

Ins & Outs of Remote Debugging

XRootD Workshop
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<http://xrootd.org>

Resolving Issues I

- # How do we resolve **XRootD** / **cmsd** issues?
 - Look at the log files
 - Check the configurations files
 - Verify system settings
 - Perhaps debug with a core file
- # So, we need access to these key items!

Resolving Issues II

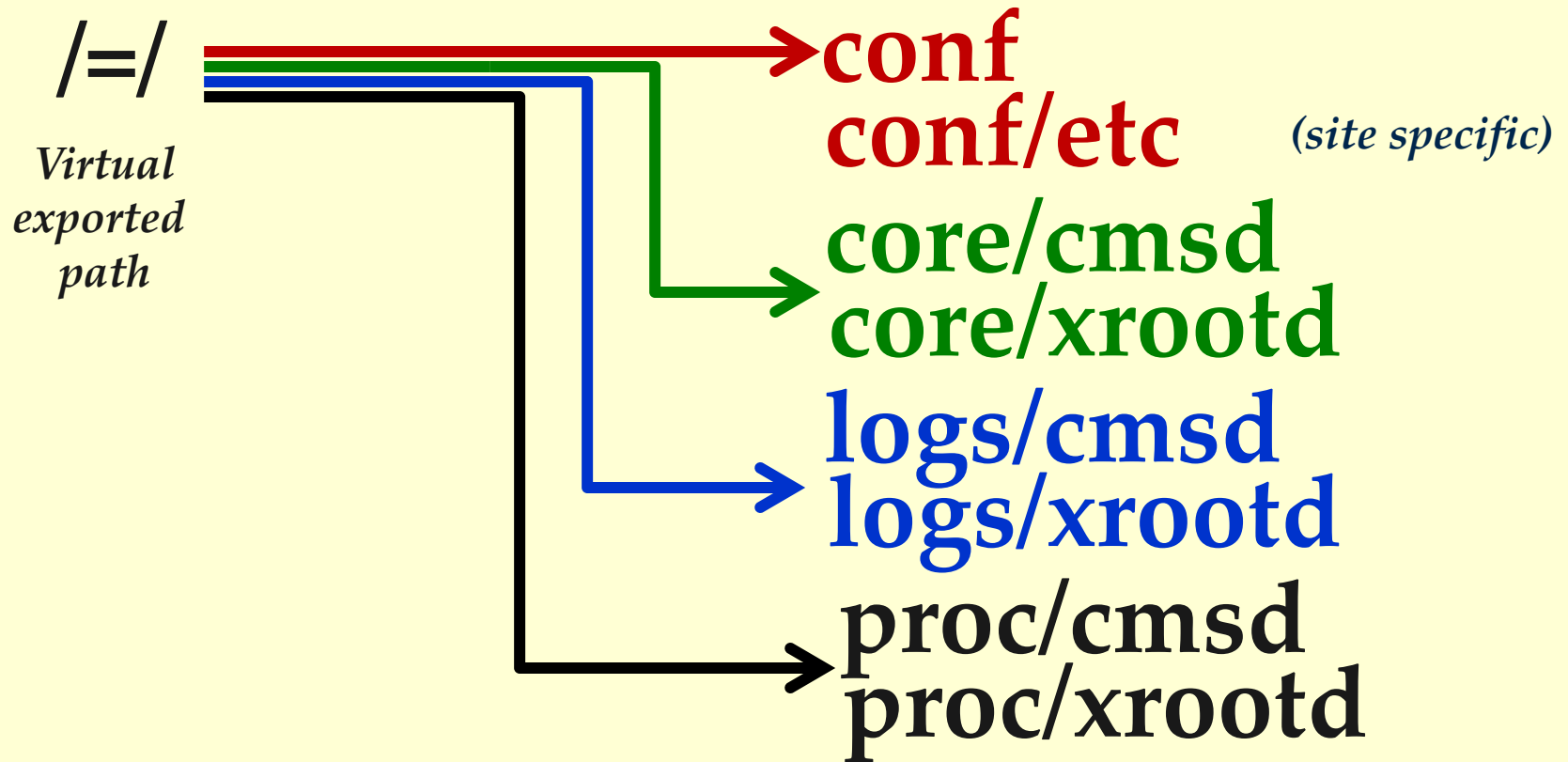
- # Not all sites have required expertise
 - May need developer help
- # How do developers get the information?
 - Usually via email
 - This is normally painfully slow
 - Time zone differences
 - Iterative processing
 - Resolution is not always timely!
- # Is there an alternative?

Remote Debugging via digFS

XRootD provided pseudo file system

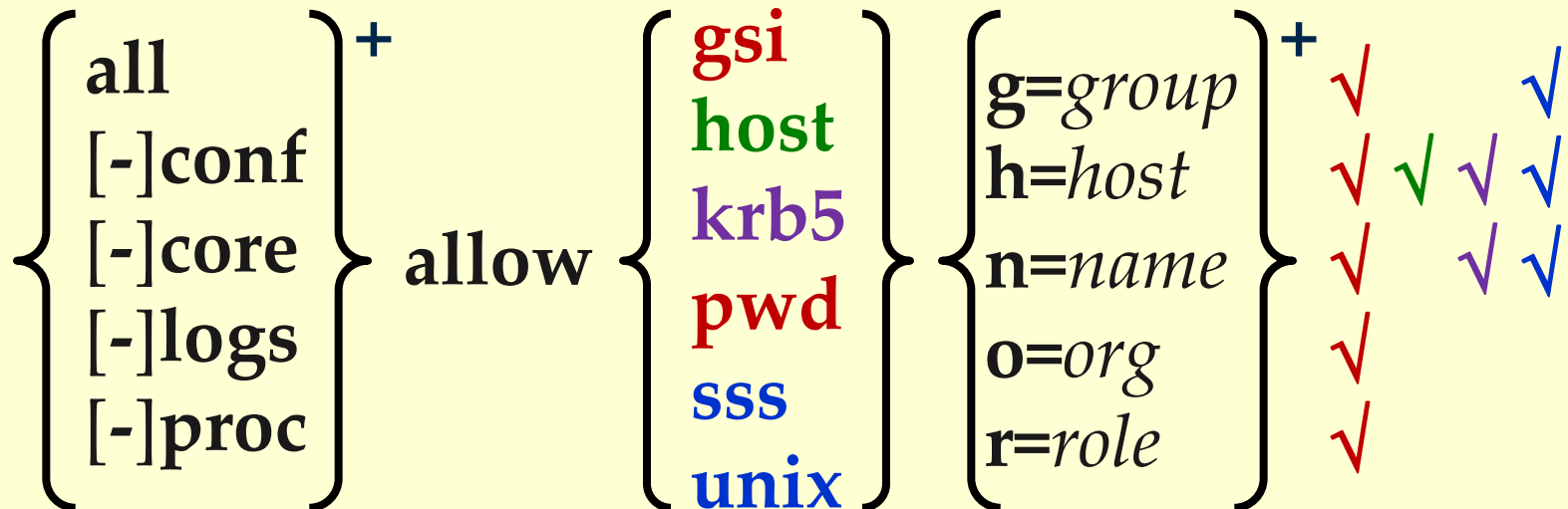
- Provides restricted selectable R/O access to
 - Configuration file Log files
 - Core files /proc/self (*Linux only*)
- Has authentication & authorization options
 - Including access control restrictions
- View is standardized regardless of location
- Configured via `xrootd.diglib` directive

The digFS View



digFS Authorization

- # digFS consults an authorization file
 - Created by the site and specified in config file
 - `xrootd.diglib * authfile`



Adding Additional Files

- # Special directive in the config file
- # `dig.addconf path [fname]`
 - Adds the file pointed to by *path* to namespace
 - Specifically, appears as `/=/conf/etc/fname`
 - Defaults to last component of *path*
 - Useful for supplying site specific information
 - E.g. `dig.addconf /etc/hosts`

Helpful xrdfs queries

- # Query config version
 - Display the endpoint's version
- # Query config role
 - Displays the endpoint's role name
- # Query config sitename
 - Displays the endpoint's site name
- # Query config cms
 - Displays the endpoint's cmsd status

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Now For The Demo!