Platform Configurations

General Database Setup

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- **Background on database configuration**

Before we start, a little background on the database configuration for a website.

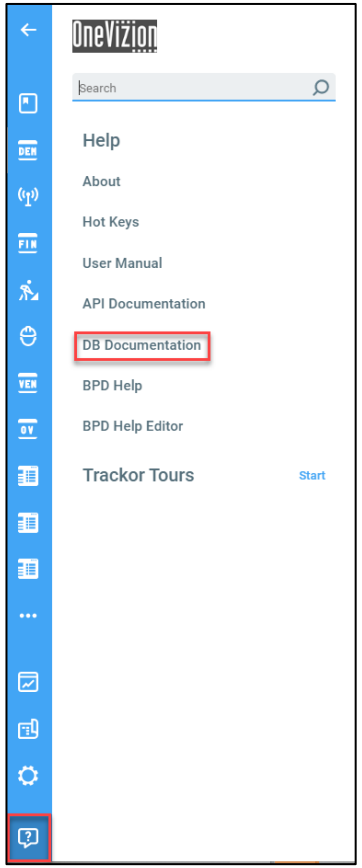
There are four Oracle users configured per website:

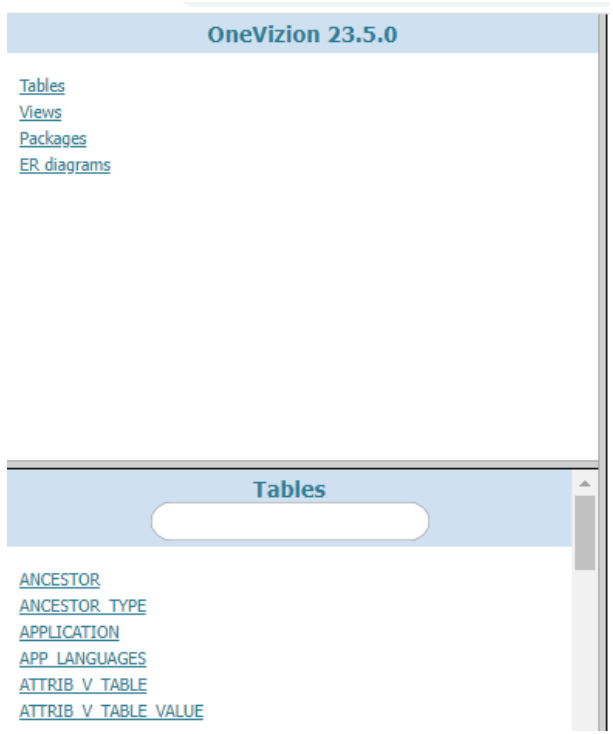
1. OWNER – Contains all of the objects required for the website to function.
2. WEB – Connected to by the website. Has privileges on certain objects from the OWNER but not everything.
3. RPT – Used for running reports and exports. Has further restricted privileges on specific objects from OWNER, most of them in a “read-only” fashion.
4. PKG – Used by the “Admin PL/SQL Blocks” and “Admin DB Packages” pages, usually for creating packages to use in Rules, Reports, etc. Similar privileges to WEB user.

General Database Setup

- **Use the DB Docs pages for details**

You can find entity-relationship diagrams and information on tables and views on the DB Docs page.





General Website Setup

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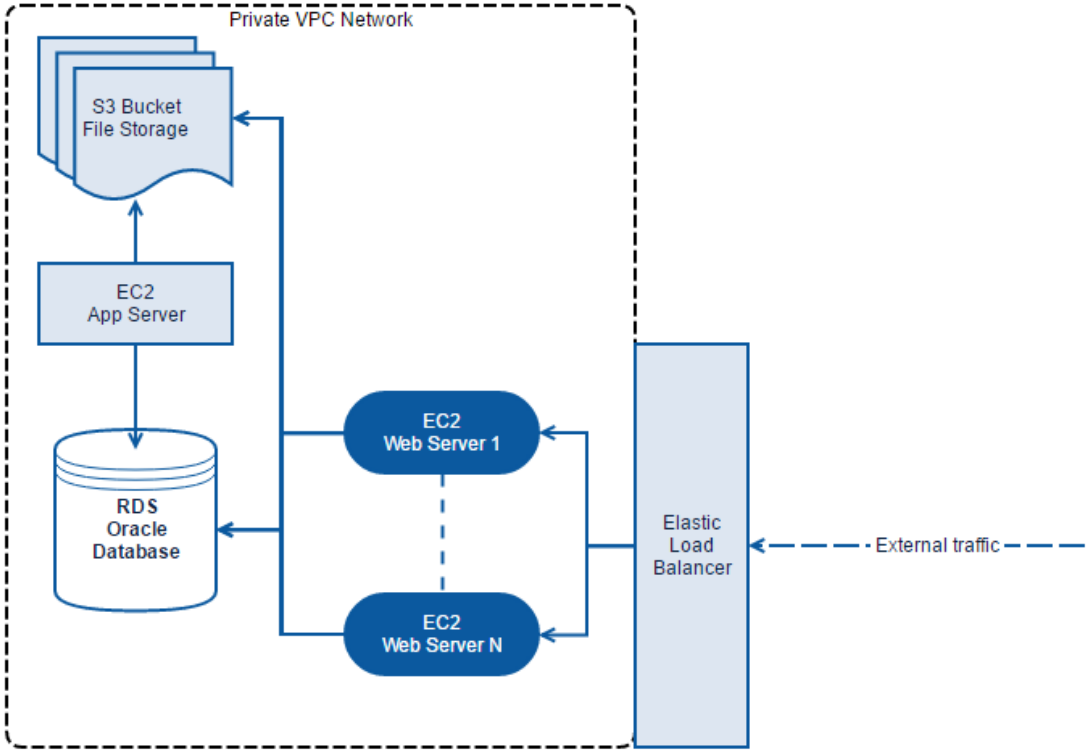
- **General website setup**

Websites typically consist of:

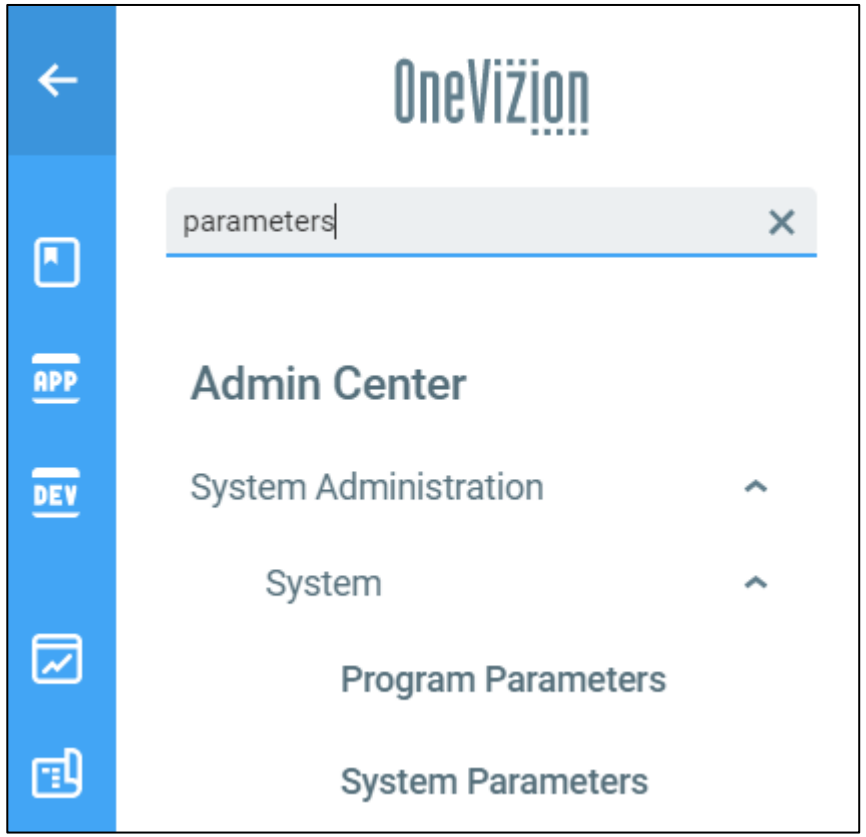
1. Database
2. One or more web servers running tomcat
3. One or more servers for running reports
4. Long-term file storage in AWS



Platform Configurations

- **What configurations are available?**

Several options are available for customizing a website, including system and program-specific parameters.
System Parameters apply to the entire website.
Program Parameters apply to a particular program.



Platform Configurations

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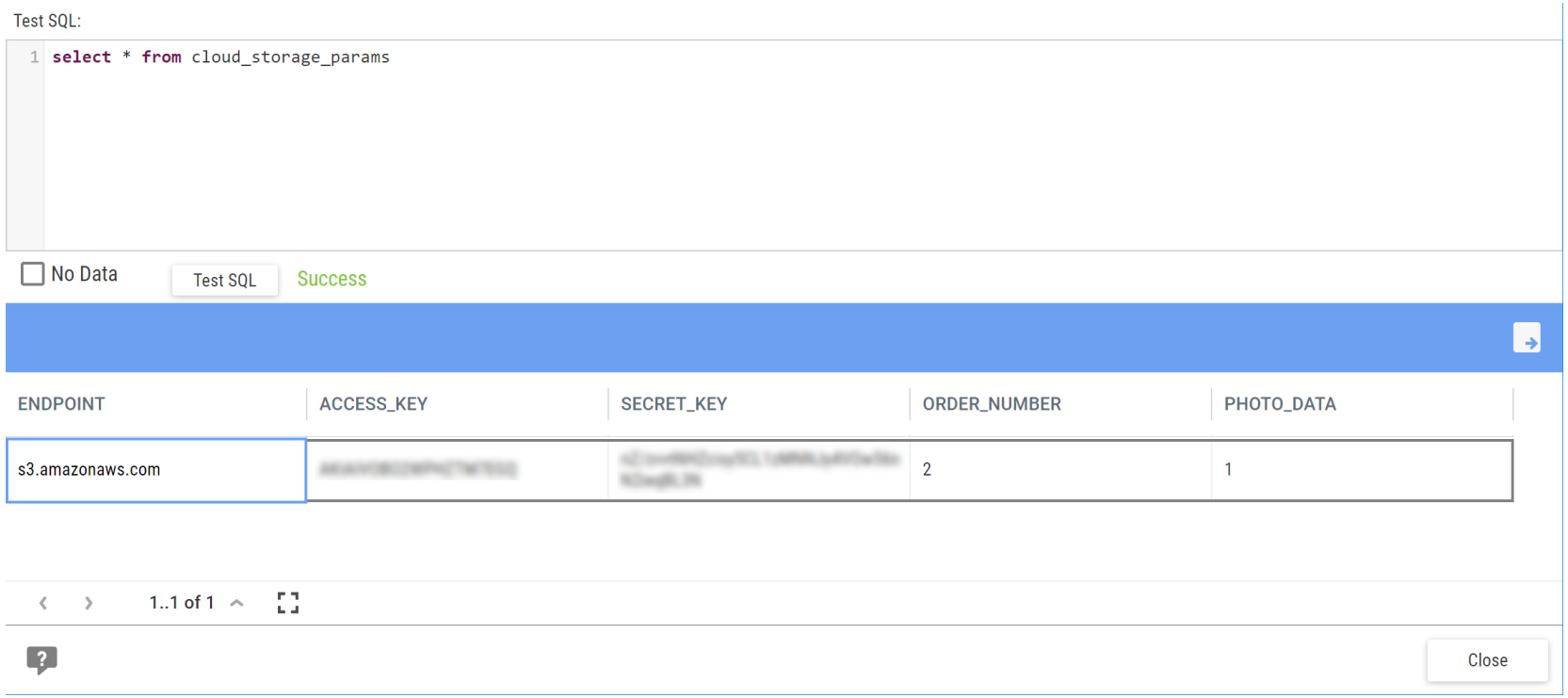
- **Cloud Storage Parameters**

Some configurations are only available by directly updating tables and not through the UI.

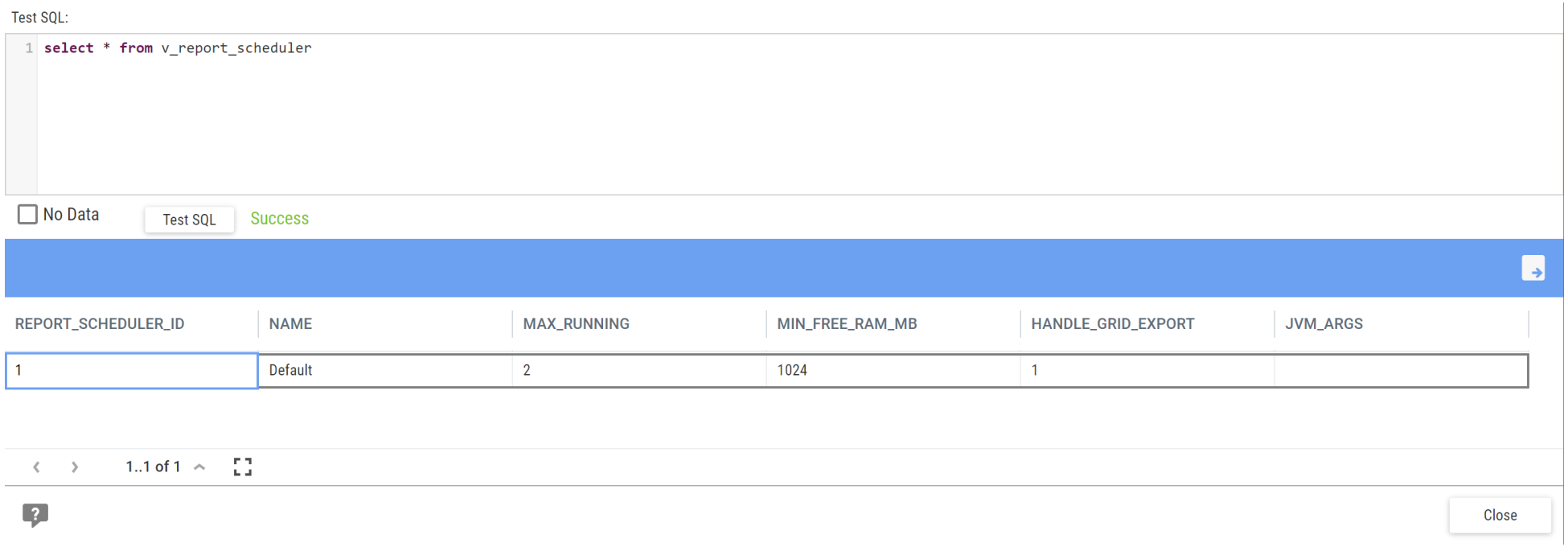
CLOUD_STORAGE_PARAMS – Specify the keys to connect to the S3 Bucket for file storage.



Platform Configurations

- **V Report Scheduler**

V_REPORT_SCHEDULER – Definitions of report schedulers that are available.



Platform Upgrades

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- **How is the platform upgraded?**

When a new version of the OneVizion platform is available, upgrades are available as:

1. New versions of the web application
2. New versions of the services scheduler and report/export executables
3. Upgrade scripts to be executed on the database

Development sprints are two weeks, which will usually produce a new version.

Extended Support Releases (ESRs) are available every eight sprints. All bugs which are fixed during the sprints between ESRs are ported back to the ESR.

Platform Upgrades

- **What to consider pre/post version upgrade**

While we try to be very careful about updates (and provide notification as far ahead as possible) that could impact existing functionality, performing some testing on lower environments before major upgrades is always suggested.

Before deploying a new version of the OneVizion platform, consider the following:

1. Keep a list of functional packages. Even better if they are all listed in the same Component Package.
2. Review critical functionality of each functional package in a testing environment after a major upgrade.
3. Invite business “power users” to drive around the test environment as well.

Platform Upgrades

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- **CheckSQL Tool**

To assist in checking for invalid configurations, we have developed a tool called “CheckSQL”. This is freely available on GitHub here: https://github.com/IKAMTeam/checksql

This tool (a Java executable) allows an administrator with database access to check for syntax errors in:

1. CONFIG_FIELD
2. GRID_PAGE_FIELD
3. IMP_DATA_MAP
4. IMP_DATA_TYPE
5. IMP_DATA_TYPE_PARAM
6. IMP_ENTITY
7. IMP_ENTITY_REQ_FIELD
8. IMP_SPEC
9. NOTIF
10. REPORT_LOOKUP
11. REPORT_SQL
12. RULE
13. RULE_CLASS_PARAM
14. RULE_CLASS_PARAM_VALUE
15. RULE_TYPE
16. TM_SETUP
17. WF_STEP
18. WF_TEMPLATE_STEP

Project Deployment Tools

- **What is available?**

When developing new/updated components in one environment, eventually you will want to migrate these to another environment.

Several tools are available for moving components to other environments:

1. Manual
2. Component Packages
3. Component Export/Import
4. Custom scripts

Portable Code

- **What are the best practices?**

One key to make component migration easier is to write portable code when possible.

Some best practices to consider:

1. Avoid referring to specific, sequence-generated IDs as these are not guaranteed to be the same in separate environments.
2. For PL/SQL blocks, consider selecting specific IDs into variables.
3. For SQL blocks, consider a with clause for IDs.

Always comment code so that each section is easy to follow.

Object Reference (ID) Package

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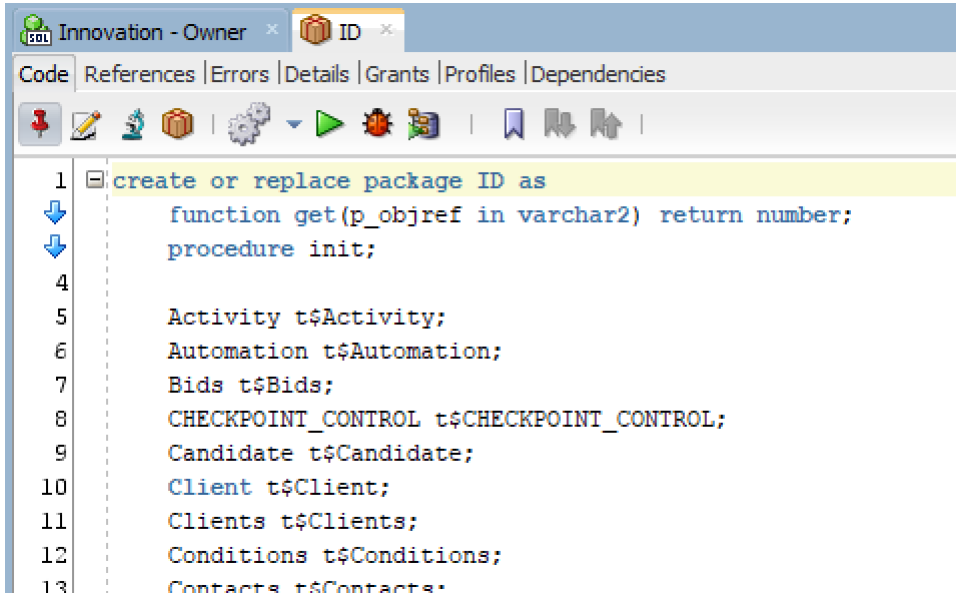
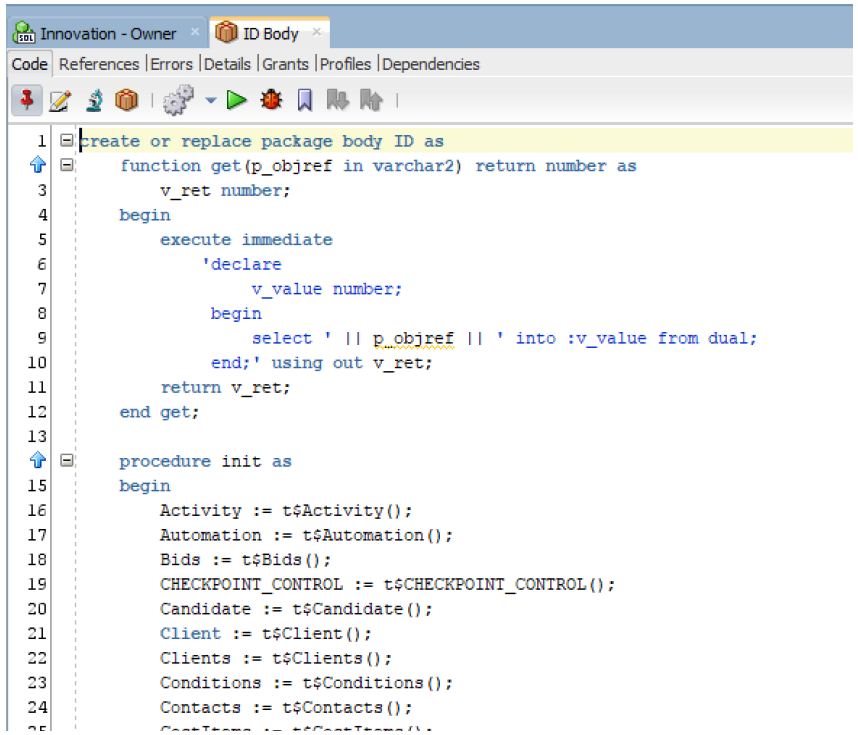
- **What is it?**

The ID package is an Oracle package that is built to allow you to get system-generated IDs for key objects like Trackor Types and Configured Fields using the admin-defined text.





Object Reference (ID) Package

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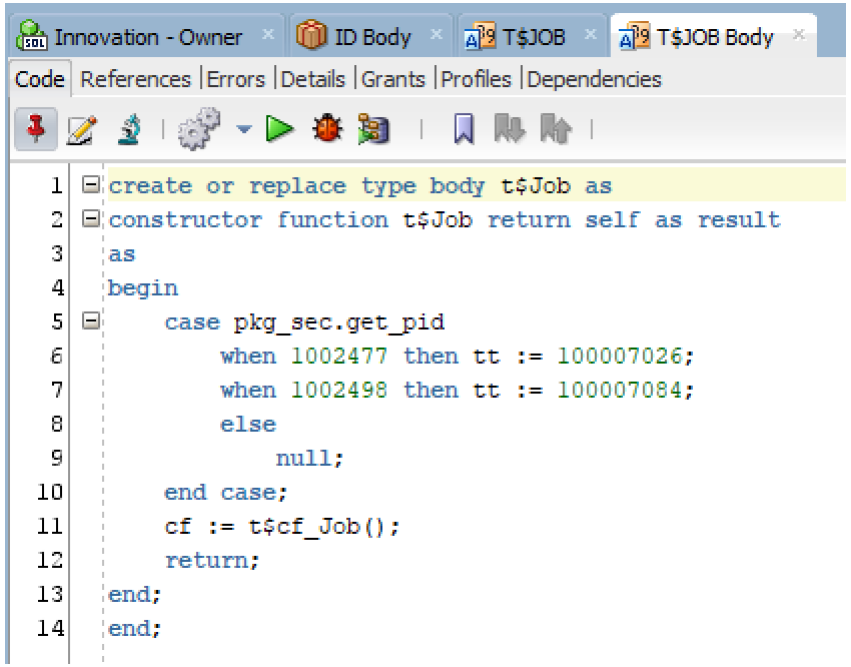
- **How can we use it?**

This is very easy to use!

In PL/SQL (Rules, Imports, etc):

For the configured_field_id:
id.<trackor_type>.cf.<config_field_name>
id.job.cf.j_phase

For the xitor_type_id:
id.<trackor_type>.tt
id.job.tt



Object Reference (ID) Package

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- **How can we use it?**

In SQL (Reports, etc.), the package has a function “GET” with a single parameter for the object reference itself.

```
select id.get(p_objref=>'id.job.tt'/*varchar2*/) ttid from dual;
```

This is fully compatible with multiple programs as well!

Object Reference (ID) Package

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- **Side notes**

Due to how the package is built, certain actions will cause existing states of this package to be discarded.
Adding new Trackor Types will cause this but adding new Configured Fields will not.
Due to this, rebuilds of the package are not automatic at this time.

There is currently a maximum of 1000 attributes (Configured Fields) per object type (Trackor Type).

We are actively improving this functionality to address these limitations but even as it is, it is a very useful tool to help develop portable code.

OneVizion Documentation

For more information regarding these topics, visit wiki.onevizion.com

Thank You