Executive Summary

- Digital Case opened for business on August 22, 2006
- Digital Case is Case Western Reserve University’s digital library, repository and archive
- Digital Case stores, disseminates, and preserves the intellectual output of Case faculty, departments and research centers in digital formats (both “born digital” items as well as materials of historical interest that have been digitized)
- Digital Case has over 10,000 items of content organized into 13 collections
- Users across the globe have accessed Digital Case items more than 13,000 times and conducted more than 12,000 search queries
- Digital Case promotes Open Access through OAI-PMH and Google Sitemaps

Process

- Institutional Repositories (IR) are technical in nature and technical staff typically drive the process
- Kelvin Smith Library (KSL) realized early on that user interface design is not our forte and we would need professional help with that effort
- Given the importance of Digital Case to the University and the KSL, we knew that the user interface needed to be the best of breed in this space
- Hired Optiem, a local technology and design firm to lead the design process allowing KSL resources to focus on the business requirements and implementation
- Optiem realized potential synergies at the outset between Ektron and Fedora
- Started the process by asking our users what they would envision a digital library to be

User Interface Highlights

- Full-text search capabilities
- Browser-based image viewing
- Browser-based movie viewing
- Integrated reporting feature
- Permanent URL assignment

Administrative Interface Highlights

- Content workflow approval and LDAP integration to encourage collaboration while maintaining content and copyright integrity
- Common interface for managing both Digital Archive and Website content
- Web based Drag and Drop interface
- Auto Image and Video recognition and conversion
- Visual Representation of content organization
### Digital Case Architecture

<table>
<thead>
<tr>
<th><strong>Open Source</strong></th>
<th><strong>Commercial</strong></th>
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<tbody>
<tr>
<td>• Fedora - digital repository software</td>
<td>• Ektron CMS400.NET - content management software</td>
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<tr>
<td>• Lucene - full-text search engine</td>
<td>• Aware JPEG 2000 Image Server - image compression software</td>
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<tr>
<td>• Handle System - persistent URL system</td>
<td>• Oracle 10g Release 2 - database software</td>
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<tr>
<td>• Apache Axis - Web services framework</td>
<td>• Microsoft .NET Framework - application framework</td>
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<td></td>
<td>• Microsoft Clustering Services - clustering software</td>
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<td>• Veritas Storage Foundation for Windows - storage software</td>
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<td></td>
<td>• EMC Legato NetWorker - backup &amp; recovery software</td>
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<td>• iSCSI Software Initiator - network storage protocol</td>
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**Support Technologies**
- Oracle 10g R2, EMC (SAN, Legato, iSCSI)
- Microsoft (MSCS, .NET Framework, iSCSI), Veritas
- Fedora, Lucene, Handle System, Axis, Aware JPEG2000

**Primary Technologies**
- Ektron CMS 400.NET
- Digital Case

**User Experience**