

# OpenV\*Secure Admin Database API Unit Test Description\*

Jonathan I. Kamens

May 5, 2011

## 1 Introduction

The following is a description of a black-box unit test of the OpenV\*Secure Admin Database API (osa\_adb). Each API function is listed, followed by the tests that should be performed on it.

The tests described here are based on the “OV\*Secure Admin Server Implementation Design” revision 1.14.

## 2 `osa_adb_get_lock` and `osa_adb_release_lock`

**Number:** 1

**Reason:** A shared lock can be acquired.

**Status:** Implemented

**Number:** 2

**Reason:** An exclusive lock can be acquired and released.

**Status:** Implemented

**Number:** 3

**Reason:** A permanent lock can be acquired and released.

**Status:** Implemented

**Number:** 4

**Reason:** Attempting to release a lock when none is held fails with NOTLOCKED.

**Status:** Implemented

**Number:** 5

**Reason:** Two processes can both acquire a shared lock.

**Status:** Implemented

**Number:** 6

**Reason:** An attempt to acquire a shared lock while another process holds an exclusive lock fails with CANTLOCK\_DB.

**Status:** Implemented

---

\*adb-unit-test.tex 17360 2005-08-25 23:41:34Z raeburn

**Number:** 7

**Reason:** An attempt to acquire an exclusive lock while another process holds a shared lock fails with CANTLOCK\_DB.

**Status:** Implemented

**Number:** 8

**Reason:** An attempt to open the database while a process holds a permanent lock fails with NO\_LOCKFILE.

**Status:** Implemented

**Number:** 9

**Reason:** An attempt to acquire an exclusive lock while a process holds a permanent lock fails with NO\_LOCKFILE.

**Status:** Implemented

**Number:** 10

**Reason:** Acquiring a permanent lock deletes the lockfile.

**Status:** Implemented

**Number:** 11

**Reason:** Releasing a permanent lock re-creates the lockfile.

**Status:** Implemented

**Number:** 12

**Reason:** A process can perform a get operation while another process holds a shared lock.

**Status:** Implemented

**Number:** 13

**Reason:** A process that is running and has opened the adb principal database can retrieve a principal created after the open occurred.

**Status:** Implemented, but not working