# CMS Conquers Kerberos

# Why and When

- DOE mandates secure environments.

- Security incidents - especially involving passwords.

- Perceived advantages are:
  Having one login and ID to any machine in the lab.
  Moving passwordless to all fully strengthened machines.
  Computers will be more secure.

- All machines on site must have strong authentication by December 31, 2001.

- CMS has committed to having all machines in the fully strengthened realm by mid-October.

# Options

- **fully strengthened - A machine that is fully strengthened only allows kerberos logins, either your machine must be in the trusted realm or you must use portal mode (Cryptocard).**

- **mixed mode - A machine in mixed mode allows for regular ssh connections and fully strengthened interactions.**

# CMS Machines and Schedule

- bigmac and fries user cluster - Fully strengthened at installation.
- ramen and gyoza test cluster - Fully strengthened at installation.
- gallo and popcrn cluster - Fully strengthened after production test.
- velveeta - Fully strengthened after production test.
- cmsun1 and wonder - Mixed mode on September 6. Fully strengthened September.

# What to do TODAY

**1. Read the following as an absolute minimum:**
**http://www.fnal.gov/docs/strongauth/html/nutshell.html**

**2. Get Kerberos principal by filling out the online form at:**
**http://www.fnal.gov/cd/forms/strongauth.html**

**DO THIS TODAY!**

**3. Request your Cryptocard at the same time.**

**4. Once you have your principal, use telnet to test it on cmsun1 or on wonder.**

**5. SSH access with an AFS password is still allowed until September 25.**

# To Do by the URL's

**1a. If you don't have a Fermi Account go to**
**http://computing.fnal.gov/cms and follow the CMS link.**

**1. The main kerberos page:**
**http://www.fnal.gov/docs/strongauth.html**

**2. Read this:**
**http://www.fnal.gov/docs/strongauth/html/nutshell.html**

**3. Get your principal:**
**http://www.fnal.gov/cd/forms/strongauth.html**

**4. Login per your favorite method:**
**http://www.fnal.gov/docs/strongauth/html/access_sr.html#64925**
**Or click on "Offsite Issues" from the main kerberos page.**

# Kerberos At Home

**1. Windows options: Reflections WRQ (telnet only - no SSH), Exceed 7, or access with telnet clients via portal mode (i.e. Cryptocard)**

**See the topics under "How to log in to a Kerberized machine" at http://www.fnal.gov/docs/strongauth**

**2. If using Unix or Linux - easy to kerberize your machine:**

**Obtain a kerberos client. (There are RedHat rpms for this.)**

**Get a copy of the /etc/krb5.conf file and copy it into your /etc/krb5.conf. (We may post this on the web or make it available via email.)**

**If you want to use kerberized SSH, install the SSH rpm from Fermilab or wait until the next release of OpenSSH**

# Final Schedule

| | |
|---|---|
| • New systems | • At installation |
| • gallo and popcrn's | • After production test - full strength |
| • wonder | • September 6 - mixed mode<br>• September 25 - full strength |
| • velveeta | • After production test - full strength |
| • cmsun1 | • September 6 - mixed mode<br>• September 25 - full strength |