Blacklight, ActiveFedora and Solrizer: Interplay between Searching, Managing and Indexing in a Repository Solution

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Any repository solution provides facilities for Creation, Management, & Editing of Content as well as facilities for Searching & Browsing through that content. Experience has shown that when a solution binds these two areas of functionality together too tightly, the system becomes brittle and unworkable, discouraging innovation. Our work on the Hydra project has produced a flexible and intuitive solution that combines these two areas in an almost entirely decoupled fashion. This solution, which is already working in multiple Hydra applications, is built on a three-part pattern where Blacklight handles Search & Discovery, ActiveFedora handles Creation, Management and Editing of Content, and a small application called Shelver supplies the crossover point by indexing the content into Solr so that it will show up in Blacklight. This three-part approach reflects a strong pattern for designing and/or improving repository solutions. The main pivot of this approach is to treat indexing as its own separate part of the application and to allow that indexing processes to evolve constantly as part of the application development cycle.

This work is the product of combining established best practices, best of breed software, and lessons learned from an iterative approach to application development. While our implementation is focused on Fedora Repositories, the software could be used in multiple contexts and the pattern is certainly applicable to any content-oriented application.