Akubra Release Plan Summary

Akubra

The Akubra Project is a new effort developed jointly by the Fedora and Topaz project teams as the first area of joint architecture work. The goal of Akubra is to provide a pluggable storage component that supports transactions on common file systems plus the ability to support multiple customized storage options at the same time. Akubra was a result of the architecture analysis by the Fedora and Topaz developers that concluded that the best opportunity for moving forward on joint architecture was to focus on building open source components to facilitate better integration of the low-level storage of files /bitstreams/blobs, and pluggability of heterogeneous underlying storage systems. We plan to integrate the new Akubra software with both the Topaz OTM and the Fedora Repository service. The primary intent is to create better abstraction and separation of concerns between file/bitstream/blob storage, and the services that Topaz and Fedora provides over them. Once this is done, there will be more flexibility in terms of how Topaz and Fedora can evolve architecturally.

Feature	Action						Availability					Notes
	FR	A	T	M	FM	O	Q108	Q208	Q308	Q408	2009	
Pluggable Storage Framework Design	I	D	I			I			X			– Fedora v3.0 for comment
Simple Transactional File System Plug-in	I	D	I			I			X			
Multiplexed Storage Framework Design	I	D	I			I			X			
Multiplexed Storage Framework	I	D	I			I				X		
Sun ST5800 Plug-in	I		I			D			X			– Joint work with Sun -- Fedora v3.1
IA Petabox Plug-in	I	D	I			D				X		– Joint work with Internet Archive
Hierarchical Plug-in	I	D	I			D				X		– Needs one or more partners with HFS products
aDORe Plug-in	I	I	I			D				X		– Joint work with LANL
Advanced Sun ST5800 Plug-in	I	D	I			D				X		– Joint work with Sun -- Supports registry in ST5800 -- Able to delegate tasks to Storage Beans -- Support for call back acknowledgements
Advanced Transactional File System Plug-in	I	D	I			D					X	– Possible joint work with Sun -- Supports use of native transactional file systems

Legend					
Project	FR – Fedora Repository Project	A – Akubra Project	T – Topaz Project	M – Mulgara Project	FM – Fedora Middleware Project	O – Other independent open source projects
Action	D – Develops Software	I – Integrates Software			