

XrootD Support and CMS



Goals of this Talk

- CMS has a desire to discuss the long term support of xrootd
- CMS requires remote streaming to support its current computing model
- The model has evolved over the years due to
 - 1. evolution of the reliability and capabilities of networking
 - 2. our disk resources are reliably under pledged



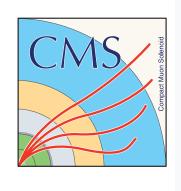
Key Computing Model Elements and XrootD

CMS uses XrootD in Key parts of our computing model:

- needed for Prompt Reconstruction at Tier1s
- needed for Pileup library
- needed for analysis streaming

Without it we would not be able to:

- promptly reconstruct the full data rate of raw detector data from P5
- produce high pileup simulation samples on the GRID
- effectively use our global computing resources for distributed analysis



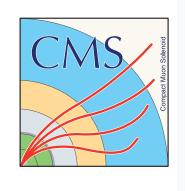


Stakeholders of Components - CMS

Stakeholders

2010	
Components	CMS
Core	X
Client	X
Monitoring	X
Clustering	X
Object Query	
S - POSIX backend	X
S - XCache	X
S - multi user POSIX	X
S - S3/HTTP/Globus	
S - EOS	
Auth - SciTokens	X
Auth - X509	X
Protocol - Xrootd	X
Protocol - HTTP	X
nt. Testing	X

CMS using a large fractions of the components of XrootD and should contribute more to its development



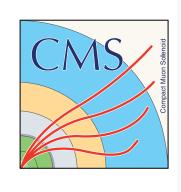


Stakeholders of Components

Stakeholders

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Components	SLAC(LSST)	ATLAS	EOS	OSDF	CMS
Core	?	X	Х	Х	Х
Client	?	X	Х		Х
Monitoring	?	?		Х	Х
Clustering	?				Х
Object Query	Х				
FS - POSIX backend	?	?		Х	
FS - XCache	?	?		Х	Х
FS - multi user POSIX				Х	Х
FS - S3/HTTP/Globus				Х	
FS - EOS		Ind	Х		Ind
Auth - SciTokens		X	X	Х	Х
Auth - X509	?	X	Х		X
Protocol - Xrootd	?	X	Х		X
Protocol - HTTP	?	X	Х	Х	Х
Int. Testing	?	X	Х	X	X

Who we think other potential stakeholders are and what components they use.





Contributors to Components

Contributors

Rubin	USATLAS	CERN	Pelican	USCMS	IRIS-HEP
Х	X				
		X			
?	X			Х	
?	X				
X					
?	X				
				Х	
			Х		Х
			Х		
		X			
			Х		
		(SFT)			
?	X				
		X			
			X		Х
	? ? X ?	X X ? X ? X X X	X X X X	X X X X X Y Y X Y X Y X X X X X X X X X	X X X X X X X X X X X X X X X X X X X

Who we think are contributing to what, so that we can find partners.

CMS would like to contribute more given it's importance to us!