = true
_optimizer_table_expansion = true
_and_pruning_enabled = true
_deferred_constant_folding_mode = DEFAULT
_optimizer_distinct_placement = true
partition_pruning_internal_cursor = 0
parallel_hinted = none
_sql_compatibility = 0
_optimizer_use_feedback = true
_optimizer_try_st_before_jppd = true
Bug Fix Control Environment
fix 3834770 = 1
fix 3746511 = enabled
fix 4519016 = enabled
fix 3118776 = enabled
fix 4488689 = enabled
fix 2194204 = disabled
fix 2660592 = enabled
fix 2320291 = enabled
fix 2324795 = enabled

```

fix 4308414 = enabled
fix 3499674 = disabled
fix 4569940 = enabled
fix 4631959 = enabled
fix 4519340 = enabled
fix 4550003 = enabled
fix 1403283 = enabled
fix 4554846 = enabled
fix 4602374 = enabled
fix 4584065 = enabled
fix 4545833 = enabled
fix 4611850 = enabled
fix 4663698 = enabled
fix 4663804 = enabled
fix 4666174 = enabled
fix 4567767 = enabled
fix 4556762 = 15
fix 4728348 = enabled
fix 4708389 = enabled
fix 4175830 = enabled
fix 4752814 = enabled
fix 4583239 = enabled
fix 4386734 = enabled
fix 4887636 = enabled
fix 4483240 = enabled
fix 4872602 = disabled
fix 4711525 = enabled
fix 4545802 = enabled
fix 4605810 = enabled
fix 4704779 = enabled
fix 4900129 = enabled
fix 4924149 = enabled
fix 4663702 = enabled
fix 4878299 = enabled
fix 4658342 = enabled
fix 4881533 = enabled
fix 4676955 = enabled
fix 4273361 = enabled
fix 4967068 = enabled
fix 4969880 = disabled
fix 5005866 = enabled
fix 5015557 = enabled
fix 4705343 = enabled
fix 4904838 = enabled
fix 4716096 = enabled
fix 4483286 = disabled
fix 4722900 = enabled
fix 4615392 = enabled
fix 5096560 = enabled
fix 5029464 = enabled
fix 4134994 = enabled
fix 4904890 = enabled
fix 5104624 = enabled
fix 5014836 = enabled
fix 4768040 = enabled
fix 4600710 = enabled
fix 5129233 = enabled
fix 4595987 = enabled
fix 4908162 = enabled
fix 5139520 = enabled
fix 5084239 = enabled
fix 5143477 = disabled
fix 2663857 = enabled
fix 4717546 = enabled
fix 5240264 = disabled
fix 5099909 = enabled
fix 5240607 = enabled
fix 5195882 = enabled
fix 5220356 = enabled
fix 5263572 = enabled
fix 5385629 = enabled
fix 5302124 = enabled
fix 5391942 = enabled
fix 5384335 = enabled
fix 5482831 = enabled
fix 4158812 = enabled
fix 5387148 = enabled
fix 5383891 = enabled
fix 5466973 = enabled
fix 5396162 = enabled
fix 5394888 = enabled
fix 5395291 = enabled
fix 5236908 = enabled

fix 5509293 = enabled
fix 5449488 = enabled
fix 5567933 = enabled
fix 5570494 = enabled
fix 5288623 = enabled
fix 5505995 = enabled
fix 5505157 = enabled
fix 5112460 = enabled
fix 5554865 = enabled
fix 5112260 = enabled
fix 5112352 = enabled
fix 5547058 = enabled
fix 5618040 = enabled
fix 5585313 = enabled
fix 5547895 = enabled
fix 5634346 = enabled
fix 5620485 = enabled
fix 5483301 = enabled
fix 5657044 = enabled
fix 5694984 = enabled
fix 5868490 = enabled
fix 5650477 = enabled
fix 5611962 = enabled
fix 4279274 = enabled
fix 5741121 = enabled
fix 5714944 = enabled
fix 5391505 = enabled
fix 5762598 = enabled
fix 5578791 = enabled
fix 5259048 = enabled
fix 5882954 = enabled
fix 2492766 = enabled
fix 5707608 = enabled
fix 5891471 = enabled
fix 5884780 = enabled
fix 5680702 = enabled
fix 5371452 = enabled
fix 5838613 = enabled
fix 5949981 = enabled
fix 5624216 = enabled
fix 5741044 = enabled
fix 5976822 = enabled
fix 6006457 = enabled
fix 5872956 = enabled
fix 5923644 = enabled
fix 5943234 = enabled
fix 5844495 = enabled
fix 4168080 = enabled
fix 6020579 = enabled
fix 5842686 = disabled
fix 5996801 = enabled
fix 5593639 = enabled
fix 6133948 = enabled
fix 3151991 = enabled
fix 6146906 = enabled
fix 6239909 = enabled
fix 6267621 = enabled
fix 5909305 = enabled
fix 6279918 = enabled
fix 6141818 = enabled
fix 6151963 = enabled
fix 6251917 = enabled
fix 6282093 = enabled
fix 6119510 = enabled
fix 6119382 = enabled
fix 3801750 = enabled
fix 5705630 = disabled
fix 5944076 = enabled
fix 5406763 = enabled
fix 6070954 = enabled
fix 6282944 = enabled
fix 6138746 = enabled
fix 6082745 = enabled
fix 3426050 = enabled
fix 599680 = enabled
fix 6062266 = enabled
fix 6087237 = enabled
fix 6122894 = enabled
fix 6377505 = enabled
fix 5893768 = enabled
fix 6163564 = enabled
fix 6073325 = enabled
fix 6188881 = enabled

fix 6007259 = enabled
fix 6239971 = enabled
fix 5284200 = disabled
fix 6042205 = enabled
fix 6051211 = enabled
fix 6434668 = enabled
fix 6438752 = enabled
fix 5936366 = enabled
fix 6439032 = enabled
fix 6438892 = enabled
fix 6006300 = enabled
fix 5947231 = enabled
fix 5416118 = 1
fix 6365442 = 1
fix 6239039 = enabled
fix 6502845 = enabled
fix 6913094 = enabled
fix 6029469 = enabled
fix 5919513 = enabled
fix 6057611 = enabled
fix 6469667 = enabled
fix 6608941 = disabled
fix 6368066 = enabled
fix 6329318 = enabled
fix 6656356 = enabled
fix 4507997 = enabled
fix 6671155 = enabled
fix 6694548 = enabled
fix 6688200 = enabled
fix 6612471 = enabled
fix 6708183 = disabled
fix 6326934 = enabled
fix 6520717 = disabled
fix 6714199 = enabled
fix 6681545 = enabled
fix 6748058 = enabled
fix 6167716 = enabled
fix 6674254 = enabled
fix 6468287 = enabled
fix 6503543 = enabled
fix 6808773 = disabled
fix 6766962 = enabled
fix 6120483 = enabled
fix 6670551 = enabled
fix 6771838 = enabled
fix 6626018 = disabled
fix 6530596 = enabled
fix 6778642 = enabled
fix 6699059 = enabled
fix 6376551 = enabled
fix 6429113 = enabled
fix 6782437 = enabled
fix 6776808 = enabled
fix 6765823 = enabled
fix 6768660 = enabled
fix 6782665 = enabled
fix 6610822 = enabled
fix 6514189 = enabled
fix 6818410 = enabled
fix 6827696 = enabled
fix 6773613 = enabled
fix 5902962 = enabled
fix 6956212 = enabled
fix 3056297 = enabled
fix 6440977 = disabled
fix 6972291 = disabled
fix 6904146 = enabled
fix 6221403 = enabled
fix 5475051 = enabled
fix 6845871 = enabled
fix 5468809 = enabled
fix 6917633 = enabled
fix 4444536 = disabled
fix 6955210 = enabled
fix 6994194 = enabled
fix 6399597 = disabled
fix 6951776 = enabled
fix 5648287 = 3
fix 6987082 = disabled
fix 7132036 = enabled
fix 6980350 = enabled
fix 5199213 = enabled
fix 7138405 = enabled

fix 7148689 = enabled
fix 6820988 = enabled
fix 7032684 = enabled
fix 6617866 = enabled
fix 7155968 = enabled
fix 7127980 = enabled
fix 6982954 = enabled
fix 7241819 = enabled
fix 6897034 = enabled
fix 7236148 = enabled
fix 7298570 = enabled
fix 7249095 = enabled
fix 7314499 = enabled
fix 7324224 = enabled
fix 7289023 = enabled
fix 7237571 = enabled
fix 7116357 = enabled
fix 7345484 = enabled
fix 7375179 = enabled
fix 6430500 = disabled
fix 5897486 = enabled
fix 6774209 = enabled
fix 7306637 = enabled
fix 6451322 = enabled
fix 7208131 = enabled
fix 7388652 = enabled
fix 7127530 = enabled
fix 6751206 = enabled
fix 6669103 = enabled
fix 7430474 = enabled
fix 6990305 = enabled
fix 7043307 = enabled
fix 6921505 = enabled
fix 7388457 = enabled
fix 3120429 = enabled
fix 7452823 = disabled
fix 6838105 = enabled
fix 6769711 = enabled
fix 7170213 = enabled
fix 6528872 = enabled
fix 7295298 = enabled
fix 5922070 = enabled
fix 7259468 = enabled
fix 6418552 = enabled
fix 4619997 = enabled
fix 7524366 = enabled
fix 6942476 = enabled
fix 6418771 = enabled
fix 7375077 = enabled
fix 5400639 = enabled
fix 4570921 = enabled
fix 7426911 = enabled
fix 5099019 = disabled
fix 7528216 = enabled
fix 7521266 = enabled
fix 7385140 = enabled
fix 7576516 = enabled
fix 7573526 = enabled
fix 7576476 = enabled
fix 7165898 = enabled
fix 7263214 = enabled
fix 3320140 = enabled
fix 7555510 = enabled
fix 7613118 = enabled
fix 7597059 = enabled
fix 7558911 = enabled
fix 5520732 = enabled
fix 7679490 = disabled
fix 7449971 = enabled
fix 3628118 = enabled
fix 4370840 = enabled
fix 7281191 = enabled
fix 7519687 = enabled
fix 5029592 = 3
fix 6012093 = 1
fix 6053861 = disabled
fix 6941515 = disabled
fix 7696414 = enabled
fix 7272039 = enabled
fix 7834811 = enabled
fix 7640597 = enabled
fix 7341616 = enabled
fix 7168184 = enabled

fix 399198 = enabled
fix 7831070 = enabled
fix 7676897 = disabled
fix 7414637 = enabled
fix 7585456 = enabled
fix 8202421 = enabled
fix 7658097 = disabled
fix 8251486 = enabled
fix 7132684 = enabled
fix 7512227 = enabled
fix 6972987 = enabled
fix 7199035 = enabled
fix 8243446 = enabled
fix 7650462 = enabled
fix 6720701 = enabled
fix 7592673 = enabled
fix 7718694 = enabled
fix 7534027 = enabled
fix 7708267 = enabled
fix 5716785 = enabled
fix 7356191 = enabled
fix 7679161 = enabled
fix 7597159 = enabled
fix 7499258 = enabled
fix 8328363 = enabled
fix 7452863 = enabled
fix 8284930 = enabled
fix 7298626 = enabled
fix 7657126 = enabled
fix 8371884 = enabled
fix 8318020 = enabled
fix 8255423 = enabled
fix 7135745 = enabled
fix 8356253 = enabled
fix 7534257 = enabled
fix 8323407 = enabled
fix 7539815 = enabled
fix 8289316 = enabled
fix 8447850 = enabled
fix 7675944 = enabled
fix 8355120 = enabled
fix 7176746 = enabled
fix 8442891 = enabled
fix 8373261 = enabled
fix 7679164 = enabled
fix 7670533 = enabled
fix 8408665 = enabled
fix 8491399 = enabled
fix 8348392 = enabled
fix 8348585 = enabled
fix 8508056 = enabled
fix 8335178 = enabled
fix 8515269 = enabled
fix 8247017 = enabled
fix 7325597 = enabled
fix 8531490 = enabled
fix 6163600 = enabled
fix 8589278 = disabled
fix 8557992 = enabled
fix 7556098 = enabled
fix 8580883 = enabled
fix 5892599 = disabled
fix 8609714 = enabled
fix 8514561 = enabled
fix 8619631 = disabled

PARAMETERS IN OPT_PARAM HINT

Column Usage Monitoring is ON: tracking level = 1

Considering Query Transformations on query block SEL\$1 (#0)

Query transformations (QT)

JF: Checking validity of join factorization for query block SEL\$1 (#0)

JF: Bypassed: not a UNION or UNION-ALL query block.

ST: not valid since star transformation parameter is FALSE

TE: Checking validity of table expansion for query block SEL\$1 (#0)

TE: Bypassed: No partitioned table in query block.

```

CBQT bypassed for query block SEL$1 (#0): no complex view, sub-queries or UNION (ALL) queries.
CBQT: Validity checks failed for ayzr498gpsdms.
CSE: Considering common sub-expression elimination in query block SEL$1 (#0)
*****
Common Subexpression elimination (CSE)
*****
CSE:      CSE not performed on query block SEL$1 (#0).
OBYE:    Considering Order-by Elimination from view SEL$1 (#0)
*****
Order-by elimination (OBYE)
*****
OBYE:    OBYE bypassed: no order by to eliminate.
CVM: Considering view merge in query block SEL$1 (#0)
query block SEL$1 (#0) unchanged
Considering Query Transformations on query block SEL$1 (#0)
*****
Query transformations (QT)
*****
JF: Checking validity of join factorization for query block SEL$1 (#0)
JF: Bypassed: not a UNION or UNION-ALL query block.
ST: not valid since star transformation parameter is FALSE
TE: Checking validity of table expansion for query block SEL$1 (#0)
TE: Bypassed: No partitioned table in query block.
CBQT bypassed for query block SEL$1 (#0): no complex view, sub-queries or UNION (ALL) queries.
CBQT: Validity checks failed for ayzr498gpsdms.
CSE: Considering common sub-expression elimination in query block SEL$1 (#0)
*****
Common Subexpression elimination (CSE)
*****
CSE:      CSE not performed on query block SEL$1 (#0).
SU: Considering subquery unnesting in query block SEL$1 (#0)
*****
Subquery Unnest (SU)
*****
SJC: Considering set-join conversion in query block SEL$1 (#0)
*****
Set-Join Conversion (SJC)
*****
SJC: not performed
PM: Considering predicate move-around in query block SEL$1 (#0)
*****
Predicate Move-Around (PM)
*****
PM:      PM bypassed: Outer query contains no views.
PM:      PM bypassed: Outer query contains no views.
query block SEL$1 (#0) unchanged
FPD: Considering simple filter push in query block SEL$1 (#0)
"T1"."CHAR_COL"='10'
try to generate transitive predicate from check constraints for query block SEL$1 (#0)
finally: "T1"."CHAR_COL"='10'

apadrvt-start sqlid=12645795810707781240
:
  call(in-use=604, alloc=16360), compile(in-use=50600, alloc=54408), execution(in-use=1448, alloc=4060)

*****
Peeked values of the binds in SQL statement
*****

Final query after transformations:***** UNPARSED QUERY IS *****
SELECT "T1"."CHAR_COL" "CHAR_COL","T1"."C2" "C2" FROM "TESTUSER"."T1" "T1" WHERE "T1"."CHAR_COL"='10'
kkoqbc: optimizing query block SEL$1 (#0)

:
  call(in-use=632, alloc=16360), compile(in-use=51244, alloc=54408), execution(in-use=1448, alloc=4060)

kkoqbc-subheap (create addr=0x0E56FB38)
*****
QUERY BLOCK TEXT
*****
SELECT /* FIND_ME */
*
FROM
  T1
WHERE
  CHAR_COL = '10'
-----
QUERY BLOCK SIGNATURE
-----
signature (optimizer): qb_name=SEL$1 nbfros=1 flg=0
fro(0): flg=0 objn=70879 hint_alias="T1"@SEL$1
-----

```


SYSTEM STATISTICS INFORMATION

Using NOWORKLOAD Stats
 CPUSPEEDNW: 466 millions instructions/sec (default is 100)
 IOTFRSPEED: 4096 bytes per millisecond (default is 4096)
 IOSEKTIM: 10 milliseconds (default is 10)
 MBRC: -1 blocks (default is 8)

BASE STATISTICAL INFORMATION

Table Stats::

Table: T1 Alias: T1
 #Rows: 1000000 #Blks: 16217 AvgRowLen: 108.00

Index Stats::

Index: SYS_C0010157 Col#: 1
 LVLS: 2 #LB: 3908 #DK: 1000000 LB/K: 1.00 DB/K: 1.00 CLUF: 201245.00

1-ROW TABLES: T1[T1]#0

Access path analysis for T1

SINGLE TABLE ACCESS PATH

Single Table Cardinality Estimation for T1[T1]

Table: T1 Alias: T1

Card: Original: 1000000.000000 Rounded: 1 Computed: 1.00 Non Adjusted: 1.00

Access Path: TableScan

Cost: 4450.40 Resp: 4450.40 Degree: 0

Cost_io: 4394.00 Cost_cpu: 315488412

Resp_io: 4394.00 Resp_cpu: 315488412

Access Path: index (UniqueScan)

Index: SYS_C0010157

resc_io: 3.00 resc_cpu: 22584

ix_sel: 0.000001 ix_sel_with_filters: 0.000001

Cost: 3.00 Resp: 3.00 Degree: 1

Access Path: index (AllEqUnique)

Index: SYS_C0010157

resc_io: 3.00 resc_cpu: 22584

ix_sel: 0.000001 ix_sel_with_filters: 0.000001

Cost: 3.00 Resp: 3.00 Degree: 1

One row Card: 1.000000

Best:: AccessPath: IndexUnique

Index: SYS_C0010157

Cost: 3.00 Degree: 1 Resp: 3.00 Card: 1.00 Bytes: 0

OPTIMIZER STATISTICS AND COMPUTATIONS

GENERAL PLANS

Considering cardinality-based initial join order.

Permutations for Starting Table :0

Join order[1]: T1[T1]#0

Best so far: Table#: 0 cost: 3.0040 card: 1.0000 bytes: 108

(newjo-stop-1) k:0, spcnt:0, perm:1, maxperm:2000

Number of join permutations tried: 1

Or-Expansion validity checks failed on query block SEL\$1 (#0) because no need for OR expansion if we only have 1-row tables

Transfer Optimizer annotations for query block SEL\$1 (#0)

id=0 frofkks[i] (index start key) predicate="T1"."CHAR_COL"='10'

id=0 frofkke[i] (index stop key) predicate="T1"."CHAR_COL"='10'

Final cost for query block SEL\$1 (#0) - All Rows Plan:

Best join order: 1

Cost: 3.0040 Degree: 1 Card: 1.0000 Bytes: 108

Resc: 3.0040 Resc_io: 3.0000 Resc_cpu: 22584

Resp: 3.0040 Resp_io: 3.0000 Resc_cpu: 22584

kkoqbc-subheap (delete addr=0x0E56FB38, in-use=11652, alloc=14128)

kkoqbc-end:

:

call(in-use=6908, alloc=32736), compile(in-use=51900, alloc=54408), execution(in-use=1448, alloc=4060)

kkoqbc: finish optimizing query block SEL\$1 (#0)

apadrvc-end

:

call(in-use=6908, alloc=32736), compile(in-use=52548, alloc=54408), execution(in-use=1448, alloc=4060)

Starting SQL statement dump

user_id=65 user_name=TESTUSER module=SQL*Plus action=
sql_id=ayzr498gpsdms plan_hash_value=1657849122 problem_type=3
----- Current SQL Statement for this session (sql_id=ayzr498gpsdms) -----

```
SELECT /* FIND_ME */  
*  
FROM  
  T1  
WHERE  
  CHAR_COL = '10'  
sql_text_length=59  
sql=SELECT /* FIND_ME */  
*
```

```
FROM  
  T1  
WHERE  
  CHAR_COL = '10'  
----- Explain Plan Dump -----  
----- Plan Table -----
```

=====
Plan Table
=====

Id	Operation	Name	Rows	Bytes	Cost	Time
0	SELECT STATEMENT				3	
1	TABLE ACCESS BY INDEX ROWID	T1	1	108	3	00:00:01
2	INDEX UNIQUE SCAN	SYS_C0010157	1		2	00:00:01

Predicate Information:

2 - access("CHAR_COL"='10')

Content of other_xml column

```
=====  
db_version      : 11.2.0.1  
parse_schema    : TESTUSER  
plan_hash       : 1657849122  
plan_hash_2     : 3942213799  
Outline Data:  
/*+  
  BEGIN_OUTLINE_DATA  
    IGNORE_OPTIM_EMBEDDED_HINTS  
    OPTIMIZER_FEATURES_ENABLE('11.2.0.1')  
    DB_VERSION('11.2.0.1')  
    ALL_ROWS  
    OUTLINE_LEAF(@"SEL$1")  
    INDEX_RS_ASC(@"SEL$1" "T1"@"SEL$1" ("T1"."CHAR_COL"))  
  END_OUTLINE_DATA  
*/
```

Optimizer state dump:

```
Compilation Environment Dump  
optimizer_mode_hinted           = false  
optimizer_features_hinted       = 0.0.0  
parallel_execution_enabled      = false  
parallel_query_forced_dop       = 0  
parallel_dml_forced_dop         = 0  
parallel_ddl_forced_degree      = 0  
parallel_ddl_forced_instances   = 0  
_query_rewrite_fudge           = 90  
optimizer_features_enable       = 11.2.0.1  
_optimizer_search_limit        = 5  
cpu_count                       = 2  
active_instance_count          = 1  
parallel_threads_per_cpu       = 2  
hash_area_size                  = 131072  
bitmap_merge_area_size         = 1048576  
sort_area_size                  = 65536  
sort_area_retained_size        = 0  
_sort_elimination_cost_ratio    = 0  
_optimizer_block_size          = 8192  
_sort_multiblock_read_count     = 2  
_hash_multiblock_io_count       = 0  
_db_file_optimizer_read_count   = 8  
_optimizer_max_permutations     = 2000  
pga_aggregate_target           = 143360 KB  
_pga_max_size                   = 204800 KB  
_query_rewrite_maxdisjunct     = 257  
_smm_auto_min_io_size          = 56 KB  
_smm_auto_max_io_size          = 248 KB
```

```
_smm_min_size = 143 KB
_smm_max_size = 28672 KB
_smm_px_max_size = 71680 KB
_cpu_to_io = 0
_optimizer_undo_cost_change = 11.2.0.1
_parallel_query_mode = enabled
_parallel_dml_mode = disabled
_parallel_ddl_mode = enabled
_optimizer_mode = all_rows
_sqlstat_enabled = false
_optimizer_percent_parallel = 101
_always_anti_join = choose
_always_semi_join = choose
_optimizer_mode_force = true
_partition_view_enabled = true
_always_star_transformation = false
_query_rewrite_or_error = false
_hash_join_enabled = true
_cursor_sharing = exact
_b_tree_bitmap_plans = true
_star_transformation_enabled = false
_optimizer_cost_model = choose
_new_sort_cost_estimate = true
_complex_view_merging = true
_unnest_subquery = true
_eliminate_common_subexpr = true
_pred_move_around = true
_convert_set_to_join = false
_push_join_predicate = true
_push_join_union_view = true
_fast_full_scan_enabled = true
_optim_enhance_nnull_detection = true
_parallel_broadcast_enabled = true
_px_broadcast_fudge_factor = 100
_ordered_nested_loop = true
_no_or_expansion = false
_optimizer_index_cost_adj = 100
_optimizer_index_caching = 0
_system_index_caching = 0
_disable_datalayer_sampling = false
_query_rewrite_enabled = true
_query_rewrite_integrity = enforced
_query_cost_rewrite = true
_query_rewrite_2 = true
_query_rewrite_1 = true
_query_rewrite_expression = true
_query_rewrite_jmigrate = true
_query_rewrite_fpc = true
_query_rewrite_drj = true
_full_pwise_join_enabled = true
_partial_pwise_join_enabled = true
_left_nested_loops_random = true
_improved_row_length_enabled = true
_index_join_enabled = true
_enable_type_dep_selectivity = true
_improved_outerjoin_card = true
_optimizer_adjust_for_nulls = true
_optimizer_degree = 0
_use_column_stats_for_function = true
_subquery_pruning_enabled = true
_subquery_pruning_mv_enabled = false
_or_expand_nvl_predicate = true
_like_with_bind_as_equality = false
_table_scan_cost_plus_one = true
_cost_equality_semi_join = true
_default_non_equality_sel_check = true
_new_initial_join_orders = true
_oneside_colstat_for_equijoins = true
_optim_peek_user_binds = true
_minimal_stats_aggregation = true
_force_temptables_for_gsets = false
workarea_size_policy = auto
_smm_auto_cost_enabled = true
_gs_anti_semi_join_allowed = true
_optim_new_default_join_sel = true
_optimizer_dynamic_sampling = 2
_pre_rewrite_push_pred = true
_optimizer_new_join_card_computation = true
_union_rewrite_for_gs = yes_gset_mv
_generalized_pruning_enabled = true
_optim_adjust_for_part_skews = true
_force_datefold_trunc = false
statistics_level = typical
```

_optimizer_system_stats_usage = true
skip_unusable_indexes = true
_remove_aggr_subquery = true
_optimizer_push_down_distinct = 0
_dml_monitoring_enabled = true
_optimizer_undo_changes = false
_predicate_elimination_enabled = true
_nested_loop_fudge = 100
_project_view_columns = true
_local_communication_costing_enabled = true
_local_communication_ratio = 50
_query_rewrite_vop_cleanup = true
_slave_mapping_enabled = true
_optimizer_cost_based_transformation = linear
_optimizer_mjc_enabled = true
_right_outer_hash_enable = true
_spr_push_pred_refspr = true
_optimizer_cache_stats = false
_optimizer_cbqt_factor = 50
_optimizer_squ_bottomup = true
_fic_area_size = 131072
_optimizer_skip_scan_enabled = true
_optimizer_cost_filter_pred = false
_optimizer_sortmerge_join_enabled = true
_optimizer_join_sel_sanity_check = true
_mmv_query_rewrite_enabled = true
_bt_mmv_query_rewrite_enabled = true
_add_stale_mv_to_dependency_list = true
_distinct_view_unnesting = false
_optimizer_dim_subq_join_sel = true
_optimizer_disable_strans_sanity_checks = 0
_optimizer_compute_index_stats = true
_push_join_union_view2 = true
_optimizer_ignore_hints = false
_optimizer_random_plan = 0
_query_rewrite_setopgrw_enable = true
_optimizer_correct_sq_selectivity = true
_disable_function_based_index = false
_optimizer_join_order_control = 3
_optimizer_cartesian_enabled = true
_optimizer_starplan_enabled = true
_extended_pruning_enabled = true
_optimizer_push_pred_cost_based = true
_optimizer_null_aware_antijoin = true
_optimizer_extend_jppd_view_types = true
_sql_model_unfold_forloops = run_time
_enable_dml_lock_escalation = false
_bloom_filter_enabled = true
_update_bji_ipdml_enabled = 0
_optimizer_extended_cursor_sharing = udo
_dm_max_shared_pool_pct = 1
_optimizer_cost_hjsmj_multimatch = true
_optimizer_transitivity_retain = true
_px_pwg_enabled = true
optimizer_secure_view_merging = true
_optimizer_join_elimination_enabled = true
flashback_table_rpi = non_fbt
_optimizer_cbqt_no_size_restriction = true
_optimizer_enhanced_filter_push = true
_optimizer_filter_pred_pullup = true
_rowsrc_trace_level = 0
_simple_view_merging = true
_optimizer_rownum_pred_based_fkr = true
_optimizer_better_inlist_costing = all
_optimizer_self_induced_cache_cost = false
_optimizer_min_cache_blocks = 10
_optimizer_or_expansion = depth
_optimizer_order_by_elimination_enabled = true
_optimizer_outer_to_anti_enabled = true
_selfjoin_mv_duplicates = true
_dimension_skip_null = true
_force_rewrite_enable = false
_optimizer_star_tran_in_with_clause = true
_optimizer_complex_pred_selectivity = true
_optimizer_connect_by_cost_based = true
_gby_hash_aggregation_enabled = true
_globalindex_pnum_filter_enabled = true
_px_minus_intersect = true
_fix_control_key = 0
_force_slave_mapping_intra_part_loads = false
_force_tmp_segment_loads = false
_query_mmvrewrite_maxpreds = 10
_query_mmvrewrite_maxintervals = 5

```
_query_mmvrewrite_maxinlists = 5
_query_mmvrewrite_maxdmaps = 10
_query_mmvrewrite_maxcmaps = 20
_query_mmvrewrite_maxregperm = 512
_query_mmvrewrite_maxmergedcmaps = 50
_query_mmvrewrite_maxqryinlistvals = 500
_disable_parallel_conventional_load = false
_trace_virtual_columns = false
_replace_virtual_columns = true
_virtual_column_overload_allowed = true
_kdt_buffering = true
_first_k_rows_dynamic_proration = true
_optimizer_sortmerge_join_inequality = true
_optimizer_aw_stats_enabled = true
_bloom_pruning_enabled = true
result_cache_mode = MANUAL
_px_ual_serial_input = true
_optimizer_skip_scan_guess = false
_enable_row_shipping = true
_row_shipping_threshold = 80
_row_shipping_explain = false
transaction_isolation_level = read_committed
_optimizer_distinct_elimination = true
_optimizer_multi_level_push_pred = true
_optimizer_group_by_placement = true
_optimizer_rownum_bind_default = 10
_enable_query_rewrite_on_remote_objs = true
_optimizer_extended_cursor_sharing_rel = simple
_optimizer_adaptive_cursor_sharing = true
_direct_path_insert_features = 0
_optimizer_improve_selectivity = true
optimizer_use_pending_statistics = false
_optimizer_enable_density_improvements = true
_optimizer_aw_join_push_enabled = true
_optimizer_connect_by_combine_sw = true
_enable_pmo_ctas = 0
_optimizer_native_full_outer_join = force
_bloom_predicate_enabled = true
_optimizer_enable_extended_stats = true
_is_lock_table_for_ddl_wait_lock = 0
_pivot_implementation_method = choose
optimizer_capture_sql_plan_baselines = false
optimizer_use_sql_plan_baselines = true
_optimizer_star_trans_min_cost = 0
_optimizer_star_trans_min_ratio = 0
_with_subquery = OPTIMIZER
_optimizer_fkr_index_cost_bias = 10
_optimizer_use_subheap = true
parallel_degree_policy = manual
parallel_degree = 0
parallel_min_time_threshold = 10
_parallel_time_unit = 10
_optimizer_or_expansion_subheap = true
_optimizer_free_transformation_heap = true
_optimizer_reuse_cost_annotations = true
_result_cache_auto_size_threshold = 100
_result_cache_auto_time_threshold = 1000
_optimizer_nested_rollup_for_gset = 100
_nlj_batching_enabled = 1
parallel_query_default_dop = 0
is_recur_flags = 0
optimizer_use_invisible_indexes = false
flashback_data_archive_internal_cursor = 0
_optimizer_extended_stats_usage_control = 224
_parallel_syspls_obey_force = true
cell_offload_processing = true
_rdbms_internal_fplib_enabled = false
db_file_multiblock_read_count = 46
_bloom_folding_enabled = true
_mv_generalized_oj_refresh_opt = true
cell_offload_compaction = ADAPTIVE
parallel_degree_limit = 65535
parallel_force_local = false
parallel_max_degree = 4
total_cpu_count = 2
cell_offload_plan_display = AUTO
_optimizer_coalesce_subqueries = true
_optimizer_fast_pred_transitivity = true
_optimizer_fast_access_pred_analysis = true
_optimizer_unnest_disjunctive_subq = true
_optimizer_unnest_corr_set_subq = true
_optimizer_distinct_agg_transform = true
_aggregation_optimization_settings = 0
```

```
_optimizer_connect_by_elim_dups = true
_optimizer_eliminate_filtering_join = true
_connect_by_use_union_all = true
dst_upgrade_insert_conv = true
advanced_queuing_internal_cursor = 0
_optimizer_unnest_all_subqueries = true
_bloom_predicate_pushdown_to_storage = true
_bloom_vector_elements = 0
_bloom_pushing_max = 524288
parallel_autodop = 0
parallel_ddldml = 0
_parallel_cluster_cache_policy = adaptive
_parallel_scalability = 50
iot_internal_cursor = 0
_optimizer_instance_count = 0
_optimizer_connect_by_cb_whr_only = false
_suppress_scn_chk_for_cqn = nosuppress_1466
_optimizer_join_factorization = true
_optimizer_use_cbqt_star_transformation = true
_optimizer_table_expansion = true
_and_pruning_enabled = true
_deferred_constant_folding_mode = DEFAULT
_optimizer_distinct_placement = true
partition_pruning_internal_cursor = 0
parallel_hinted = none
_sql_compatibility = 0
_optimizer_use_feedback = true
_optimizer_try_st_before_jppd = true
```

Bug Fix Control Environment

```
fix 3834770 = 1
fix 3746511 = enabled
fix 4519016 = enabled
fix 3118776 = enabled
fix 4488689 = enabled
fix 2194204 = disabled
fix 2660592 = enabled
fix 2320291 = enabled
fix 2324795 = enabled
fix 4308414 = enabled
fix 3499674 = disabled
fix 4569940 = enabled
fix 4631959 = enabled
fix 4519340 = enabled
fix 4550003 = enabled
fix 1403283 = enabled
fix 4554846 = enabled
fix 4602374 = enabled
fix 4584065 = enabled
fix 4545833 = enabled
fix 4611850 = enabled
fix 4663698 = enabled
fix 4663804 = enabled
fix 4666174 = enabled
fix 4567767 = enabled
fix 4556762 = 15
fix 4728348 = enabled
fix 4708389 = enabled
fix 4175830 = enabled
fix 4752814 = enabled
fix 4583239 = enabled
fix 4386734 = enabled
fix 4887636 = enabled
fix 4483240 = enabled
fix 4872602 = disabled
fix 4711525 = enabled
fix 4545802 = enabled
fix 4605810 = enabled
fix 4704779 = enabled
fix 4900129 = enabled
fix 4924149 = enabled
fix 4663702 = enabled
fix 4878299 = enabled
fix 4658342 = enabled
fix 4881533 = enabled
fix 4676955 = enabled
fix 4273361 = enabled
fix 4967068 = enabled
fix 4969880 = disabled
fix 5005866 = enabled
fix 5015557 = enabled
fix 4705343 = enabled
fix 4904838 = enabled
fix 4716096 = enabled
```

fix 4483286 = disabled
fix 4722900 = enabled
fix 4615392 = enabled
fix 5096560 = enabled
fix 5029464 = enabled
fix 4134994 = enabled
fix 4904890 = enabled
fix 5104624 = enabled
fix 5014836 = enabled
fix 4768040 = enabled
fix 4600710 = enabled
fix 5129233 = enabled
fix 4595987 = enabled
fix 4908162 = enabled
fix 5139520 = enabled
fix 5084239 = enabled
fix 5143477 = disabled
fix 2663857 = enabled
fix 4717546 = enabled
fix 5240264 = disabled
fix 5099909 = enabled
fix 5240607 = enabled
fix 5195882 = enabled
fix 5220356 = enabled
fix 5263572 = enabled
fix 5385629 = enabled
fix 5302124 = enabled
fix 5391942 = enabled
fix 5384335 = enabled
fix 5482831 = enabled
fix 4158812 = enabled
fix 5387148 = enabled
fix 5383891 = enabled
fix 5466973 = enabled
fix 5396162 = enabled
fix 5394888 = enabled
fix 5395291 = enabled
fix 5236908 = enabled
fix 5509293 = enabled
fix 5449488 = enabled
fix 5567933 = enabled
fix 5570494 = enabled
fix 5288623 = enabled
fix 5505995 = enabled
fix 5505157 = enabled
fix 5112460 = enabled
fix 5554865 = enabled
fix 5112260 = enabled
fix 5112352 = enabled
fix 5547058 = enabled
fix 5618040 = enabled
fix 5585313 = enabled
fix 5547895 = enabled
fix 5634346 = enabled
fix 5620485 = enabled
fix 5483301 = enabled
fix 5657044 = enabled
fix 5694984 = enabled
fix 5868490 = enabled
fix 5650477 = enabled
fix 5611962 = enabled
fix 4279274 = enabled
fix 5741121 = enabled
fix 5714944 = enabled
fix 5391505 = enabled
fix 5762598 = enabled
fix 5578791 = enabled
fix 5259048 = enabled
fix 5882954 = enabled
fix 2492766 = enabled
fix 5707608 = enabled
fix 5891471 = enabled
fix 5884780 = enabled
fix 5680702 = enabled
fix 5371452 = enabled
fix 5838613 = enabled
fix 5949981 = enabled
fix 5624216 = enabled
fix 5741044 = enabled
fix 5976822 = enabled
fix 6006457 = enabled
fix 5872956 = enabled
fix 5923644 = enabled

fix 5943234 = enabled
fix 5844495 = enabled
fix 4168080 = enabled
fix 6020579 = enabled
fix 5842686 = disabled
fix 5996801 = enabled
fix 5593639 = enabled
fix 6133948 = enabled
fix 3151991 = enabled
fix 6146906 = enabled
fix 6239909 = enabled
fix 6267621 = enabled
fix 5909305 = enabled
fix 6279918 = enabled
fix 6141818 = enabled
fix 6151963 = enabled
fix 6251917 = enabled
fix 6282093 = enabled
fix 6119510 = enabled
fix 6119382 = enabled
fix 3801750 = enabled
fix 5705630 = disabled
fix 5944076 = enabled
fix 5406763 = enabled
fix 6070954 = enabled
fix 6282944 = enabled
fix 6138746 = enabled
fix 6082745 = enabled
fix 3426050 = enabled
fix 599680 = enabled
fix 6062266 = enabled
fix 6087237 = enabled
fix 6122894 = enabled
fix 6377505 = enabled
fix 5893768 = enabled
fix 6163564 = enabled
fix 6073325 = enabled
fix 6188881 = enabled
fix 6007259 = enabled
fix 6239971 = enabled
fix 5284200 = disabled
fix 6042205 = enabled
fix 6051211 = enabled
fix 6434668 = enabled
fix 6438752 = enabled
fix 5936366 = enabled
fix 6439032 = enabled
fix 6438892 = enabled
fix 6006300 = enabled
fix 5947231 = enabled
fix 5416118 = 1
fix 6365442 = 1
fix 6239039 = enabled
fix 6502845 = enabled
fix 6913094 = enabled
fix 6029469 = enabled
fix 5919513 = enabled

*** 2010-05-27 19:04:41.927

fix 6057611 = enabled
fix 6469667 = enabled
fix 6608941 = disabled
fix 6368066 = enabled
fix 6329318 = enabled
fix 6656356 = enabled
fix 4507997 = enabled
fix 6671155 = enabled
fix 6694548 = enabled
fix 6688200 = enabled
fix 6612471 = enabled
fix 6708183 = disabled
fix 6326934 = enabled
fix 6520717 = disabled
fix 6714199 = enabled
fix 6681545 = enabled
fix 6748058 = enabled
fix 6167716 = enabled
fix 6674254 = enabled
fix 6468287 = enabled
fix 6503543 = enabled
fix 6808773 = disabled
fix 6766962 = enabled
fix 6120483 = enabled

fix 6670551 = enabled
fix 6771838 = enabled
fix 6626018 = disabled
fix 6530596 = enabled
fix 6778642 = enabled
fix 6699059 = enabled
fix 6376551 = enabled
fix 6429113 = enabled
fix 6782437 = enabled
fix 6776808 = enabled
fix 6765823 = enabled
fix 6768660 = enabled
fix 6782665 = enabled
fix 6610822 = enabled
fix 6514189 = enabled
fix 6818410 = enabled
fix 6827696 = enabled
fix 6773613 = enabled
fix 5902962 = enabled
fix 6956212 = enabled
fix 3056297 = enabled
fix 6440977 = disabled
fix 6972291 = disabled
fix 6904146 = enabled
fix 6221403 = enabled
fix 5475051 = enabled
fix 6845871 = enabled
fix 5468809 = enabled
fix 6917633 = enabled
fix 4444536 = disabled
fix 6955210 = enabled
fix 6994194 = enabled
fix 6399597 = disabled
fix 6951776 = enabled
fix 5648287 = 3
fix 6987082 = disabled
fix 7132036 = enabled
fix 6980350 = enabled
fix 5199213 = enabled
fix 7138405 = enabled
fix 7148689 = enabled
fix 6820988 = enabled
fix 7032684 = enabled
fix 6617866 = enabled
fix 7155968 = enabled
fix 7127980 = enabled
fix 6982954 = enabled
fix 7241819 = enabled
fix 6897034 = enabled
fix 7236148 = enabled
fix 7298570 = enabled
fix 7249095 = enabled
fix 7314499 = enabled
fix 7324224 = enabled
fix 7289023 = enabled
fix 7237571 = enabled
fix 7116357 = enabled
fix 7345484 = enabled
fix 7375179 = enabled
fix 6430500 = disabled
fix 5897486 = enabled
fix 6774209 = enabled
fix 7306637 = enabled
fix 6451322 = enabled
fix 7208131 = enabled
fix 7388652 = enabled
fix 7127530 = enabled
fix 6751206 = enabled
fix 6669103 = enabled
fix 7430474 = enabled
fix 6990305 = enabled
fix 7043307 = enabled
fix 6921505 = enabled
fix 7388457 = enabled
fix 3120429 = enabled
fix 7452823 = disabled
fix 6838105 = enabled
fix 6769711 = enabled
fix 7170213 = enabled
fix 6528872 = enabled
fix 7295298 = enabled
fix 5922070 = enabled
fix 7259468 = enabled

fix 6418552 = enabled
fix 4619997 = enabled
fix 7524366 = enabled
fix 6942476 = enabled
fix 6418771 = enabled
fix 7375077 = enabled
fix 5400639 = enabled
fix 4570921 = enabled
fix 7426911 = enabled
fix 5099019 = disabled
fix 7528216 = enabled
fix 7521266 = enabled
fix 7385140 = enabled
fix 7576516 = enabled
fix 7573526 = enabled
fix 7576476 = enabled
fix 7165898 = enabled
fix 7263214 = enabled
fix 3320140 = enabled
fix 7555510 = enabled
fix 7613118 = enabled
fix 7597059 = enabled
fix 7558911 = enabled
fix 5520732 = enabled
fix 7679490 = disabled
fix 7449971 = enabled
fix 3628118 = enabled
fix 4370840 = enabled
fix 7281191 = enabled
fix 7519687 = enabled
fix 5029592 = 3
fix 6012093 = 1
fix 6053861 = disabled
fix 6941515 = disabled
fix 7696414 = enabled
fix 7272039 = enabled
fix 7834811 = enabled
fix 7640597 = enabled
fix 7341616 = enabled
fix 7168184 = enabled
fix 399198 = enabled
fix 7831070 = enabled
fix 7676897 = disabled
fix 7414637 = enabled
fix 7585456 = enabled
fix 8202421 = enabled
fix 7658097 = disabled
fix 8251486 = enabled
fix 7132684 = enabled
fix 7512227 = enabled
fix 6972987 = enabled
fix 7199035 = enabled
fix 8243446 = enabled
fix 7650462 = enabled
fix 6720701 = enabled
fix 7592673 = enabled
fix 7718694 = enabled
fix 7534027 = enabled
fix 7708267 = enabled
fix 5716785 = enabled
fix 7356191 = enabled
fix 7679161 = enabled
fix 7597159 = enabled
fix 7499258 = enabled
fix 8328363 = enabled
fix 7452863 = enabled
fix 8284930 = enabled
fix 7298626 = enabled
fix 7657126 = enabled
fix 8371884 = enabled
fix 8318020 = enabled
fix 8255423 = enabled
fix 7135745 = enabled
fix 8356253 = enabled
fix 7534257 = enabled
fix 8323407 = enabled
fix 7539815 = enabled
fix 8289316 = enabled
fix 8447850 = enabled
fix 7675944 = enabled
fix 8355120 = enabled
fix 7176746 = enabled
fix 8442891 = enabled

fix 8373261 = enabled
fix 7679164 = enabled
fix 7670533 = enabled
fix 8408665 = enabled
fix 8491399 = enabled
fix 8348392 = enabled
fix 8348585 = enabled
fix 8508056 = enabled
fix 8335178 = enabled
fix 8515269 = enabled
fix 8247017 = enabled
fix 7325597 = enabled
fix 8531490 = enabled
fix 6163600 = enabled
fix 8589278 = disabled
fix 8557992 = enabled
fix 7556098 = enabled
fix 8580883 = enabled
fix 5892599 = disabled
fix 8609714 = enabled
fix 8514561 = enabled
fix 8619631 = disabled

Query Block Registry:

SEL\$1 0xe56362c (PARSER) [FINAL]

:
call(in-use=8936, alloc=32736), compile(in-use=71756, alloc=132608), execution(in-use=4408, alloc=8136)

End of Optimizer State Dump

Dumping Hints

=====

===== END SQL Statement Dump =====

Registered qb: SEL\$1 0x273ed6d4 (PARSER)

QUERY BLOCK SIGNATURE

signature (): qb_name=SEL\$1 nbfros=1 flg=0
fro(0): flg=4 objn=70879 hint_alias="T1"@"SEL\$1"

SPM: current statement disallowed

Automatic degree of parallelism (ADOP)

Automatic degree of parallelism is disabled: statement type.

PM: Considering predicate move-around in query block SEL\$1 (#0)

Predicate Move-Around (PM)

OPTIMIZER INFORMATION

----- Current SQL Statement for this session (sql_id=1f1656cb14mm7) -----

EXPLAIN PLAN SET STATEMENT_ID='PLUS140864' FOR SELECT /* FIND_ME */

*

FROM

T1

WHERE

CHAR_COL = '10'

Legend

The following abbreviations are used by optimizer trace.

CBQT - cost-based query transformation

JPPD - join predicate push-down

OJPPD - old-style (non-cost-based) JPPD

FPD - filter push-down

PM - predicate move-around

CVM - complex view merging

SPJ - select-project-join

SJC - set join conversion

SU - subquery unnesting

OBYE - order by elimination

OST - old style star transformation

ST - new (cbqt) star transformation

CNT - count(col) to count(*) transformation

JE - Join Elimination

JF - join factorization

SLP - select list pruning

DP - distinct placement

qb - query block

LB - leaf blocks
 DK - distinct keys
 LB/K - average number of leaf blocks per key
 DB/K - average number of data blocks per key
 CLUF - clustering factor
 NDV - number of distinct values
 Resp - response cost
 Card - cardinality
 Resc - resource cost
 NL - nested loops (join)
 SM - sort merge (join)
 HA - hash (join)
 CPUSPEED - CPU Speed
 IOTFRSPEED - I/O transfer speed
 IOSEKTIM - I/O seek time
 SREADTIM - average single block read time
 MREADTIM - average multiblock read time
 MBRC - average multiblock read count
 MAXTHR - maximum I/O system throughput
 SLAVETHR - average slave I/O throughput
 dmeth - distribution method
 1: no partitioning required
 2: value partitioned
 4: right is random (round-robin)
 128: left is random (round-robin)
 8: broadcast right and partition left
 16: broadcast left and partition right
 32: partition left using partitioning of right
 64: partition right using partitioning of left
 256: run the join in serial
 0: invalid distribution method
 sel - selectivity
 ptn - partition

 PARAMETERS USED BY THE OPTIMIZER

 PARAMETERS WITH ALTERED VALUES

 Compilation Environment Dump
 Bug Fix Control Environment

 PARAMETERS WITH DEFAULT VALUES

Compilation Environment Dump
 optimizer_mode_hinted = false
 optimizer_features_hinted = 0.0.0
 parallel_execution_enabled = false
 parallel_query_forced_dop = 0
 parallel_dml_forced_dop = 0
 parallel_ddl_forced_degree = 0
 parallel_ddl_forced_instances = 0
 _query_rewrite_fudge = 90
 optimizer_features_enable = 11.2.0.1
 _optimizer_search_limit = 5
 cpu_count = 2
 active_instance_count = 1
 parallel_threads_per_cpu = 2
 hash_area_size = 131072
 bitmap_merge_area_size = 1048576
 sort_area_size = 65536
 sort_area_retained_size = 0
 _sort_elimination_cost_ratio = 0
 _optimizer_block_size = 8192
 _sort_multiblock_read_count = 2
 _hash_multiblock_io_count = 0
 _db_file_optimizer_read_count = 8
 _optimizer_max_permutations = 2000
 pga_aggregate_target = 143360 KB
 _pga_max_size = 204800 KB
 _query_rewrite_maxdisjunct = 257
 _smm_auto_min_io_size = 56 KB
 _smm_auto_max_io_size = 248 KB
 _smm_min_size = 143 KB
 _smm_max_size = 28672 KB
 _smm_px_max_size = 71680 KB
 _cpu_to_io = 0
 _optimizer_undo_cost_change = 11.2.0.1
 parallel_query_mode = enabled
 parallel_dml_mode = disabled
 parallel_ddl_mode = enabled

```
optimizer_mode = all_rows
sqlstat_enabled = false
_optimizer_percent_parallel = 101
_always_anti_join = choose
_always_semi_join = choose
_optimizer_mode_force = true
_partition_view_enabled = true
_always_star_transformation = false
_query_rewrite_or_error = false
_hash_join_enabled = true
cursor_sharing = exact
_b_tree_bitmap_plans = true
star_transformation_enabled = false
_optimizer_cost_model = choose
_new_sort_cost_estimate = true
_complex_view_merging = true
_unnest_subquery = true
_eliminate_common_subexpr = true
_pred_move_around = true
_convert_set_to_join = false
_push_join_predicate = true
_push_join_union_view = true
_fast_full_scan_enabled = true
_optim_enhance_nnull_detection = true
_parallel_broadcast_enabled = true
_px_broadcast_fudge_factor = 100
_ordered_nested_loop = true
_no_or_expansion = false
optimizer_index_cost_adj = 100
optimizer_index_caching = 0
_system_index_caching = 0
_disable_datalayer_sampling = false
query_rewrite_enabled = true
query_rewrite_integrity = enforced
_query_cost_rewrite = true
_query_rewrite_2 = true
_query_rewrite_1 = true
_query_rewrite_expression = true
_query_rewrite_jgmigrate = true
_query_rewrite_fpc = true
_query_rewrite_drj = true
_full_pwise_join_enabled = true
_partial_pwise_join_enabled = true
_left_nested_loops_random = true
_improved_row_length_enabled = true
_index_join_enabled = true
_enable_type_dep_selectivity = true
_improved_outerjoin_card = true
_optimizer_adjust_for_nulls = true
_optimizer_degree = 0
_use_column_stats_for_function = true
_subquery_pruning_enabled = true
_subquery_pruning_mv_enabled = false
_or_expand_nvl_predicate = true
_like_with_bind_as_equality = false
_table_scan_cost_plus_one = true
_cost_equality_semi_join = true
_default_non_equality_sel_check = true
_new_initial_join_orders = true
_oneside_colstat_for_equijoins = true
_optim_peek_user_binds = true
_minimal_stats_aggregation = true
_force_temptables_for_gsets = false
workarea_size_policy = auto
_smm_auto_cost_enabled = true
_gs_anti_semi_join_allowed = true
_optim_new_default_join_sel = true
optimizer_dynamic_sampling = 2
_pre_rewrite_push_pred = true
_optimizer_new_join_card_computation = true
_union_rewrite_for_gs = yes_gset_mv
_generalized_pruning_enabled = true
_optim_adjust_for_part_skews = true
_force_datefold_trunc = false
statistics_level = typical
_optimizer_system_stats_usage = true
skip_unusable_indexes = true
_remove_aggr_subquery = true
_optimizer_push_down_distinct = 0
_dml_monitoring_enabled = true
_optimizer_undo_changes = false
_predicate_elimination_enabled = true
_nested_loop_fudge = 100
```

```
_project_view_columns = true
_local_communication_costing_enabled = true
_local_communication_ratio = 50
_query_rewrite_vop_cleanup = true
_slave_mapping_enabled = true
_optimizer_cost_based_transformation = linear
_optimizer_mjc_enabled = true
_right_outer_hash_enable = true
_spr_push_pred_refspr = true
_optimizer_cache_stats = false
_optimizer_cbqt_factor = 50
_optimizer_squ_bottomup = true
_fic_area_size = 131072
_optimizer_skip_scan_enabled = true
_optimizer_cost_filter_pred = false
_optimizer_sortmerge_join_enabled = true
_optimizer_join_sel_sanity_check = true
_mmv_query_rewrite_enabled = true
_bt_mmv_query_rewrite_enabled = true
_add_stale_mv_to_dependency_list = true
_distinct_view_unnesting = false
_optimizer_dim_subq_join_sel = true
_optimizer_disable_strans_sanity_checks = 0
_optimizer_compute_index_stats = true
_push_join_union_view2 = true
_optimizer_ignore_hints = false
_optimizer_random_plan = 0
_query_rewrite_setopgrw_enable = true
_optimizer_correct_sq_selectivity = true
_disable_function_based_index = false
_optimizer_join_order_control = 3
_optimizer_cartesian_enabled = true
_optimizer_starplan_enabled = true
_extended_pruning_enabled = true
_optimizer_push_pred_cost_based = true
_optimizer_null_aware_antijoin = true
_optimizer_extend_jppd_view_types = true
_sql_model_unfold_forloops = run_time
_enable_dml_lock_escalation = false
_bloom_filter_enabled = true
_update_bji_ipdml_enabled = 0
_optimizer_extended_cursor_sharing = udo
_dm_max_shared_pool_pct = 1
_optimizer_cost_hjsmj_multimatch = true
_optimizer_transitivity_retain = true
_px_pwg_enabled = true
optimizer_secure_view_merging = true
_optimizer_join_elimination_enabled = true
flashback_table_rpi = non_fbt
_optimizer_cbqt_no_size_restriction = true
_optimizer_enhanced_filter_push = true
_optimizer_filter_pred_pullup = true
_rowsrc_trace_level = 0
_simple_view_merging = true
_optimizer_rownum_pred_based_fkr = true
_optimizer_better_inlist_costing = all
_optimizer_self_induced_cache_cost = false
_optimizer_min_cache_blocks = 10
_optimizer_or_expansion = depth
_optimizer_order_by_elimination_enabled = true
_optimizer_outer_to_anti_enabled = true
_selfjoin_mv_duplicates = true
_dimension_skip_null = true
_force_rewrite_enable = false
_optimizer_star_tran_in_with_clause = true
_optimizer_complex_pred_selectivity = true
_optimizer_connect_by_cost_based = true
_gby_hash_aggregation_enabled = true
_globalindex_pnum_filter_enabled = true
_px_minus_intersect = true
_fix_control_key = 0
_force_slave_mapping_intra_part_loads = false
_force_tmp_segment_loads = false
_query_mmvrewrite_maxpreds = 10
_query_mmvrewrite_maxintervals = 5
_query_mmvrewrite_maxinlists = 5
_query_mmvrewrite_maxdmaps = 10
_query_mmvrewrite_maxcmaps = 20
_query_mmvrewrite_maxregperm = 512
_query_mmvrewrite_maxmergedcmaps = 50
_query_mmvrewrite_maxqryinlistvals = 500
_disable_parallel_conventional_load = false
_trace_virtual_columns = false
```

_replace_virtual_columns = true
_virtual_column_overload_allowed = true
_kdt_buffering = true
_first_k_rows_dynamic_proration = true
_optimizer_sortmerge_join_inequality = true
_optimizer_aw_stats_enabled = true
_bloom_pruning_enabled = true
result_cache_mode = MANUAL
_px_ual_serial_input = true
_optimizer_skip_scan_guess = false
_enable_row_shipping = true
_row_shipping_threshold = 80
_row_shipping_explain = false
transaction_isolation_level = read_committed
_optimizer_distinct_elimination = true
_optimizer_multi_level_push_pred = true
_optimizer_group_by_placement = true
_optimizer_rownum_bind_default = 10
_enable_query_rewrite_on_remote_objs = true
_optimizer_extended_cursor_sharing_rel = simple
_optimizer_adaptive_cursor_sharing = true
_direct_path_insert_features = 0
_optimizer_improve_selectivity = true
optimizer_use_pending_statistics = false
_optimizer_enable_density_improvements = true
_optimizer_aw_join_push_enabled = true
_optimizer_connect_by_combine_sw = true
_enable_pmo_ctas = 0
_optimizer_native_full_outer_join = force
_bloom_predicate_enabled = true
_optimizer_enable_extended_stats = true
_is_lock_table_for_ddl_wait_lock = 0
_pivot_implementation_method = choose
optimizer_capture_sql_plan_baselines = false
optimizer_use_sql_plan_baselines = true
_optimizer_star_trans_min_cost = 0
_optimizer_star_trans_min_ratio = 0
_with_subquery = OPTIMIZER
_optimizer_fkr_index_cost_bias = 10
_optimizer_use_subheap = true
parallel_degree_policy = manual
parallel_degree = 0
parallel_min_time_threshold = 10
_parallel_time_unit = 10
_optimizer_or_expansion_subheap = true
_optimizer_free_transformation_heap = true
_optimizer_reuse_cost_annotations = true
_result_cache_auto_size_threshold = 100
_result_cache_auto_time_threshold = 1000
_optimizer_nested_rollup_for_gset = 100
_nlj_batching_enabled = 1
parallel_query_default_dop = 0
is_recur_flags = 0
optimizer_use_invisible_indexes = false
flashback_data_archive_internal_cursor = 0
_optimizer_extended_stats_usage_control = 224
_parallel_syspls_obey_force = true
cell_offload_processing = true
_rdbms_internal_fplib_enabled = false
db_file_multiblock_read_count = 46
_bloom_folding_enabled = true
_mv_generalized_oj_refresh_opt = true
cell_offload_compaction = ADAPTIVE
parallel_degree_limit = 65535
parallel_force_local = false
parallel_max_degree = 4
total_cpu_count = 2
cell_offload_plan_display = AUTO
_optimizer_coalesce_subqueries = true
_optimizer_fast_pred_transitivity = true
_optimizer_fast_access_pred_analysis = true
_optimizer_unnest_disjunctive_subq = true
_optimizer_unnest_corr_set_subq = true
_optimizer_distinct_agg_transform = true
_aggregation_optimization_settings = 0
_optimizer_connect_by_elim_dups = true
_optimizer_eliminate_filtering_join = true
_connect_by_use_union_all = true
dst_upgrade_insert_conv = true
advanced_queuing_internal_cursor = 0
_optimizer_unnest_all_subqueries = true
_bloom_predicate_pushdown_to_storage = true
_bloom_vector_elements = 0

_bloom_pushing_max = 524288
parallel_autodop = 0
parallel_ddldml = 0
_parallel_cluster_cache_policy = adaptive
_parallel_scalability = 50
iot_internal_cursor = 0
_optimizer_instance_count = 0
_optimizer_connect_by_cb_whr_only = false
_suppress_scn_chk_for_cqn = nosuppress_1466
_optimizer_join_factorization = true
_optimizer_use_cbqt_star_transformation = true
_optimizer_table_expansion = true
_and_pruning_enabled = true
_deferred_constant_folding_mode = DEFAULT
_optimizer_distinct_placement = true
partition_pruning_internal_cursor = 0
parallel_hinted = none
_sql_compatibility = 0
_optimizer_use_feedback = true
_optimizer_try_st_before_jppd = true

Bug Fix Control Environment

fix 3834770 = 1
fix 3746511 = enabled
fix 4519016 = enabled
fix 3118776 = enabled
fix 4488689 = enabled
fix 2194204 = disabled
fix 2660592 = enabled
fix 2320291 = enabled
fix 2324795 = enabled
fix 4308414 = enabled
fix 3499674 = disabled
fix 4569940 = enabled
fix 4631959 = enabled
fix 4519340 = enabled
fix 4550003 = enabled
fix 1403283 = enabled
fix 4554846 = enabled
fix 4602374 = enabled
fix 4584065 = enabled
fix 4545833 = enabled
fix 4611850 = enabled
fix 4663698 = enabled
fix 4663804 = enabled
fix 4666174 = enabled
fix 4567767 = enabled
fix 4556762 = 15
fix 4728348 = enabled
fix 4708389 = enabled
fix 4175830 = enabled
fix 4752814 = enabled
fix 4583239 = enabled
fix 4386734 = enabled
fix 4887636 = enabled
fix 4483240 = enabled
fix 4872602 = disabled
fix 4711525 = enabled
fix 4545802 = enabled
fix 4605810 = enabled
fix 4704779 = enabled
fix 4900129 = enabled
fix 4924149 = enabled
fix 4663702 = enabled
fix 4878299 = enabled
fix 4658342 = enabled
fix 4881533 = enabled
fix 4676955 = enabled
fix 4273361 = enabled
fix 4967068 = enabled
fix 4969880 = disabled
fix 5005866 = enabled
fix 5015557 = enabled
fix 4705343 = enabled
fix 4904838 = enabled
fix 4716096 = enabled
fix 4483286 = disabled
fix 4722900 = enabled
fix 4615392 = enabled
fix 5096560 = enabled
fix 5029464 = enabled
fix 4134994 = enabled
fix 4904890 = enabled
fix 5104624 = enabled

fix 5014836 = enabled
fix 4768040 = enabled
fix 4600710 = enabled
fix 5129233 = enabled
fix 4595987 = enabled
fix 4908162 = enabled
fix 5139520 = enabled
fix 5084239 = enabled
fix 5143477 = disabled
fix 2663857 = enabled
fix 4717546 = enabled
fix 5240264 = disabled
fix 5099909 = enabled
fix 5240607 = enabled
fix 5195882 = enabled
fix 5220356 = enabled
fix 5263572 = enabled
fix 5385629 = enabled
fix 5302124 = enabled
fix 5391942 = enabled
fix 5384335 = enabled
fix 5482831 = enabled
fix 4158812 = enabled
fix 5387148 = enabled
fix 5383891 = enabled
fix 5466973 = enabled
fix 5396162 = enabled
fix 5394888 = enabled
fix 5395291 = enabled
fix 5236908 = enabled
fix 5509293 = enabled
fix 5449488 = enabled
fix 5567933 = enabled
fix 5570494 = enabled
fix 5288623 = enabled
fix 5505995 = enabled
fix 5505157 = enabled
fix 5112460 = enabled
fix 5554865 = enabled
fix 5112260 = enabled
fix 5112352 = enabled
fix 5547058 = enabled
fix 5618040 = enabled
fix 5585313 = enabled
fix 5547895 = enabled
fix 5634346 = enabled
fix 5620485 = enabled
fix 5483301 = enabled
fix 5657044 = enabled
fix 5694984 = enabled
fix 5868490 = enabled
fix 5650477 = enabled
fix 5611962 = enabled
fix 4279274 = enabled
fix 5741121 = enabled
fix 5714944 = enabled
fix 5391505 = enabled
fix 5762598 = enabled
fix 5578791 = enabled
fix 5259048 = enabled
fix 5882954 = enabled
fix 2492766 = enabled
fix 5707608 = enabled
fix 5891471 = enabled
fix 5884780 = enabled
fix 5680702 = enabled
fix 5371452 = enabled
fix 5838613 = enabled
fix 5949981 = enabled
fix 5624216 = enabled
fix 5741044 = enabled
fix 5976822 = enabled
fix 6006457 = enabled
fix 5872956 = enabled
fix 5923644 = enabled
fix 5943234 = enabled
fix 5844495 = enabled
fix 4168080 = enabled
fix 6020579 = enabled
fix 5842686 = disabled
fix 5996801 = enabled
fix 5593639 = enabled
fix 6133948 = enabled

fix 3151991 = enabled
fix 6146906 = enabled
fix 6239909 = enabled
fix 6267621 = enabled
fix 5909305 = enabled
fix 6279918 = enabled
fix 6141818 = enabled
fix 6151963 = enabled
fix 6251917 = enabled
fix 6282093 = enabled
fix 6119510 = enabled
fix 6119382 = enabled
fix 3801750 = enabled
fix 5705630 = disabled
fix 5944076 = enabled
fix 5406763 = enabled
fix 6070954 = enabled
fix 6282944 = enabled
fix 6138746 = enabled
fix 6082745 = enabled
fix 3426050 = enabled
fix 599680 = enabled
fix 6062266 = enabled
fix 6087237 = enabled
fix 6122894 = enabled
fix 6377505 = enabled
fix 5893768 = enabled
fix 6163564 = enabled
fix 6073325 = enabled
fix 6188881 = enabled
fix 6007259 = enabled
fix 6239971 = enabled
fix 5284200 = disabled
fix 6042205 = enabled
fix 6051211 = enabled
fix 6434668 = enabled
fix 6438752 = enabled
fix 5936366 = enabled
fix 6439032 = enabled
fix 6438892 = enabled
fix 6006300 = enabled
fix 5947231 = enabled
fix 5416118 = 1
fix 6365442 = 1
fix 6239039 = enabled
fix 6502845 = enabled
fix 6913094 = enabled
fix 6029469 = enabled
fix 5919513 = enabled
fix 6057611 = enabled
fix 6469667 = enabled
fix 6608941 = disabled
fix 6368066 = enabled
fix 6329318 = enabled
fix 6656356 = enabled
fix 4507997 = enabled
fix 6671155 = enabled
fix 6694548 = enabled
fix 6688200 = enabled
fix 6612471 = enabled
fix 6708183 = disabled
fix 6326934 = enabled
fix 6520717 = disabled
fix 6714199 = enabled
fix 6681545 = enabled
fix 6748058 = enabled
fix 6167716 = enabled
fix 6674254 = enabled
fix 6468287 = enabled
fix 6503543 = enabled
fix 6808773 = disabled
fix 6766962 = enabled
fix 6120483 = enabled
fix 6670551 = enabled
fix 6771838 = enabled
fix 6626018 = disabled
fix 6530596 = enabled
fix 6778642 = enabled
fix 6699059 = enabled
fix 6376551 = enabled
fix 6429113 = enabled
fix 6782437 = enabled
fix 6776808 = enabled

fix 6765823 = enabled
fix 6768660 = enabled
fix 6782665 = enabled
fix 6610822 = enabled
fix 6514189 = enabled
fix 6818410 = enabled
fix 6827696 = enabled
fix 6773613 = enabled
fix 5902962 = enabled
fix 6956212 = enabled
fix 3056297 = enabled
fix 6440977 = disabled
fix 6972291 = disabled
fix 6904146 = enabled
fix 6221403 = enabled
fix 5475051 = enabled
fix 6845871 = enabled
fix 5468809 = enabled
fix 6917633 = enabled
fix 4444536 = disabled
fix 6955210 = enabled
fix 6994194 = enabled
fix 6399597 = disabled
fix 6951776 = enabled
fix 5648287 = 3
fix 6987082 = disabled
fix 7132036 = enabled
fix 6980350 = enabled
fix 5199213 = enabled
fix 7138405 = enabled
fix 7148689 = enabled
fix 6820988 = enabled
fix 7032684 = enabled
fix 6617866 = enabled
fix 7155968 = enabled
fix 7127980 = enabled
fix 6982954 = enabled
fix 7241819 = enabled
fix 6897034 = enabled
fix 7236148 = enabled
fix 7298570 = enabled
fix 7249095 = enabled
fix 7314499 = enabled
fix 7324224 = enabled
fix 7289023 = enabled
fix 7237571 = enabled
fix 7116357 = enabled
fix 7345484 = enabled
fix 7375179 = enabled
fix 6430500 = disabled
fix 5897486 = enabled
fix 6774209 = enabled
fix 7306637 = enabled
fix 6451322 = enabled
fix 7208131 = enabled
fix 7388652 = enabled
fix 7127530 = enabled
fix 6751206 = enabled
fix 6669103 = enabled
fix 7430474 = enabled
fix 6990305 = enabled
fix 7043307 = enabled
fix 6921505 = enabled
fix 7388457 = enabled
fix 3120429 = enabled
fix 7452823 = disabled
fix 6838105 = enabled
fix 6769711 = enabled
fix 7170213 = enabled
fix 6528872 = enabled
fix 7295298 = enabled
fix 5922070 = enabled
fix 7259468 = enabled
fix 6418552 = enabled
fix 4619997 = enabled
fix 7524366 = enabled
fix 6942476 = enabled
fix 6418771 = enabled
fix 7375077 = enabled
fix 5400639 = enabled
fix 4570921 = enabled
fix 7426911 = enabled
fix 5099019 = disabled

fix 7528216 = enabled
fix 7521266 = enabled
fix 7385140 = enabled
fix 7576516 = enabled
fix 7573526 = enabled
fix 7576476 = enabled
fix 7165898 = enabled
fix 7263214 = enabled
fix 3320140 = enabled
fix 7555510 = enabled
fix 7613118 = enabled
fix 7597059 = enabled
fix 7558911 = enabled
fix 5520732 = enabled
fix 7679490 = disabled
fix 7449971 = enabled
fix 3628118 = enabled
fix 4370840 = enabled
fix 7281191 = enabled
fix 7519687 = enabled
fix 5029592 = 3
fix 6012093 = 1
fix 6053861 = disabled
fix 6941515 = disabled
fix 7696414 = enabled
fix 7272039 = enabled
fix 7834811 = enabled
fix 7640597 = enabled
fix 7341616 = enabled
fix 7168184 = enabled
fix 399198 = enabled
fix 7831070 = enabled
fix 7676897 = disabled
fix 7414637 = enabled
fix 7585456 = enabled
fix 8202421 = enabled
fix 7658097 = disabled
fix 8251486 = enabled
fix 7132684 = enabled
fix 7512227 = enabled
fix 6972987 = enabled
fix 7199035 = enabled
fix 8243446 = enabled
fix 7650462 = enabled
fix 6720701 = enabled
fix 7592673 = enabled
fix 7718694 = enabled
fix 7534027 = enabled
fix 7708267 = enabled
fix 5716785 = enabled
fix 7356191 = enabled
fix 7679161 = enabled
fix 7597159 = enabled
fix 7499258 = enabled
fix 8328363 = enabled
fix 7452863 = enabled
fix 8284930 = enabled
fix 7298626 = enabled
fix 7657126 = enabled
fix 8371884 = enabled
fix 8318020 = enabled
fix 8255423 = enabled
fix 7135745 = enabled
fix 8356253 = enabled
fix 7534257 = enabled
fix 8323407 = enabled
fix 7539815 = enabled
fix 8289316 = enabled
fix 8447850 = enabled
fix 7675944 = enabled
fix 8355120 = enabled
fix 7176746 = enabled
fix 8442891 = enabled
fix 8373261 = enabled
fix 7679164 = enabled
fix 7670533 = enabled
fix 8408665 = enabled
fix 8491399 = enabled
fix 8348392 = enabled
fix 8348585 = enabled
fix 8508056 = enabled
fix 8335178 = enabled
fix 8515269 = enabled

fix 8247017 = enabled
fix 7325597 = enabled
fix 8531490 = enabled
fix 6163600 = enabled
fix 8589278 = disabled
fix 8557992 = enabled
fix 7556098 = enabled
fix 8580883 = enabled
fix 5892599 = disabled
fix 8609714 = enabled
fix 8514561 = enabled
fix 8619631 = disabled

PARAMETERS IN OPT_PARAM HINT

Column Usage Monitoring is ON: tracking level = 1

Considering Query Transformations on query block SEL\$1 (#0)

Query transformations (QT)

JF: Checking validity of join factorization for query block SEL\$1 (#0)

JF: Bypassed: not a UNION or UNION-ALL query block.

ST: not valid since star transformation parameter is FALSE

TE: Checking validity of table expansion for query block SEL\$1 (#0)

TE: Bypassed: No partitioned table in query block.

CBQT bypassed for query block SEL\$1 (#0): no complex view, sub-queries or UNION (ALL) queries.

CBQT: Validity checks failed for 1f1656cb14mm7.

CSE: Considering common sub-expression elimination in query block SEL\$1 (#0)

Common Subexpression elimination (CSE)

CSE: CSE not performed on query block SEL\$1 (#0).

OBYE: Considering Order-by Elimination from view SEL\$1 (#0)

Order-by elimination (OBYE)

OBYE: OBYE bypassed: no order by to eliminate.

CVM: Considering view merge in query block SEL\$1 (#0)

query block SEL\$1 (#0) unchanged

Considering Query Transformations on query block SEL\$1 (#0)

Query transformations (QT)

JF: Checking validity of join factorization for query block SEL\$1 (#0)

JF: Bypassed: not a UNION or UNION-ALL query block.

ST: not valid since star transformation parameter is FALSE

TE: Checking validity of table expansion for query block SEL\$1 (#0)

TE: Bypassed: No partitioned table in query block.

CBQT bypassed for query block SEL\$1 (#0): no complex view, sub-queries or UNION (ALL) queries.

CBQT: Validity checks failed for 1f1656cb14mm7.

CSE: Considering common sub-expression elimination in query block SEL\$1 (#0)

Common Subexpression elimination (CSE)

CSE: CSE not performed on query block SEL\$1 (#0).

SU: Considering subquery unnesting in query block SEL\$1 (#0)

Subquery Unnest (SU)

SJC: Considering set-join conversion in query block SEL\$1 (#0)

Set-Join Conversion (SJC)

SJC: not performed

PM: Considering predicate move-around in query block SEL\$1 (#0)

Predicate Move-Around (PM)

PM: PM bypassed: Outer query contains no views.

PM: PM bypassed: Outer query contains no views.

query block SEL\$1 (#0) unchanged

FPD: Considering simple filter push in query block SEL\$1 (#0)

"T1"."CHAR_COL"='10'

try to generate transitive predicate from check constraints for query block SEL\$1 (#0)

finally: "T1"."CHAR_COL"='10'

apadrvt-start sqliid=1658667385983487591

:

call(in-use=604, alloc=16360), compile(in-use=59652, alloc=60944), execution(in-use=75472, alloc=77548)

Peeked values of the binds in SQL statement

Final query after transformations:***** UNPARSED QUERY IS *****
SELECT "T1"."CHAR_COL" "CHAR_COL","T1"."C2" "C2" FROM "TESTUSER"."T1" "T1" WHERE "T1"."CHAR_COL"='10'
kkoqbc: optimizing query block SEL\$1 (#0)

:
call(in-use=632, alloc=16360), compile(in-use=60296, alloc=65000), execution(in-use=79548, alloc=81624)

kkoqbc-subheap (create addr=0x0E56FB38)

QUERY BLOCK TEXT

SELECT /* FIND_ME */

*
FROM
T1
WHERE
CHAR_COL = '10'

QUERY BLOCK SIGNATURE

signature (optimizer): qb_name=SEL\$1 nbfros=1 flg=0
fro(0): flg=0 objn=70879 hint_alias="T1"@SEL\$1

SYSTEM STATISTICS INFORMATION

Using NOWORKLOAD Stats
CPUSPEEDNW: 466 millions instructions/sec (default is 100)
IOTFRSPEED: 4096 bytes per millisecond (default is 4096)
IOSEKTIM: 10 milliseconds (default is 10)
MBRC: -1 blocks (default is 8)

BASE STATISTICAL INFORMATION

Table Stats::

Table: T1 Alias: T1
#Rows: 1000000 #Blks: 16217 AvgRowLen: 108.00

Index Stats::

Index: SYS_C0010157 Col#: 1
LVLS: 2 #LB: 3908 #DK: 1000000 LB/K: 1.00 DB/K: 1.00 CLUF: 201245.00

1-ROW TABLES: T1[T1]#0

Access path analysis for T1

SINGLE TABLE ACCESS PATH

Single Table Cardinality Estimation for T1[T1]
Table: T1 Alias: T1
Card: Original: 1000000.000000 Rounded: 1 Computed: 1.00 Non Adjusted: 1.00

Access Path: TableScan
Cost: 4450.40 Resp: 4450.40 Degree: 0
Cost_io: 4394.00 Cost_cpu: 315488412
Resp_io: 4394.00 Resp_cpu: 315488412

Access Path: index (UniqueScan)
Index: SYS_C0010157
resc_io: 3.00 resc_cpu: 22584
ix_sel: 0.000001 ix_sel_with_filters: 0.000001
Cost: 3.00 Resp: 3.00 Degree: 1

Access Path: index (AllEqUnique)
Index: SYS_C0010157
resc_io: 3.00 resc_cpu: 22584
ix_sel: 0.000001 ix_sel_with_filters: 0.000001
Cost: 3.00 Resp: 3.00 Degree: 1

One row Card: 1.000000
Best:: AccessPath: IndexUnique
Index: SYS_C0010157
Cost: 3.00 Degree: 1 Resp: 3.00 Card: 1.00 Bytes: 0

OPTIMIZER STATISTICS AND COMPUTATIONS

GENERAL PLANS

Considering cardinality-based initial join order.
Permutations for Starting Table :0

```

Join order[1]: T1[T1]#0
*****
Best so far: Table#: 0 cost: 3.0040 card: 1.0000 bytes: 108
*****
(newjo-stop-1) k:0, spcnt:0, perm:1, maxperm:2000

*****
Number of join permutations tried: 1
*****
Or-Expansion validity checks failed on query block SEL$1 (#0) because no need for OR expansion if we only have 1-row tables
Transfer Optimizer annotations for query block SEL$1 (#0)
id=0 frofkks[i] (index start key) predicate="T1"."CHAR_COL"='10'
id=0 frofkke[i] (index stop key) predicate="T1"."CHAR_COL"='10'
Final cost for query block SEL$1 (#0) - All Rows Plan:
  Best join order: 1
  Cost: 3.0040 Degree: 1 Card: 1.0000 Bytes: 108
  Resc: 3.0040 Resc_io: 3.0000 Resc_cpu: 22584
  Resp: 3.0040 Resp_io: 3.0000 Resc_cpu: 22584
kkoqbc-subheap (delete addr=0x0E56FB38, in-use=11652, alloc=14128)
kkoqbc-end:
:
  call(in-use=6908, alloc=32736), compile(in-use=60952, alloc=65000), execution(in-use=79548, alloc=81624)

kkoqbc: finish optimizing query block SEL$1 (#0)
apadrvc-end
:
  call(in-use=6908, alloc=32736), compile(in-use=61600, alloc=65000), execution(in-use=79548, alloc=81624)

```

Starting SQL statement dump

```

user_id=65 user_name=TESTUSER module=SQL*Plus action=
sql_id=1f1656cb14mm7 plan_hash_value=1657849122 problem_type=3
----- Current SQL Statement for this session (sql_id=1f1656cb14mm7) -----
EXPLAIN PLAN SET STATEMENT_ID='PLUS140864' FOR SELECT /* FIND_ME */
*
FROM
  T1
WHERE
  CHAR_COL = '10'
sql_text_length=106
sql=EXPLAIN PLAN SET STATEMENT_ID='PLUS140864' FOR SELECT /* FIND_ME */
*
FROM
  T1
WHERE
  CHAR_COL = '10'
----- Explain Plan Dump -----
----- Plan Table -----

```

=====
Plan Table
=====

Id	Operation	Name	Rows	Bytes	Cost	Time
0	SELECT STATEMENT				3	
1	TABLE ACCESS BY INDEX ROWID	T1	1	108	3	00:00:01
2	INDEX UNIQUE SCAN	SYS_C0010157	1		2	00:00:01

Predicate Information:

2 - access("CHAR_COL"='10')

Content of other_xml column

```

=====
db_version      : 11.2.0.1
parse_schema    : TESTUSER
plan_hash       : 1657849122
plan_hash_2     : 3942213799
Outline Data:
/*+
  BEGIN_OUTLINE_DATA
    IGNORE_OPTIM_EMBEDDED_HINTS
    OPTIMIZER_FEATURES_ENABLE('11.2.0.1')
    DB_VERSION('11.2.0.1')
    ALL_ROWS
    OUTLINE_LEAF(@"SEL$1")
    INDEX_RS_ASC(@"SEL$1" "T1"@"SEL$1" ("T1"."CHAR_COL"))
  END_OUTLINE_DATA
*/

```

Optimizer state dump:

Compilation Environment Dump

optimizer_mode_hinted = false
optimizer_features_hinted = 0.0.0
parallel_execution_enabled = false
parallel_query_forced_dop = 0
parallel_dml_forced_dop = 0
parallel_ddl_forced_degree = 0
parallel_ddl_forced_instances = 0
_query_rewrite_fudge = 90
optimizer_features_enable = 11.2.0.1
_optimizer_search_limit = 5
cpu_count = 2
active_instance_count = 1
parallel_threads_per_cpu = 2
hash_area_size = 131072
bitmap_merge_area_size = 1048576
sort_area_size = 65536
sort_area_retained_size = 0
_sort_elimination_cost_ratio = 0
_optimizer_block_size = 8192
_sort_multiblock_read_count = 2
_hash_multiblock_io_count = 0
_db_file_optimizer_read_count = 8
_optimizer_max_permutations = 2000
pga_aggregate_target = 143360 KB
_pga_max_size = 204800 KB
_query_rewrite_maxdisjunct = 257
_smm_auto_min_io_size = 56 KB
_smm_auto_max_io_size = 248 KB
_smm_min_size = 143 KB
_smm_max_size = 28672 KB
_smm_px_max_size = 71680 KB
_cpu_to_io = 0
_optimizer_undo_cost_change = 11.2.0.1
parallel_query_mode = enabled
parallel_dml_mode = disabled
parallel_ddl_mode = enabled
optimizer_mode = all_rows
sqlstat_enabled = false
_optimizer_percent_parallel = 101
_always_anti_join = choose
_always_semi_join = choose
_optimizer_mode_force = true
_partition_view_enabled = true
_always_star_transformation = false
_query_rewrite_or_error = false
_hash_join_enabled = true
cursor_sharing = exact
_b_tree_bitmap_plans = true
star_transformation_enabled = false
_optimizer_cost_model = choose
_new_sort_cost_estimate = true
_complex_view_merging = true
_unnest_subquery = true
_eliminate_common_subexpr = true
_pred_move_around = true
_convert_set_to_join = false
_push_join_predicate = true
_push_join_union_view = true
_fast_full_scan_enabled = true
_optim_enhance_nnull_detection = true
_parallel_broadcast_enabled = true
_px_broadcast_fudge_factor = 100
_ordered_nested_loop = true
_no_or_expansion = false
optimizer_index_cost_adj = 100
optimizer_index_caching = 0
_system_index_caching = 0
_disable_datalayer_sampling = false
query_rewrite_enabled = true
query_rewrite_integrity = enforced
_query_cost_rewrite = true
_query_rewrite_2 = true
_query_rewrite_1 = true
_query_rewrite_expression = true
_query_rewrite_jmigrate = true
_query_rewrite_fpc = true
_query_rewrite_drj = true
_full_pwise_join_enabled = true
_partial_pwise_join_enabled = true
_left_nested_loops_random = true
_improved_row_length_enabled = true

_index_join_enabled = true
_enable_type_dep_selectivity = true
_improved_outerjoin_card = true
_optimizer_adjust_for_nulls = true
_optimizer_degree = 0
_use_column_stats_for_function = true
_subquery_pruning_enabled = true
_subquery_pruning_mv_enabled = false
_or_expand_nvl_predicate = true
_like_with_bind_as_equality = false
_table_scan_cost_plus_one = true
_cost_equality_semi_join = true
_default_non_equality_sel_check = true
_new_initial_join_orders = true
_oneside_colstat_for_equijoins = true
_optim_peek_user_binds = true
_minimal_stats_aggregation = true
_force_temptables_for_gsets = false
workarea_size_policy = auto
_smm_auto_cost_enabled = true
_gs_anti_semi_join_allowed = true
_optim_new_default_join_sel = true
optimizer_dynamic_sampling = 2
_pre_rewrite_push_pred = true
_optimizer_new_join_card_computation = true
_union_rewrite_for_gs = yes_gset_mv
_generalized_pruning_enabled = true
_optim_adjust_for_part_skews = true
_force_datefold_trunc = false
statistics_level = typical
_optimizer_system_stats_usage = true
skip_unusable_indexes = true
_remove_aggr_subquery = true
_optimizer_push_down_distinct = 0
_dml_monitoring_enabled = true
_optimizer_undo_changes = false
_predicate_elimination_enabled = true
_nested_loop_fudge = 100
_project_view_columns = true
_local_communication_costing_enabled = true
_local_communication_ratio = 50
_query_rewrite_vop_cleanup = true
_slave_mapping_enabled = true
_optimizer_cost_based_transformation = linear
_optimizer_mjc_enabled = true
_right_outer_hash_enable = true
_spr_push_pred_refspr = true
_optimizer_cache_stats = false
_optimizer_cbqt_factor = 50
_optimizer_squ_bottomup = true
_fic_area_size = 131072
_optimizer_skip_scan_enabled = true
_optimizer_cost_filter_pred = false
_optimizer_sortmerge_join_enabled = true
_optimizer_join_sel_sanity_check = true
_mmv_query_rewrite_enabled = true
_bt_mmv_query_rewrite_enabled = true
_add_stale_mv_to_dependency_list = true
_distinct_view_unnesting = false
_optimizer_dim_subq_join_sel = true
_optimizer_disable_strans_sanity_checks = 0
_optimizer_compute_index_stats = true
_push_join_union_view2 = true
_optimizer_ignore_hints = false
_optimizer_random_plan = 0
_query_rewrite_setopgrw_enable = true
_optimizer_correct_sq_selectivity = true
_disable_function_based_index = false
_optimizer_join_order_control = 3
_optimizer_cartesian_enabled = true
_optimizer_starplan_enabled = true
_extended_pruning_enabled = true
_optimizer_push_pred_cost_based = true
_optimizer_null_aware_antijoin = true
_optimizer_extend_jppd_view_types = true
_sql_model_unfold_forloops = run_time
_enable_dml_lock_escalation = false
_bloom_filter_enabled = true
_update_bji_ipdml_enabled = 0
_optimizer_extended_cursor_sharing = udo
_dm_max_shared_pool_pct = 1
_optimizer_cost_hjsmj_multimatch = true
_optimizer_transitivity_retain = true

```
_px_pwg_enabled = true
optimizer_secure_view_merging = true
_optimizer_join_elimination_enabled = true
flashback_table_rpi = non_fbt
_optimizer_cbqt_no_size_restriction = true
_optimizer_enhanced_filter_push = true
_optimizer_filter_pred_pullup = true
_rowsrc_trace_level = 0
_simple_view_merging = true
_optimizer_rownum_pred_based_fkr = true
_optimizer_better_inlist_costing = all
_optimizer_self_induced_cache_cost = false
_optimizer_min_cache_blocks = 10
_optimizer_or_expansion = depth
_optimizer_order_by_elimination_enabled = true
_optimizer_outer_to_anti_enabled = true
_selfjoin_mv_duplicates = true
_dimension_skip_null = true
_force_rewrite_enable = false
_optimizer_star_tran_in_with_clause = true
_optimizer_complex_pred_selectivity = true
_optimizer_connect_by_cost_based = true
_gby_hash_aggregation_enabled = true
_globalindex_pnum_filter_enabled = true
_px_minus_intersect = true
_fix_control_key = 0
_force_slave_mapping_intra_part_loads = false
_force_tmp_segment_loads = false
_query_mmvrewrite_maxpreds = 10
_query_mmvrewrite_maxintervals = 5
_query_mmvrewrite_maxinlists = 5
_query_mmvrewrite_maxdmaps = 10
_query_mmvrewrite_maxcmaps = 20
_query_mmvrewrite_maxregperm = 512
_query_mmvrewrite_maxmergedcmaps = 50
_query_mmvrewrite_maxqryinlistvals = 500
_disable_parallel_conventional_load = false
_trace_virtual_columns = false
_replace_virtual_columns = true
_virtual_column_overload_allowed = true
_kdt_buffering = true
_first_k_rows_dynamic_proration = true
_optimizer_sortmerge_join_inequality = true
_optimizer_aw_stats_enabled = true
_bloom_pruning_enabled = true
result_cache_mode = MANUAL
_px_ual_serial_input = true
_optimizer_skip_scan_guess = false
_enable_row_shipping = true
_row_shipping_threshold = 80
_row_shipping_explain = false
transaction_isolation_level = read_committed
_optimizer_distinct_elimination = true
_optimizer_multi_level_push_pred = true
_optimizer_group_by_placement = true
_optimizer_rownum_bind_default = 10
_enable_query_rewrite_on_remote_objs = true
_optimizer_extended_cursor_sharing_rel = simple
_optimizer_adaptive_cursor_sharing = true
_direct_path_insert_features = 0
_optimizer_improve_selectivity = true
optimizer_use_pending_statistics = false
_optimizer_enable_density_improvements = true
_optimizer_aw_join_push_enabled = true
_optimizer_connect_by_combine_sw = true
_enable_pmo_ctas = 0
_optimizer_native_full_outer_join = force
_bloom_predicate_enabled = true
_optimizer_enable_extended_stats = true
_is_lock_table_for_ddl_wait_lock = 0
_pivot_implementation_method = choose
optimizer_capture_sql_plan_baselines = false
optimizer_use_sql_plan_baselines = true
_optimizer_star_trans_min_cost = 0
_optimizer_star_trans_min_ratio = 0
_with_subquery = OPTIMIZER
_optimizer_fkr_index_cost_bias = 10
_optimizer_use_subheap = true
parallel_degree_policy = manual
parallel_degree = 0
parallel_min_time_threshold = 10
_parallel_time_unit = 10
_optimizer_or_expansion_subheap = true
```

```
_optimizer_free_transformation_heap = true
_optimizer_reuse_cost_annotations = true
_result_cache_auto_size_threshold = 100
_result_cache_auto_time_threshold = 1000
_optimizer_nested_rollup_for_gset = 100
_nlj_batching_enabled = 1
parallel_query_default_dop = 0
is_recur_flags = 0
optimizer_use_invisible_indexes = false
flashback_data_archive_internal_cursor = 0
_optimizer_extended_stats_usage_control = 224
_parallel_syspls_obey_force = true
cell_offload_processing = true
_rdbms_internal_fplib_enabled = false
db_file_multiblock_read_count = 46
_bloom_folding_enabled = true
_mv_generalized_oj_refresh_opt = true
cell_offload_compaction = ADAPTIVE
parallel_degree_limit = 65535
parallel_force_local = false
parallel_max_degree = 4
total_cpu_count = 2
cell_offload_plan_display = AUTO
_optimizer_coalesce_subqueries = true
_optimizer_fast_pred_transitivity = true
_optimizer_fast_access_pred_analysis = true
_optimizer_unnest_disjunctive_subq = true
_optimizer_unnest_corr_set_subq = true
_optimizer_distinct_agg_transform = true
_aggregation_optimization_settings = 0
_optimizer_connect_by_elim_dups = true
_optimizer_eliminate_filtering_join = true
_connect_by_use_union_all = true
dst_upgrade_insert_conv = true
advanced_queuing_internal_cursor = 0
_optimizer_unnest_all_subqueries = true
_bloom_predicate_pushdown_to_storage = true
_bloom_vector_elements = 0
_bloom_pushing_max = 524288
parallel_autodop = 0
parallel_ddldml = 0
_parallel_cluster_cache_policy = adaptive
_parallel_scalability = 50
iot_internal_cursor = 0
_optimizer_instance_count = 0
_optimizer_connect_by_cb_whr_only = false
_suppress_scn_chk_for_cqn = nosuppress_1466
_optimizer_join_factorization = true
_optimizer_use_cbqt_star_transformation = true
_optimizer_table_expansion = true
_and_pruning_enabled = true
_deferred_constant_folding_mode = DEFAULT
_optimizer_distinct_placement = true
partition_pruning_internal_cursor = 0
parallel_hinted = none
_sql_compatibility = 0
_optimizer_use_feedback = true
_optimizer_try_st_before_jppd = true
```

Bug Fix Control Environment

```
fix 3834770 = 1
fix 3746511 = enabled
fix 4519016 = enabled
fix 3118776 = enabled
fix 4488689 = enabled
fix 2194204 = disabled
fix 2660592 = enabled
fix 2320291 = enabled
fix 2324795 = enabled
fix 4308414 = enabled
fix 3499674 = disabled
fix 4569940 = enabled
fix 4631959 = enabled
fix 4519340 = enabled
fix 4550003 = enabled
fix 1403283 = enabled
fix 4554846 = enabled
fix 4602374 = enabled
fix 4584065 = enabled
fix 4545833 = enabled
fix 4611850 = enabled
fix 4663698 = enabled
fix 4663804 = enabled
fix 4666174 = enabled
```

fix 4567767 = enabled
fix 4556762 = 15
fix 4728348 = enabled
fix 4708389 = enabled
fix 4175830 = enabled
fix 4752814 = enabled
fix 4583239 = enabled
fix 4386734 = enabled
fix 4887636 = enabled
fix 4483240 = enabled
fix 4872602 = disabled
fix 4711525 = enabled
fix 4545802 = enabled
fix 4605810 = enabled
fix 4704779 = enabled
fix 4900129 = enabled
fix 4924149 = enabled
fix 4663702 = enabled
fix 4878299 = enabled
fix 4658342 = enabled
fix 4881533 = enabled
fix 4676955 = enabled
fix 4273361 = enabled
fix 4967068 = enabled
fix 4969880 = disabled
fix 5005866 = enabled
fix 5015557 = enabled
fix 4705343 = enabled
fix 4904838 = enabled
fix 4716096 = enabled
fix 4483286 = disabled
fix 4722900 = enabled
fix 4615392 = enabled
fix 5096560 = enabled
fix 5029464 = enabled
fix 4134994 = enabled
fix 4904890 = enabled
fix 5104624 = enabled
fix 5014836 = enabled
fix 4768040 = enabled
fix 4600710 = enabled
fix 5129233 = enabled
fix 4595987 = enabled
fix 4908162 = enabled
fix 5139520 = enabled
fix 5084239 = enabled
fix 5143477 = disabled
fix 2663857 = enabled
fix 4717546 = enabled
fix 5240264 = disabled
fix 5099909 = enabled
fix 5240607 = enabled
fix 5195882 = enabled
fix 5220356 = enabled
fix 5263572 = enabled
fix 5385629 = enabled
fix 5302124 = enabled
fix 5391942 = enabled
fix 5384335 = enabled
fix 5482831 = enabled
fix 4158812 = enabled
fix 5387148 = enabled
fix 5383891 = enabled
fix 5466973 = enabled
fix 5396162 = enabled
fix 5394888 = enabled
fix 5395291 = enabled
fix 5236908 = enabled
fix 5509293 = enabled
fix 5449488 = enabled
fix 5567933 = enabled
fix 5570494 = enabled
fix 5288623 = enabled
fix 5505995 = enabled
fix 5505157 = enabled
fix 5112460 = enabled
fix 5554865 = enabled
fix 5112260 = enabled
fix 5112352 = enabled
fix 5547058 = enabled
fix 5618040 = enabled
fix 5585313 = enabled
fix 5547895 = enabled

fix 5634346 = enabled
fix 5620485 = enabled
fix 5483301 = enabled
fix 5657044 = enabled
fix 5694984 = enabled
fix 5868490 = enabled
fix 5650477 = enabled
fix 5611962 = enabled
fix 4279274 = enabled
fix 5741121 = enabled
fix 5714944 = enabled
fix 5391505 = enabled
fix 5762598 = enabled
fix 5578791 = enabled
fix 5259048 = enabled
fix 5882954 = enabled
fix 2492766 = enabled
fix 5707608 = enabled
fix 5891471 = enabled
fix 5884780 = enabled
fix 5680702 = enabled
fix 5371452 = enabled
fix 5838613 = enabled
fix 5949981 = enabled
fix 5624216 = enabled
fix 5741044 = enabled
fix 5976822 = enabled
fix 6006457 = enabled
fix 5872956 = enabled
fix 5923644 = enabled
fix 5943234 = enabled
fix 5844495 = enabled
fix 4168080 = enabled
fix 6020579 = enabled
fix 5842686 = disabled
fix 5996801 = enabled
fix 5593639 = enabled
fix 6133948 = enabled
fix 3151991 = enabled
fix 6146906 = enabled
fix 6239909 = enabled
fix 6267621 = enabled
fix 5909305 = enabled
fix 6279918 = enabled
fix 6141818 = enabled
fix 6151963 = enabled
fix 6251917 = enabled
fix 6282093 = enabled
fix 6119510 = enabled
fix 6119382 = enabled
fix 3801750 = enabled
fix 5705630 = disabled
fix 5944076 = enabled
fix 5406763 = enabled
fix 6070954 = enabled
fix 6282944 = enabled
fix 6138746 = enabled
fix 6082745 = enabled
fix 3426050 = enabled
fix 599680 = enabled
fix 6062266 = enabled
fix 6087237 = enabled
fix 6122894 = enabled
fix 6377505 = enabled
fix 5893768 = enabled
fix 6163564 = enabled
fix 6073325 = enabled
fix 6188881 = enabled
fix 6007259 = enabled
fix 6239971 = enabled
fix 5284200 = disabled
fix 6042205 = enabled
fix 6051211 = enabled
fix 6434668 = enabled
fix 6438752 = enabled
fix 5936366 = enabled
fix 6439032 = enabled
fix 6438892 = enabled
fix 6006300 = enabled
fix 5947231 = enabled
fix 5416118 = 1
fix 6365442 = 1
fix 6239039 = enabled

fix 6502845 = enabled
fix 6913094 = enabled
fix 6029469 = enabled
fix 5919513 = enabled
fix 6057611 = enabled
fix 6469667 = enabled
fix 6608941 = disabled
fix 6368066 = enabled
fix 6329318 = enabled
fix 6656356 = enabled
fix 4507997 = enabled
fix 6671155 = enabled
fix 6694548 = enabled
fix 6688200 = enabled
fix 6612471 = enabled
fix 6708183 = disabled
fix 6326934 = enabled
fix 6520717 = disabled
fix 6714199 = enabled
fix 6681545 = enabled
fix 6748058 = enabled
fix 6167716 = enabled
fix 6674254 = enabled
fix 6468287 = enabled
fix 6503543 = enabled
fix 6808773 = disabled
fix 6766962 = enabled
fix 6120483 = enabled
fix 6670551 = enabled
fix 6771838 = enabled
fix 6626018 = disabled
fix 6530596 = enabled
fix 6778642 = enabled
fix 6699059 = enabled
fix 6376551 = enabled
fix 6429113 = enabled
fix 6782437 = enabled
fix 6776808 = enabled
fix 6765823 = enabled
fix 6768660 = enabled
fix 6782665 = enabled
fix 6610822 = enabled
fix 6514189 = enabled
fix 6818410 = enabled
fix 6827696 = enabled
fix 6773613 = enabled
fix 5902962 = enabled
fix 6956212 = enabled
fix 3056297 = enabled
fix 6440977 = disabled
fix 6972291 = disabled
fix 6904146 = enabled
fix 6221403 = enabled
fix 5475051 = enabled
fix 6845871 = enabled
fix 5468809 = enabled
fix 6917633 = enabled
fix 4444536 = disabled
fix 6955210 = enabled
fix 6994194 = enabled
fix 6399597 = disabled
fix 6951776 = enabled
fix 5648287 = 3
fix 6987082 = disabled
fix 7132036 = enabled
fix 6980350 = enabled
fix 5199213 = enabled
fix 7138405 = enabled
fix 7148689 = enabled
fix 6820988 = enabled
fix 7032684 = enabled
fix 6617866 = enabled
fix 7155968 = enabled
fix 7127980 = enabled
fix 6982954 = enabled
fix 7241819 = enabled
fix 6897034 = enabled
fix 7236148 = enabled
fix 7298570 = enabled
fix 7249095 = enabled
fix 7314499 = enabled
fix 7324224 = enabled
fix 7289023 = enabled

fix 7237571 = enabled
fix 7116357 = enabled
fix 7345484 = enabled
fix 7375179 = enabled
fix 6430500 = disabled
fix 5897486 = enabled
fix 6774209 = enabled
fix 7306637 = enabled
fix 6451322 = enabled
fix 7208131 = enabled
fix 7388652 = enabled
fix 7127530 = enabled
fix 6751206 = enabled
fix 6669103 = enabled
fix 7430474 = enabled
fix 6990305 = enabled
fix 7043307 = enabled
fix 6921505 = enabled
fix 7388457 = enabled
fix 3120429 = enabled
fix 7452823 = disabled
fix 6838105 = enabled
fix 6769711 = enabled
fix 7170213 = enabled
fix 6528872 = enabled
fix 7295298 = enabled
fix 5922070 = enabled
fix 7259468 = enabled
fix 6418552 = enabled
fix 4619997 = enabled
fix 7524366 = enabled
fix 6942476 = enabled
fix 6418771 = enabled
fix 7375077 = enabled
fix 5400639 = enabled
fix 4570921 = enabled
fix 7426911 = enabled
fix 5099019 = disabled
fix 7528216 = enabled
fix 7521266 = enabled
fix 7385140 = enabled
fix 7576516 = enabled
fix 7573526 = enabled
fix 7576476 = enabled
fix 7165898 = enabled
fix 7263214 = enabled
fix 3320140 = enabled
fix 7555510 = enabled
fix 7613118 = enabled
fix 7597059 = enabled
fix 7558911 = enabled
fix 5520732 = enabled
fix 7679490 = disabled
fix 7449971 = enabled
fix 3628118 = enabled
fix 4370840 = enabled
fix 7281191 = enabled
fix 7519687 = enabled
fix 5029592 = 3
fix 6012093 = 1
fix 6053861 = disabled
fix 6941515 = disabled
fix 7696414 = enabled
fix 7272039 = enabled
fix 7834811 = enabled
fix 7640597 = enabled
fix 7341616 = enabled
fix 7168184 = enabled
fix 399198 = enabled
fix 7831070 = enabled
fix 7676897 = disabled
fix 7414637 = enabled
fix 7585456 = enabled
fix 8202421 = enabled
fix 7658097 = disabled
fix 8251486 = enabled
fix 7132684 = enabled
fix 7512227 = enabled
fix 6972987 = enabled
fix 7199035 = enabled
fix 8243446 = enabled
fix 7650462 = enabled
fix 6720701 = enabled

fix 7592673 = enabled
fix 7718694 = enabled
fix 7534027 = enabled
fix 7708267 = enabled
fix 5716785 = enabled
fix 7356191 = enabled
fix 7679161 = enabled
fix 7597159 = enabled
fix 7499258 = enabled
fix 8328363 = enabled
fix 7452863 = enabled
fix 8284930 = enabled
fix 7298626 = enabled
fix 7657126 = enabled
fix 8371884 = enabled
fix 8318020 = enabled
fix 8255423 = enabled
fix 7135745 = enabled
fix 8356253 = enabled
fix 7534257 = enabled
fix 8323407 = enabled
fix 7539815 = enabled
fix 8289316 = enabled
fix 8447850 = enabled
fix 7675944 = enabled
fix 8355120 = enabled
fix 7176746 = enabled
fix 8442891 = enabled
fix 8373261 = enabled
fix 7679164 = enabled
fix 7670533 = enabled
fix 8408665 = enabled
fix 8491399 = enabled
fix 8348392 = enabled
fix 8348585 = enabled
fix 8508056 = enabled
fix 8335178 = enabled
fix 8515269 = enabled
fix 8247017 = enabled
fix 7325597 = enabled
fix 8531490 = enabled
fix 6163600 = enabled
fix 8589278 = disabled
fix 8557992 = enabled
fix 7556098 = enabled
fix 8580883 = enabled
fix 5892599 = disabled
fix 8609714 = enabled
fix 8514561 = enabled
fix 8619631 = disabled

Query Block Registry:

SEL\$1 0x273ed6d4 (PARSER) [FINAL]

:

call(in-use=8936, alloc=32736), compile(in-use=86084, alloc=187352), execution(in-use=204960, alloc=208652)

End of Optimizer State Dump

Dumping Hints

=====

===== END SQL Statement Dump =====