

# Oracle Security

## Spring 2018



# DBA Threat Assessment

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# Anatomy of an IT Terrorist Attack (1:7)

- Oracle releases a new security patch
- Attackers download it within minutes
- Attackers read the list of weaknesses
- Attackers know they have weeks/months before Oracle's customers will apply the patch
- I am going to teach everyone here how to attack any Oracle Database
  - With no escalated privileges
  - Without any tools or techniques such as SQL Injection
  - And with one only one SQL statement and one line of code
- You have an ethical and moral responsibility to use this information only for the purpose of helping your organization understand the risk they are taking by not investing in data security

# Anatomy of an IT Terrorist Attack (2:7)

ORACLE MY ORACLE SUPPORT PowerView is Off

Switch to Cloud Support Daniel (Available) (0) Contact Us Help

Dashboard Knowledge Service Requests Patches & Updates Community Certifications Systems Collector Advanced Customer Services More... Give Feedback...

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[Security Patch Update October 2017 \(11.2.0.4.171017\) Database Known Issues \(2297788.1\)](#)

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[All About Security: User, Privilege, Role, SYSDBA, O/S Authentication, Audit, Encryption, OLS, Database Vault, Audit Vault \(207959.1\)](#)

[Security Checklist: 10 Basic Steps to Make Your Database Secure from Attacks \(1545816.1\)](#)

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**PURPOSE**

This document lists the known issues for Oracle Database Security Patch Update (11.2.0.4.171017) dated October 17, 2017. These known issues are in addition to the issues listed in the individual READMEs.

**SCOPE**

The document is for Database Administrators and/or others tasked with Quarterly Security Patching.

**DETAILS**

**Patch 26474853 - Security Patch Update October 2017 (11.2.0.4.171017) Database Known Issues**

For CPUOct2017

My Oracle Support Document ID: 2297788.1

Released: October 17, 2017

This document lists the known issues for Oracle Database Security Patch Update dated October 2017 - 11.2.0.4.171017 (aka patch 26474853). These known issues are in addition to the issues listed in the individual CPUOct2017 READMEs.

This document includes the following sections:

- Section 1. "Known Issues"
- Section 2. "Modification History"
- Section 3. "Documentation Accessibility"

**1 Known Issues**

Was this document helpful?  Yes  No

Document Details

Type: REFERENCE Status: PUBLISHED Last Major Update: Oct 30, 2017 Last Update: Oct 30, 2017

Information Centers

No Information Center available for this document.

Document References

No References available for this document.

Recently Viewed

Secure Configuration for Oracle E-Business Suite Release 12.1 [403537.1]  
Secure Configuration Guide for Oracle E-Business Suite 11i [189367.1]  
Can The OWAPIR Schema Be

# Anatomy of an IT Terrorist Attack (3:7)

## Patch Details

 **Patch 26474853: DATABASE SECURITY PATCH UPDATE 11.2.0.4.171017**

Last Updated Oct 30, 2017 6:20 PM (5+ months ago)

Product	Oracle Database - Enterprise Edition	Size	19.4 MB
	(More...)	Download Access	Software
Release	Oracle 11.2.0.4.0	Classification	Security
Platform	IBM: Linux on System z	Patch Tag	All Database

### Recommendations / Certifications

Recommended for Oracle Database 11.2.0.4.0

### Bugs Resolved by This Patch

13944971	Fix for Bug 13944971
16450169	Fix for Bug 16450169
16524926	APEX: ORA-1031 WITH ORACLE MULTIMEDIA AND REALM PROTECTED DB SCHEMA
16721594	Fix for Bug 16721594
17006570	Fix for Bug 17006570
17088068	Fix for Bug 17088068
17343514	REMOVE JAVA FROM CATBUNDLE
17551063	Fix for Bug 17551063
17551709	DATABASE SECURITY PATCH UPDATE 11.2.0.4.0 (CPUJAN2014)
17600719	DBMS_UTLILITY.INVALIDATE ORA-3113 ORA-7445 CORE DUMP [OPIGLN]

[Open Readme to View all Bugs](#)

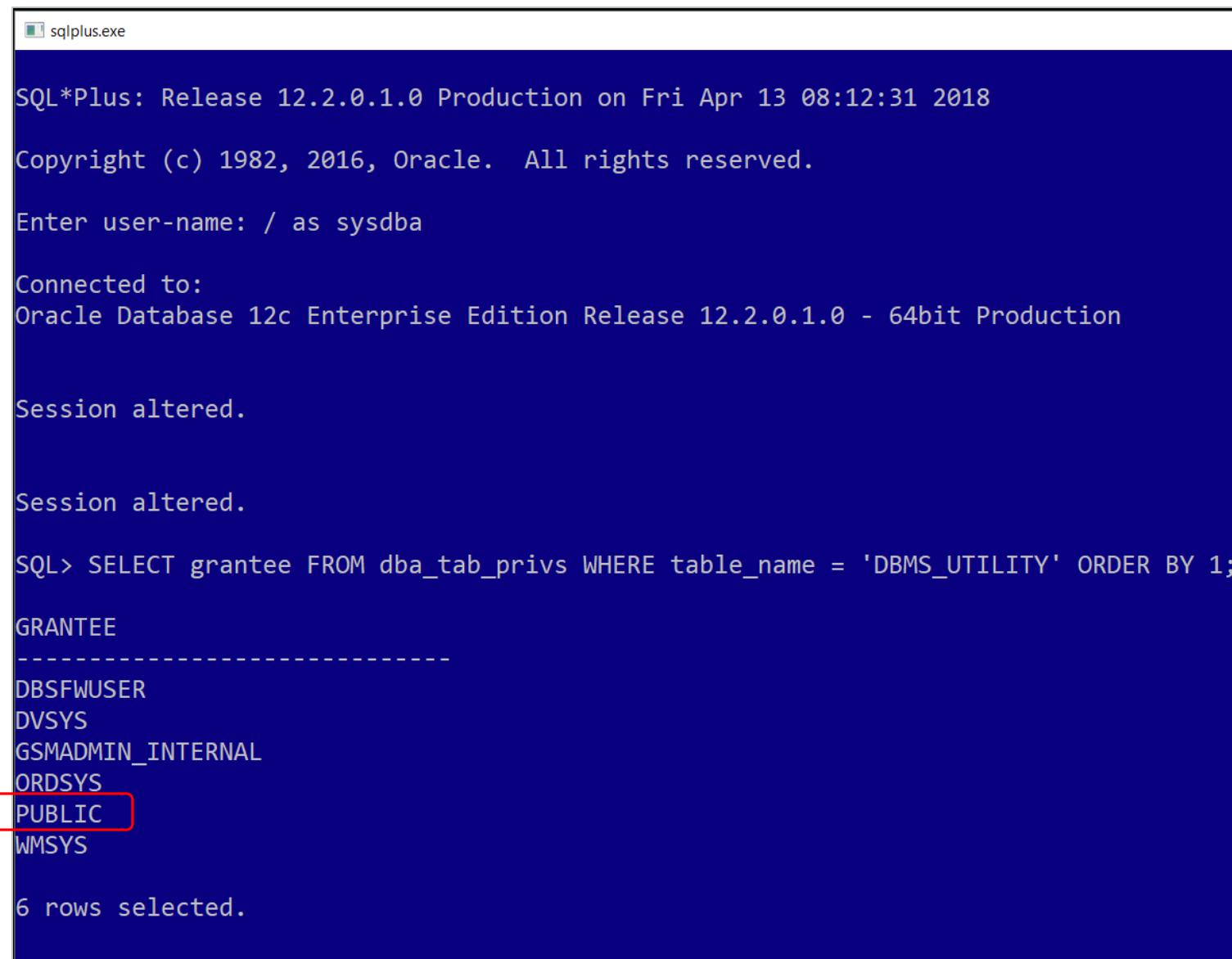
## 183.6.26 INVALIDATE Procedure

This procedure invalidates a database object and (optionally) modifies its PL/SQL compiler parameter settings. It also invalidates any objects that (directly or indirectly) depend on the object being invalidated.

### Syntax

```
DBMS_UTILITY.INVALIDATE (
    p_object_id            NUMBER,
    p_plsql_object_settings VARCHAR2 DEFAULT NULL,
    p_option_flags          PLS_INTEGER DEFAULT 0);
```

# Anatomy of an IT Terrorist Attack (5:7)



sqlplus.exe

```
SQL*Plus: Release 12.2.0.1.0 Production on Fri Apr 13 08:12:31 2018
Copyright (c) 1982, 2016, Oracle. All rights reserved.

Enter user-name: / as sysdba

Connected to:
Oracle Database 12c Enterprise Edition Release 12.2.0.1.0 - 64bit Production

Session altered.

Session altered.

SQL> SELECT grantee FROM dba_tab_privs WHERE table_name = 'DBMS.Utility' ORDER BY 1;
GRANTEE
-----
DBSFWUSER
DVSYS
GSMADMIN_INTERNAL
ORDSYS
PUBLIC
WMSYS

6 rows selected.
```

# Anatomy of an IT Terrorist Attack (6:7)

```
SQL> CREATE TABLE test (
  2  testcol VARCHAR2(20));
```

Table created.

```
SQL> CREATE OR REPLACE PROCEDURE testproc IS
  2  i PLS_INTEGER;
  3  BEGIN
  4    SELECT COUNT(*)
  5    INTO i
  6    FROM test;
  7  END testproc;
  8  /
```

SP2-0804: Procedure created with compilation warnings

```
SQL> SELECT object_id, object_name, object_type
  2  FROM user_objects
  3  WHERE object_name = 'TESTPROC';
```

OBJECT_ID	OBJECT_NAME	OBJECT_TYPE
88434	TESTPROC	PROCEDURE

```
SQL> SELECT object_id FROM user_objects WHERE object_name = 'TESTPROC';
```

OBJECT_ID
88434

```
SQL> exec dbms_utility.invalidate(88434);
```

PL/SQL procedure successfully completed.

```
SQL> SELECT object_id, object_name
  2  FROM user_objects
  3  WHERE status = 'INVALID';
```

OBJECT_ID	OBJECT_NAME
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88434	TESTPROC
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# Anatomy of an IT Terrorist Attack (7:7)

- We need you to grab your keyboard and join us in the battle to protect your data, your database, your organization, and ....
- A data and database vulnerability audit is one place to start

