

OpenV*Secure Admin Database API Unit Test Description*

Jonathan I. Kamens

October 22, 2007

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