
Title

P08. Explicitly convert a data type to another data type.

Description

You want to convert a data type to another data type explicitly.

Typical tasks and related single-row functions: - Convert a date literal string to date. - Use `to_date()` with a date-time format model. - Convert a date to a formatted date literal string. - Use `to_char()` with a date-time format model. - Convert a formatted number literal string to a number. - Use `to_number()` with a number format model. - Convert a number to a formatted number literal string. - Use `to_char()` with a number format model.

Oracle Format Models: - Date-Time Format Models, 19c - Number Format Models, 19c

Example

Convert a date literal string to a date

Convert the date literal string 'January 1, 2010' to a date using the current session's `NLS_DATE_LANGUAGE` setting.

```
select to_date('January 1, 2010', 'Month DD, YYYY') from dual;
```

where - Month is the full name of the month. - DD is the day of the month. - YYYY is the century and year.

To find the current `NLS_DATE_LANGUAGE` setting, use the following SQL statement:

```
select * from nls_session_parameters where parameter = 'NLS_DATE_LANGUAGE';
```

Convert the Chinese date literal string '1 月 1, 2010' to a date by specifying the `NLS_DATE_LANGUAGE` explicitly.

```
select to_date('1 月 1, 2010', 'Month DD, YYYY',  
  ↳ q'[NLS_DATE_LANGUAGE='TRADITIONAL CHINESE']') from dual;
```

Convert a date to a formatted date literal string

Output the date literal string with the format 'Jan 1st, 2010':

```
select to_char(sysdate, 'Mon DDth, YYYY') from dual;
```

where: - Mon is the abbreviated name of the month. - DD is the day of the month. - th is the ordinal suffix. - YYYY is the century and year.

Convert a formatted number literal string to a number

Convert the number literal 'NT\$1,000.00' to number with the explicit NLS_CURRENCY setting:

```
select to_number('NT$1,000.00', 'L999G999D00', 'NLS_CURRENCY=NT$') from  
  ↪ dual;
```

where: - L is the local currency symbol. - G is the group separator. - D is the decimal character.

Format a number to a formatted number literal

Print 1000 as \$1000.00 using the current session's NLS_CURRENCY setting:

```
select to_char(1000, 'L999G999D00', 'NLS_CURRENCY=$') from dual;
```