



How to configure Oracle NLS for case insensitive searches

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Content

This document describes how to configure Oracle NLS to support case insensitive searches.

Oracle databases are by default configured as case sensitive. Version 10gR2 added a new feature to its [NLS](#) (National Language Support) that allows to do case-insensitive sorts and comparisons altering the session settings.

This can be done by changing the value of two NLS parameters, NLS_SORT and NLS_COMP.

The [NLS_SORT](#) parameter governs the collation sequence for ordering and the various comparison operators, including '=' and 'LIKE'.

You can specify a binary, case-insensitive, sort by altering the session, for instance:

```
alter session set nls_sort=BINARY_CI;
```

This will mean that every query performed in that session will perform case-insensitive searches.

Further information about linguistic sorting and string searching can be found [here](#). For instance, you can specify a different language, or you can use BINARY_AI to configure an accent-insensitive search.

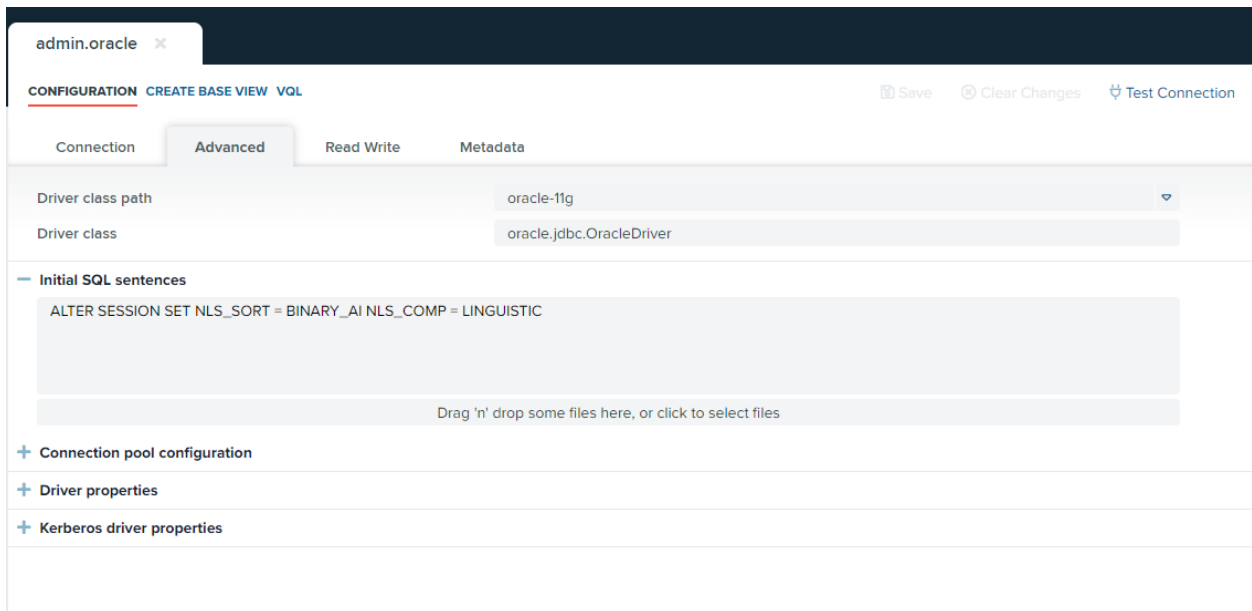
The [NLS_COMP](#) parameter decides the exact operators and query clauses that are going to follow the NLS_SORT parameter.

The default value of NLS_COMP is BINARY, this means that queries are not going to follow the NLS_SORT configuration. In order for Oracle to pay attention to the value of NLS_SORT, we must change the value of NLS_COMP to LINGUISTIC:

```
alter session set nls_comp=LINGUISTIC;
```

Denodo 8.0

Since these parameters can be modified at session level we can configure this for any Oracle JDBC data source in Virtual DataPort. You can do this by providing the ALTER SESSION statement in the initial SQL sentences option under the data source configuration:



admin.oracle x

CONFIGURATION CREATE BASE VIEW VQL Save Clear Changes Test Connection

Connection Advanced Read Write Metadata

Driver class path oracle-11g

Driver class oracle.jdbc.OracleDriver

Initial SQL sentences

```
ALTER SESSION SET NLS_SORT = BINARY_AI NLS_COMP = LINGUISTIC
```

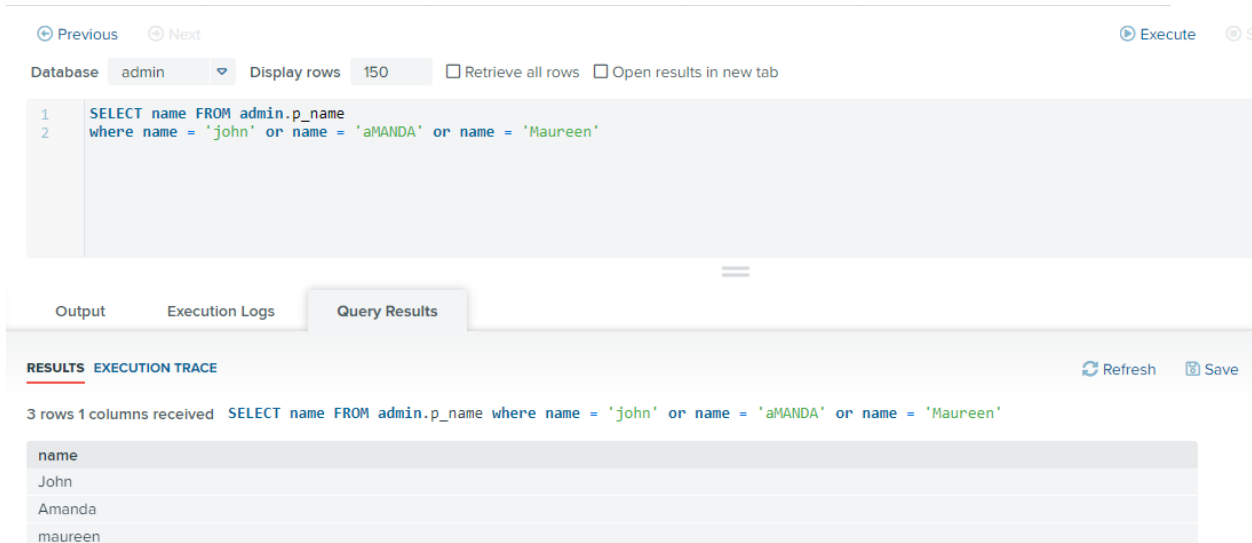
Drag 'n' drop some files here, or click to select files

+ Connection pool configuration

+ Driver properties

+ Kerberos driver properties

After that, once you run any query or view from that data source, the comparison will be based on the new configured NLS_SORT and NLS_COMP.



Previous Next Execute 5

Database admin Display rows 150 Retrieve all rows Open results in new tab

```
1 SELECT name FROM admin.p_name
2 where name = 'john' or name = 'aMANDA' or name = 'Maureen'
```

Output Execution Logs Query Results

RESULTS EXECUTION TRACE Refresh Save

3 rows 1 columns received SELECT name FROM admin.p_name where name = 'john' or name = 'aMANDA' or name = 'Maureen'

| name |
|---------|
| John |
| Amanda |
| maureen |

All three names were found, even that we specified incorrect cases for all three comparisons.

Denodo 7.0 and previous

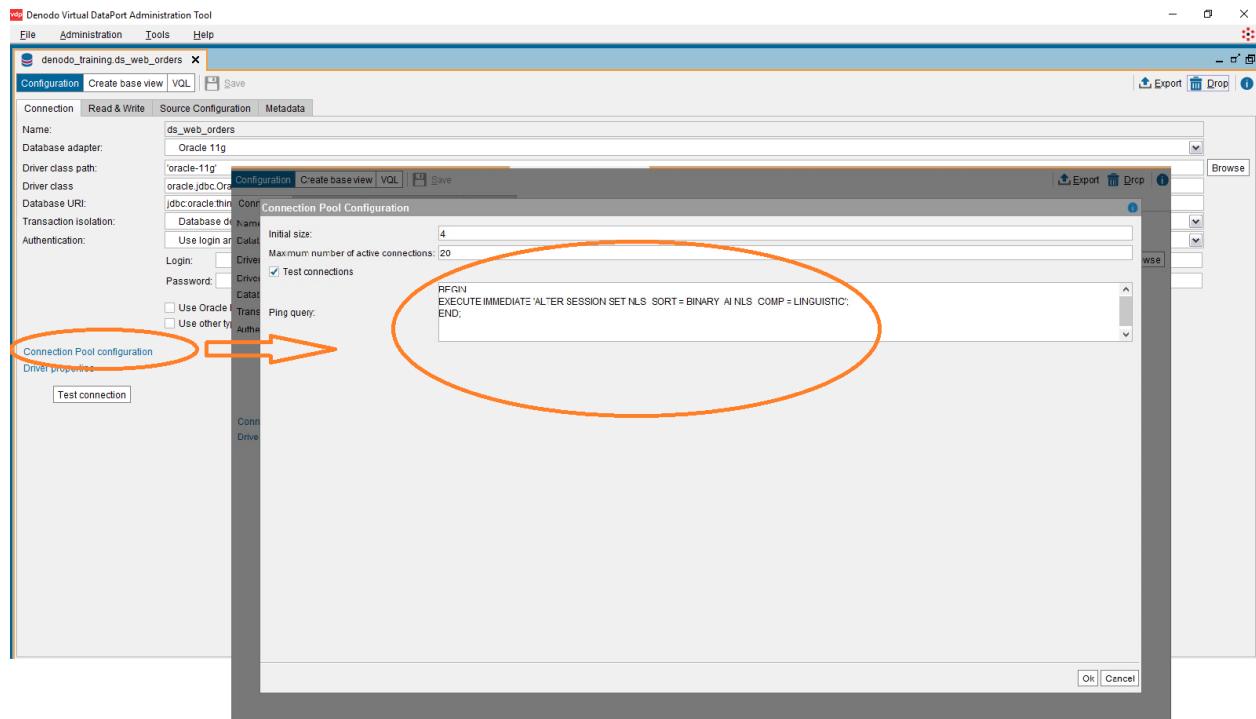
For previous versions of the Denodo Platform, you would need to do this in the Ping query of the data source configuration.

The Ping query is used to test the connections obtained from the pool before executing a query. So, as this Ping query is always executed before executing the actual query, the session can be configured to allow case-insensitive searches in advance to the query that is being issued.

As an example the following Ping query can be used:

```
BEGIN
EXECUTE IMMEDIATE 'ALTER SESSION SET NLS_SORT = BINARY_AI NLS_COMP = LINGUISTIC';
END;
```

as shown in the next figure:



Note that the 'Test connections' checkbox needs to be checked so the Ping query is always executed. This configuration can be also applied when configuring an Oracle database as the cache.

As an additional recommendation on the use of ping queries. Take into account that this query is going to be executed every time the VDP server checks if a connection from the pool is valid, so it is very important to use a query consuming few resources in the database.

References

[Linguistic Sorting and String Searching](#)