

## Kerberos Testing (3)

### MIT and Windows2000 Interoperability

Rerun tests from part 2, but include "hot-fixes" from Microsoft. Server-side fix allows for non-hierarchical referrals from one realm to another. This potentially fixes problems with authenticating to both an MIT and W2K realm.

#### Test 1 Purpose:

Test current MIT infrastructure with Microsoft solution, in part to determine dependence on CyberSafe technologies. Test trust relationship behavior between MIT KDC and Win2000 KDC.

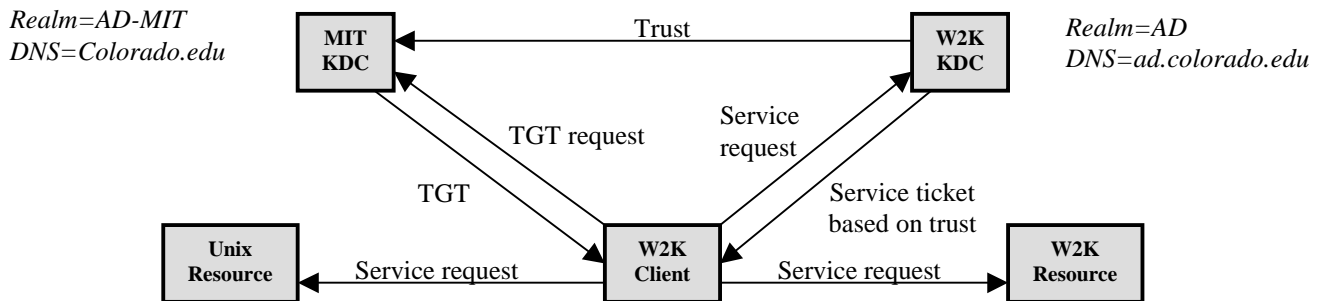
#### Components:

MIT KDC, with test realm: AD-MIT.COLORADO.EDU

W2K KDC, with test realm: AD.COLORADO.EDU; -with server-side MS hot-fix installed

Win2000 desktop machine as test client; -with client-side MS hot-fix installed.

Kerb principals: test principals on MIT KDC. User objects with same id as MIT-side test principals on MS KDC but with different passwords; kerberos mapping to principals on MIT KDC.



#### Testing:

The test should involve the following interoperability scenarios with a) one-way trusts:

<u>Client (init)</u>	<u>KDC</u>	<u>Resource</u>	<u>Mode/Trust</u>	<u>Result</u>
Win2000	MIT	Win2000	one-way	Successful login/browse share
Win2000	MIT	non-W2K	one-way	tool n/a(see below)

#### General Results: One-way, non-transitive trust

The W2K client successfully "logs in to the AD-MIT realm" then is able to access resources in the native W2K realm. The hot-fix from Microsoft allows the W2K client to obtain a TGT from the foreign kerberos realm AD-MIT.COLORADO.EDU, then, service tickets valid in the native W2K realm AD.COLORADO.EDU

#### Next Steps:

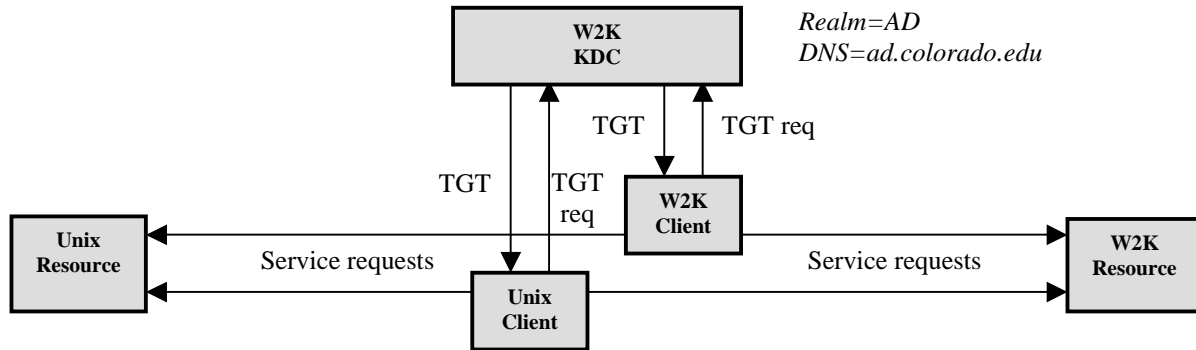
We are currently testing Hummingbird and Kermit95 Ktelnet/Kftp clients. We have been unable to successfully configure these clients for a valid test; additional configuration changes should allow us to perform a valid test.

**Test 2 Purpose:**

Test utility of Microsoft KDC as sole authentication authority. Run tests on various scenarios and record results. Rerun part 2 tests with proper keytabs generated on W2K and passed to Unix servers.

**Components:**

- W2K KDC, with test realm: AD.COLORADO.EDU
- Win2000 desktop machine as test client
- Unix workstation as test client
- Resource in MIT (AD-MIT) realm to access
- Resource in W2K (AD) realm to access



**Testing 2a:**

The test should involve the following interoperability scenarios:

<u>Client (init)</u>	<u>KDC</u>	<u>Resource</u>	<u>Mode/Trust</u>	<u>Result</u>
Win2000	MS	Win2000	native	Successful login/browse share
Win2000	MS	non-W2K	one-way	Need kclients for W2K
Unix	MS	Win2000	native	n/a
Unix	MS	non-W2K	one-way	Successful login/rlogin OK
Unix	MS	non-W2K	one-way	Successful login/ktelnet fails

**General Results:**

We have successfully generated and used keytabs from the W2K KDC to UNIX servers for rlogin. However, there was a problem using Ktelnet in this scenario.

**Next Steps:**

We plan to complete the remaining portions of this test if a telnet daemon for W2K servers is available. The Win2000/MS KDC/non-W2K portion of this test also depends on a valid Ktelnet client for W2K.