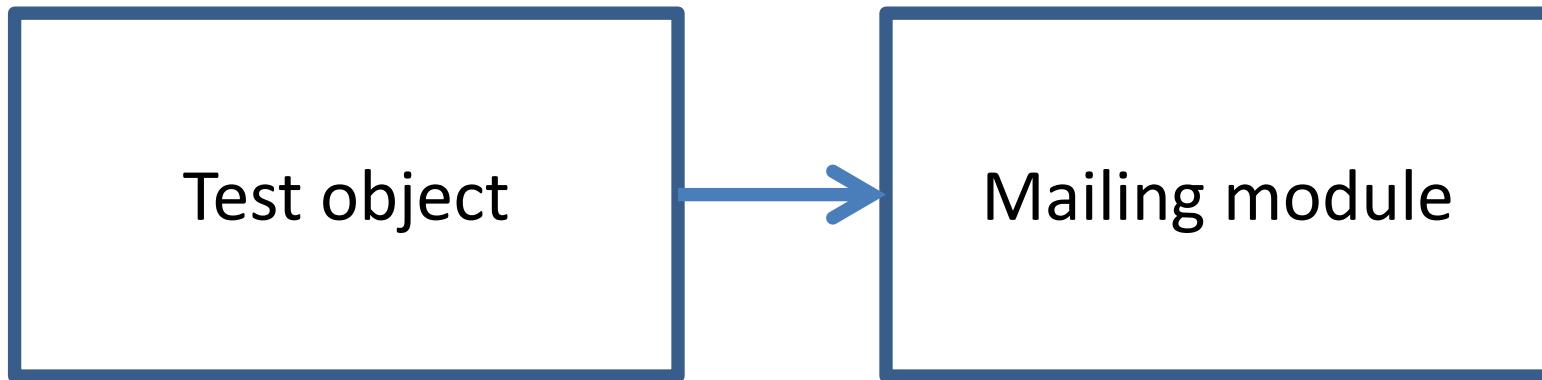


Mocking in Oracle PL/SQL

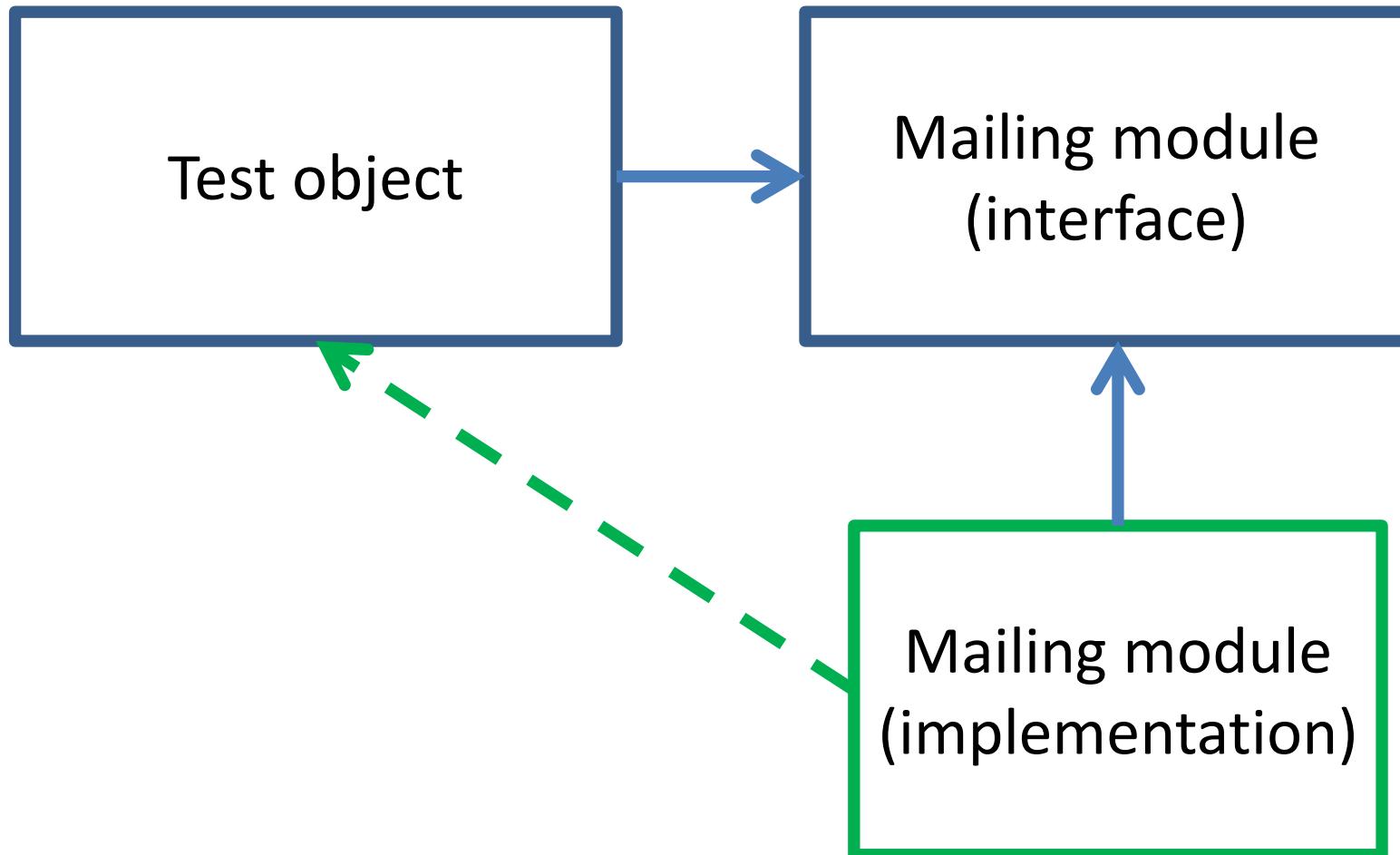
IT Lighting Talks

Maciej Grzybek
CERN IT-DB

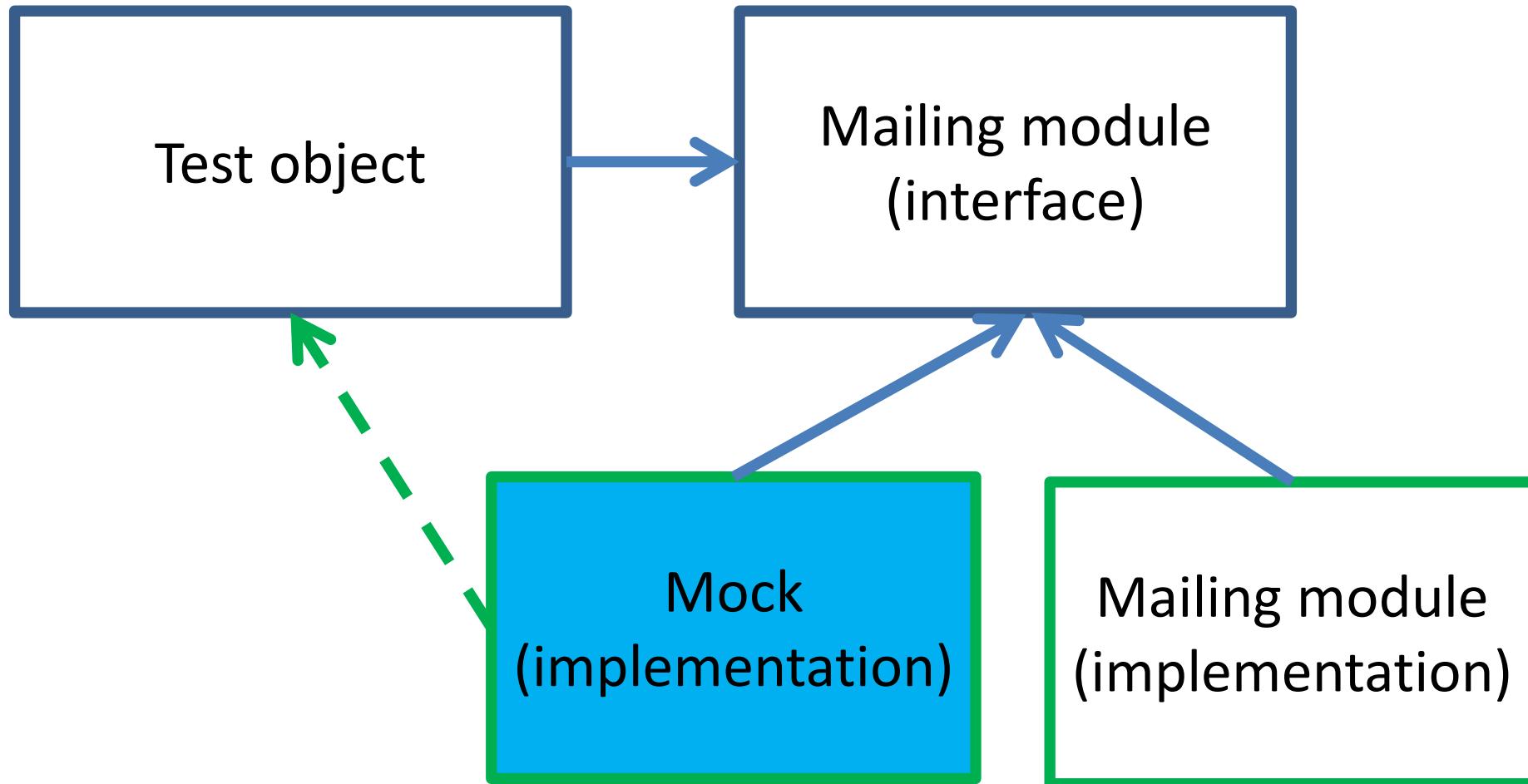
Mocking – what is this



Mocking – what is this



Mocking – what is this

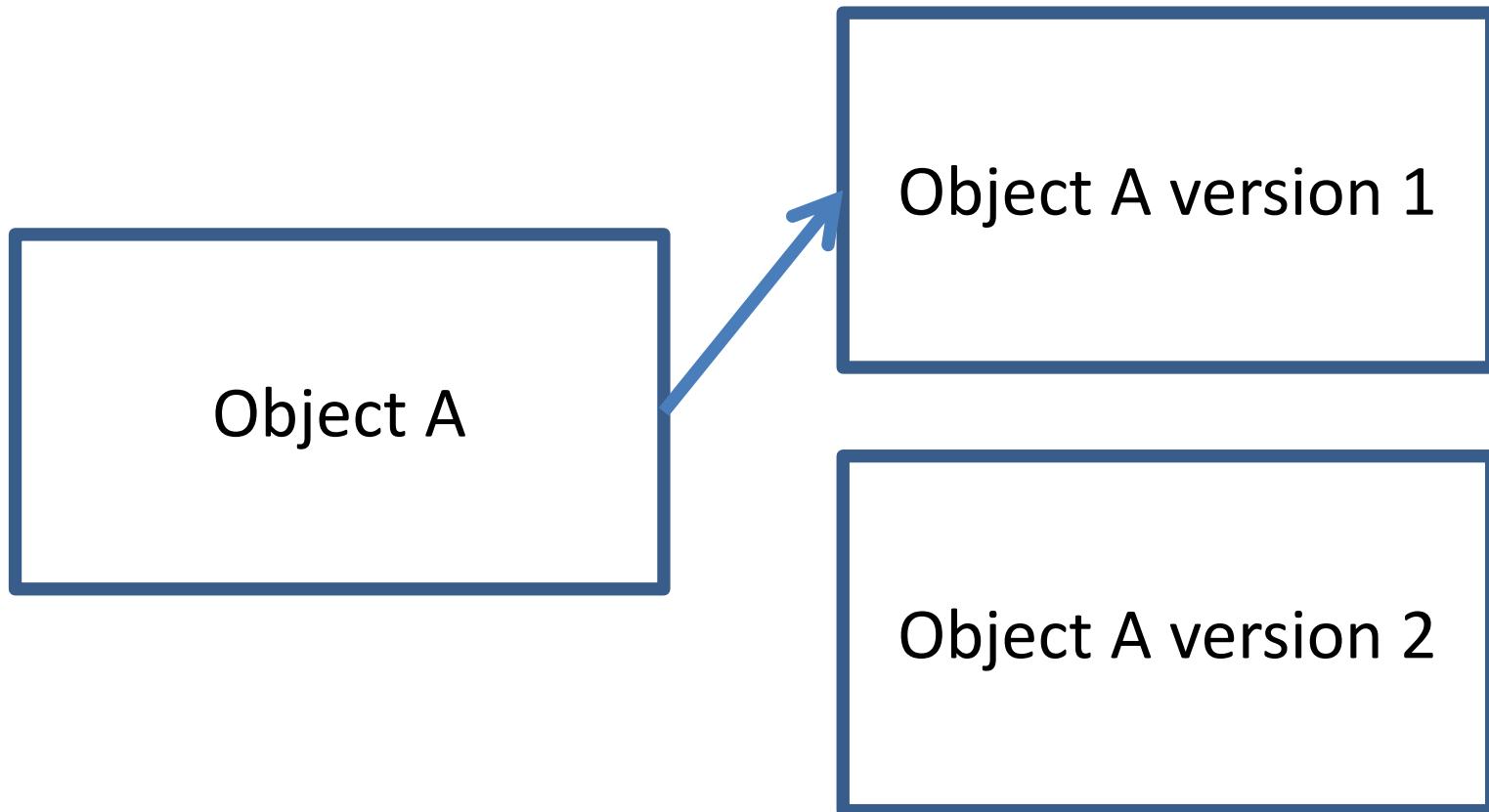


No official support for mocking
@Oracle DB

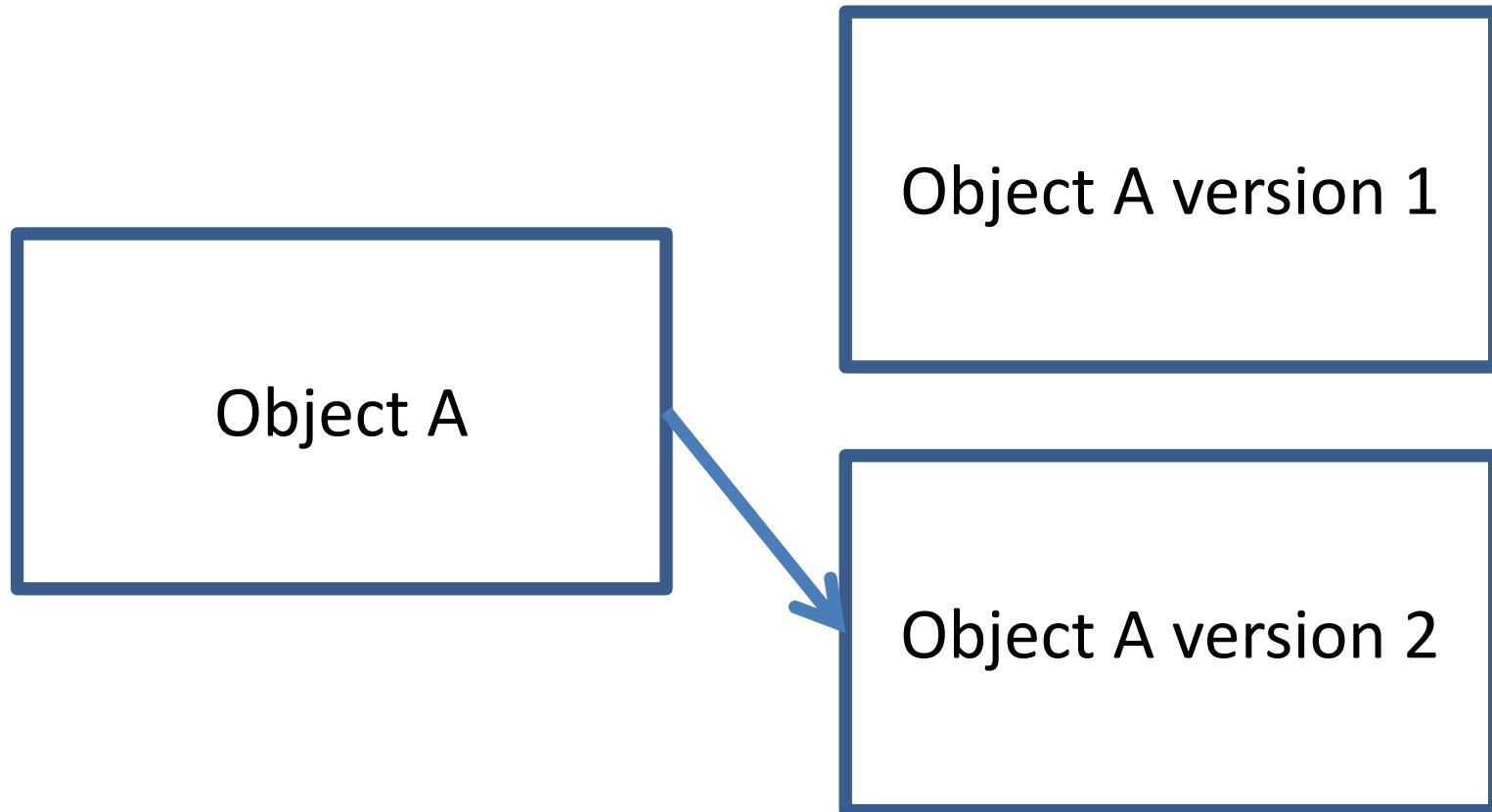
But...

Possible through versioning!

Versioning @Oracle DB



Versioning @Oracle DB



Edition-Based Redefinition – how to

- Prerequisites:
 - ALTER USER user_name ENABLE EDITIONS
 - GRANT CREATE EDITION
- Version is chosen PER SESSION
 - not affecting others!

Edition-Based Redefinition continuation

```
CREATE OR REPLACE PACKAGE mailing_module IS
 2      PROCEDURE send_mail(address VARCHAR2, subject VARCHAR2, body VARCHAR2);
END mailing_module;
4 /
```

Package created.

```
mocking_test@ITCORE:SQL> █
```

Edition-Based Redefinition continuation

```
CREATE PROCEDURE test_object IS
BEGIN
mailing_module.send_mail('foo','bar','baz');
END test_object;
5 /
```

Procedure created.

```
mocking test@ITCORE:SQL> █
```

Edition-Based Redefinition continuation

```
mocking_test@ITCORE:SQL> set serveroutput on
mocking test@ITCORE:SQL> exec test_object;
Mail sent SUCCESSFULLY!
```

PL/SQL procedure successfully completed.

```
mocking_test@ITCORE:SQL>
```

Edition-Based Redefinition continuation

```
mocking_test@ITCORE:SQL> CREATE EDITION mock_version;  
Edition created.  
  
mocking_test@ITCORE:SQL> ALTER SESSION SET EDITION=mock_version;  
Session altered.  
  
mocking_test@ITCORE:SQL> █
```

Edition-Based Redefinition continuation

```
CREATE OR REPLACE PACKAGE BODY mailing_module IS
  PROCEDURE send_mail(address VARCHAR2, subject VARCHAR2, body VARCHAR2) IS
    BEGIN
      4          DBMS_OUTPUT.PUT_LINE('I am pure mock, NOT sending mail!');
      END send_mail;
    END mailing_module;
  7  /
```

Package body created.

```
mocking_test@ITCORE:SQL> █
```

Edition-Based Redefinition continuation

```
mocking test@ITCORE:SQL> exec test_object;  
I am pure mock, NOT sending mail!
```

PL/SQL procedure successfully completed.

```
mocking_test@ITCORE:SQL>
```

Edition-Based Redefinition continuation

```
mocking_test@ITCORE:SQL> ALTER SESSION SET EDITION=ORA$BASE;  
Session altered.  
mocking_test@ITCORE:SQL> █
```

Edition-Based Redefinition continuation

```
mocking test@ITCORE:SQL> exec test_object;  
Mail sent SUCCESSFULLY!
```

PL/SQL procedure successfully completed.

```
mocking_test@ITCORE:SQL>
```

Summary

No excuses from writing tests in PL/SQL anymore!