

# PASS Migration

- \* PASS Migration Update Part IV
- \* PASS Beta Test Launched – Review

# PASS Migration Update

- We are migrating a key component of our core infrastructure, the Penn State Access Storage Space, aka PASS.
- <http://its.psu.edu/news/story-989>

# PASS Migration Update

*Review from previous NWOP meetings:*

- GPFS replaces DFS first weekend in July.
- All data in current PASS file space will be moved in preparation for the fall 2008 semester.
- After all the data is moved, there will no longer be access to the former PASS systems.
- Summer: DCE/DFS will be decommissioned.

# PASS Migration Update

*Review from previous NWOP meetings:*

- The migration is a change to a new technology (GPFS) that promises to give us substantially better performance and overall reliability.
- IBM has dropped normal support for DCE/DFS, Penn State's current authentication, authorization, and distributed file system.

# PASS Migration Timeline

Date	Milestone	How this is defined	Estimated Impact	Completed
March 17, 2008	Open Beta period begins	Enrollment for the testing environment is announced for all of Penn State.	All the current functionality in PASS space is available to the testers.	Beta testing systems are available until the July 4th cutover
May 30, 2008	Begin Internal ITS Migration	All Production services are operational. The Pre-tag will remain until the Final Cutover.	All ITS Units under /dept/its space	NO
May 30-June 30, 2008	Open Penn State Early Migration	We will offer the option to perform a timely migration in advance before the final move on July 4th.	Announcement to ITS staff targeted for mid-May.	No
<b>July 3, 5 p.m.</b> <b>Through</b> <b>July 7, 7 a.m.</b>	Complete Data Migration, PASS goes read-only for the 3 day weekend	DFS is locked into a read-only state. All systems and data remaining in DFS are moved into GPFS. No turning back. Shut off existing systems. Repurpose Hardware. Plan for next hardware/power issues.	All our dependent systems	No
July-Aug 2008	<b>Decommission DCE/DFS</b>		Hopefully None	No

# PASS Migration Update

## *What IT Administrators Need to know:*

- Duration of Planned Outages for Accounts management and Read-Only Access to filesystems.
- Possible short outages of some web sites and services during this time. We have planned for minimal disruptions to Read-Only access.
- Changes for Client Access – Kerberos authentication requirements and key OS issues.

# PASS Migration Update

## *What IT Administrators Need to know:*

- Gateway technology upgrade
  - Samba upgraded from version 2 to 3
  - NFS upgraded to support version 4
- php.scripts.psu.edu upgrade
  - Solaris to Linux
  - Apache 1.3 to Apache 2.0
  - PHP still 5.1.6 (for now)
  - SQLite extension removed; replaced by PDO
- Instructions on using PDO to access SQLite 3.x databases:
- <http://php.scripts.psu.edu/jcd/useful/webcon/2005/sqlite.php#pdo-sqlite3>

# PASS Migration Update

- Gateways Will Require Full Kerberos
  - NT Lan Manager (NTLM) authentication not supported by new SMB/CIFS gateway
  - Kerberos support in SMB/CIFS gateway not available in old gateway
  - Stand alone Windows clients require “userid@dce.psu.edu” or “dce.psu.edu\userid” username notation to obtain Kerberos tickets
  - Windows 95, 98, ME no longer supported
  - Mac OS X – CIFS works with additional steps
  - Samba clients have support (smbclient)
  - UNIX/Linux native CIFS mount support varies



# PASS Beta Test Environment

*Review and update from previous NWOP:*

- Kerberized CIFS and NFS servers online
- Private home folder access,  
Departmental space
- wiki docs and public docs [  
<http://css.its.psu.edu/PASSBeta>]
- feedback forms for Beta Testers

# PASS Migration Resources: Kerberos Authentication

For Kerberos auth to the Penn State Kerberos realm (dce.psu.edu) for either Mac, Windows or Linux clients.

**Mac OS X:** CLC has documented setting up Kerberos auth on OSX  
<http://clc.its.psu.edu/Labs/Mac/Resources/authdoc/default.aspx>  
<http://clc.its.psu.edu/Labs/Mac/help/privatefilespace/macpass.aspx>

**LINUX:** For discussion of Kerberos auth and SSO see:  
<https://wikispaces.psu.edu/display/access/Kerberos>

**WINDOWS:** For discussion of Kerberos auth and SSO see:  
<https://wikispaces.psu.edu/display/access/Kerberos+on+Windows>

Note: The registry key that must be installed on the windows clients is called "psuksetup.reg" and is available here:

[http://aset.its.psu.edu/docs/windows/active\\_directory/kdcrecords.html](http://aset.its.psu.edu/docs/windows/active_directory/kdcrecords.html)

# PASS Migration Resources: Online Learning Materials

Publishing: The Infrastructure at Penn State

[http://portfolio.psu.edu/files/eportfolio/PASS\\_blogs\\_viewlet\\_swf.html](http://portfolio.psu.edu/files/eportfolio/PASS_blogs_viewlet_swf.html)

The Files in Your PASS Space: A Guided Tour

[http://portfolio.psu.edu/files/eportfolio/PASS\\_tour\\_viewlet\\_swf.html](http://portfolio.psu.edu/files/eportfolio/PASS_tour_viewlet_swf.html)

Publishing in your Penn State Web Space

[http://portfolio.psu.edu/files/eportfolio/Publishing\\_in\\_PASS.pdf](http://portfolio.psu.edu/files/eportfolio/Publishing_in_PASS.pdf)

# PASS Migration Resources: Online Documentation

- The MIT Kerberos tools for various OS  
<http://web.mit.edu/Kerberos/dist/index.html>
- Public Online Documentation for PASS Beta Systems –  
Please join and test before July!  
<http://css.its.psu.edu/PASSBeta>
- Wikispaces – for Penn State affiliated Faculty and Staff  
<http://wikispaces.psu.edu/display/PASS>

See the last two links above for details about our Timeline, the Services we run that depend upon PASS, and details about the testing environment we are currently hosting.