

**PL/SQL**

## PL/SQL static code analysis











# Unique rules to find Bugs, Vulnerabilities, Security Hotspots, and Code Smells in your PL/SQL code

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**"TO\_DATE" and "TO\_TIMESTAMP" should be used with a datetime format model**

## Analyze your code

Code Smell Major ?

The TO\_DATE and TO\_TIMESTAMP functions are converting char of CHAR, VARCHAR2, NCHAR, or NVARCHAR2 datatype to respectively a value of DATE or TIMESTAMP datatype.

Without providing the format of the input char, `TO_DATE` will consider the provided char is compliant with the default date format. Relying on a default configuration is a source of error because it creates a dependency between the code and the configuration of the ORACLE server where this code is deployed.

According to the Oracle's documentation "the default date format is determined implicitly by the NLS\_TERRITORY initialization parameter or can be set explicitly by the NLS\_DATE\_FORMAT parameter.". It means the behaviour of the `TO_DATE` function will certainly not be the expected one if the configuration of the ORACLE server is changing.

## Noncompliant Code Example

```
SELECT TO_DATE( 'January 15, 2018, 11:00 A.M.')
FROM DUAL;
```

## Compliant Solution

```
SELECT TO_DATE( 'January 15, 2018, 11:00 A.M.', 'Month dd, YYYY, HH:MI A.M.')
FROM DUAL;
```

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