ALA Online Communities
Requirements and CMS Architecture

Prepared For
Jenny Levine, jevline@ala.org, American Library Association
Tim Smith, tsmith@ala.org, American Library Association
Sherri Vanyek, svanyek@ala.org, American Library Association

Prepared By
Chris Steins, steins@urbaninsight.com, Urban Insight, Inc.
Abhijeet Chavan, chavan@urbaninsight.com, Urban Insight, Inc.

ALA Single Point of Contact
Jenny Levine, (312) 280-2461, jlevine@ala.org

UI Contact
Chris Steins, (323) 857-6901, steins@urbaninsight.com

Approval
Document approval

______________________________________________________________________________
Jenny Levine                                                                 Date
Please do not sign the approval until this document has been finalized.

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1. Background

This document was prepared in collaboration between the American Library Association (ALA) and Urban Insight (UI) to define the specific project requirements and content management system (CMS) architecture for Phase 1 of the MyALA Online Communities project. The requirements and CMS architecture were captured and developed during a series of meetings conducted on March 12 (telephone conference) and March 17-18 (on-site meetings at ALA headquarters in Chicago), and a series of email and telephone discussions between April 7 and April 11, 2008. Participants in these meetings included:

- Jenny Levine, Project Manager, ALA (Project lead for ALA)
- Tim Smith, Deputy IT Director, ALA
- Sherri Vanyek, IT Director, ALA
- Donavan Vicha, Web Developer, ALA
- Jonathan Mak, Web Developer/Project Manager, UI
- Abhijeet Chavan, CTO, UI
- Chris Steins, Project Director, UI (Project lead for UI)

ALA’s current online community system (communities.ala.org) is powered by the Windows-based .NET Nuke software. The existing online community system has reached the end of its useful lifecycle, and will be replaced by Drupal, an open source content management system.

2. Document Purpose

This document is part of a series of documents that will be used to develop ALA’s Online Communities project

- Requirements Document: Statement of requirements ALA has identified to the Online Communities Project.
- CMS Architecture: Visual representation of the overall project architecture.
- Wireframes: Detailed descriptions of typical website pages and placement of content, used to clarify requirements and as the foundation for the visual design.
- Visual Design: Visual interface designs that demonstrate the look and feel of the website, once it is built.
Technical Specification: Technical discussion of the system architecture, modules, and identification of which requirements will be addressed by the intended Drupal content management system.

This document does not represent the system that will actually be developed. It identifies the requirements that have been set forth by the project. The forthcoming technical specification will identify which of the requirements identified in this document will be addressed in the first phase of the Online Communities project.

3. Definitions

.NET Nuke: The current online community software being used by ALA. This software is based on the Microsoft stack.

ALAconnect: The eventual social networking website that ALA will offer to its members. The first portion to be implemented is Online Communities. In phase 1 therefore, references to ALAconnect are really references to Online Communities.

ALA Council: ALA governing group, with 186 members.

BigALA: The name given to the “unit” that is the ALA itself, even though it is sometimes just another unit. All members are, by default, part of the BigALA community when they log in to Online Communities. (Sort of like Tom is everyone’s friend in MySpace.)

Blip.tv: Blip is a free video hosting service similar to YouTube, but which provides higher-quality video distribution. ALA uses Blip to deliver and promote its videos, such as those for National Library week. ALA’s branded blip.tv site is: http://alfocus.blip.tv/.

Collage Enterprise: Collage Enterprise is an enterprise content management system developed and licensed by Serena Software, Inc. (Redwood City, CA). The Collage CMS is being used by ALA to power and manage the ALA’s primary public website, ala.org. More about Collage Enterprise: http://www.serena.com/products/collage/

Committees: A group of members who convene to direct ALA activities, often related to a unit. As of March 18, 2008, there are 3,269 total committees, which includes approximately 1,841 “active” (as defined by iMIS) committees.

Community: The name given by the project team to a collection of features, content, members and visual display around an ALA unit, special interest, event or committee. In Drupal, the community is similar to an “organic group.”

DreamHost: A Los Angeles-based web hosting company that provides shared web hosting to nonprofits. ALA is currently hosting a variety of web applications such as WordPress blogs on Dreamhost.
**eSeries**: The website content management software provided by ASI that integrates with iMIS. ALA is currently using a few eSeries functions (such as registration and authentication) on the current website.

**iBOS**: Proprietary APIs (iMIS BusinessObjects) provided by ASI for a fee that can be used to interact with data in iMIS in a structured way. Older iBOS are provided as DLLs. Newer iBOS are provided in .NET. ALA is licensed to use either type of iBO.

**iMIS**: The membership association software provided by Advanced Solutions International (ASI). This system relies on a Microsoft SQL server 2000 database, and uses iBOS to provide access to the data. The current version being used at ALA is 10.6.30.07.

**Online Communities**: The ALA initiative for which this document is intended to define the requirements.

**Units**: The generic name used to describe ALA’s 11 division, 45 sections, 17 roundtables, and 15 offices that are part of ALA’s membership structure. Participation in divisions, sections, and roundtables is tracked in iMIS “subscriptions” since they are related to dues. Office participation is not tracked in iMIS.

### 4. Project Objectives

4.1. Create an online environment where ALA members can collaborate on the work of the association during the year, in addition to ALA conferences and events.

4.2. Enable members to find shared interests and expose relevant content.

4.3. Provide a community that is universally accessible; enable members who are technically savvy to access advanced Web 2.0 features and social networking opportunities.

4.4. Expose relevant open content to the public Internet, including enabling search engine indexing. Content in “closed” communities would remain accessible only to authorized members and staff.

### 5. User Roles

The project team has identified the following user roles. An access permissions matrix is provided in the following table.

5.1. **Public user**: Public, non-registered Internet visitor

5.2. **Registered user**: User has registered and confirmed an email address

5.3. **ALA Member**: An ALA member as defined by iMIS. If an ALA member, then the member automatically becomes part of one or more units: 11 divisions, 45 sections, 17 roundtables
(contained in iMIS subscriptions), 15 offices.

5.4. Staff: Effectively same role as a member; identified separately in case future roles require staff to be identified separately.

5.5. Community Author: Gain Access to closed committee.

5.6. Community Administrator: Polices an individual community for content; has complete control over an assigned community; can moderate and administer members but not the staff administrator.

5.7. Staff administrator: Complete content control for assigned communities; can change role permissions for members or staff. Can create and delete a community.

5.8. ITTS administrator: Access all settings; 3-4 ALA staff will hold this role.
<table>
<thead>
<tr>
<th>Access Permissions</th>
<th>Public User</th>
<th>Registered User*</th>
<th>ALA Member</th>
<th>ALA Staff</th>
<th>Community Author(3)</th>
<th>Community Admin(3)</th>
<th>Staff Admin</th>
<th>ITTS Admin</th>
</tr>
</thead>
<tbody>
<tr>
<td>View content in any community not designated as closed</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Comment on blogs and forums</td>
<td>✗</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Edit, delete community content (comments, blogs)</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Join a community (1)</td>
<td>✗</td>
<td>✗</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Add content to joined community</td>
<td>✗</td>
<td>✗</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Modify community settings (features, themes, etc.)</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Observe restricted community</td>
<td>✗</td>
<td>✗</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Observe closed community (2)</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Create member profile</td>
<td>✗</td>
<td>✗</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Perform member search</td>
<td>✗</td>
<td>✗</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>View member profile</td>
<td>✗</td>
<td>✗</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Change user roles for members</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Change user roles for staff</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
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</tr>
<tr>
<td>Change role permissions</td>
<td>✗</td>
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<td>✗</td>
<td>✗</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
</tbody>
</table>

Notes:

(1) If the community is closed or restricted, only to which the member has access via member’s profile.
(2) Only for communities to which the member has access via member’s profile.
(3) These “roles” should be considered as “community capacity”, which is specific to a community.
6. Community Types

6.1. Open: Anyone can view content. Members can join without restriction.

6.2. Regulated Community: (Units, Committees) Anyone can view content. Non-unit members can subscribe as observers. Unit members can view and add content. Can apply to both units and interest-based groups.

6.3. Private Community: Only community members can view and add content.

6.4. Communities also have the following special requirements

6.4.1. The Council group requires the ability to have private conversation within a community, in which only members of the group can read and participate. The Council group also requires the ability to have public conversations in which members can read but not post. If this requirement is possible, it may be more consistent to implement this feature as a separate type of private group.

6.4.2. If possible, some community features would be restricted to community members (closed), while other community features are open to all members either to read (limited) or read and post (open). The Community Administrator should be able to determine which aspects of that group are open, limited, or closed.

7. Functional Requirements

7.1. When a user creates a Drupal account, show the Terms and Conditions for participation in the website.

7.2. ALA will setup two new project email accounts: alaconnect-admin@ala.org and alaconnect@ala.org, alaconnect-admin@ala.org will eventually be configured to forward email to the ALA project team. Urban Insight will be granted temporary access to alaconnect-admin@ala.org during development in order to perform testing and configure necessary web-based services.

8. Design requirements

8.1. UserWorks will be developing proposed website designs based on wireframes provide by Urban Insight/ALA.

8.2. UserWorks will develop the website designs based on the approved design templates for the main ALA website.

8.3. Design should be liquid (expand to fit available screen width).
8.4. Design should be optimized for a 1024-pixel screen width, and ideally degrade gracefully to 800-pixels.

8.5. Consider the use of a different thematic color for each of the four different types of communities: Committee, Unit, Special Interest, Event.

8.6. Default ALAconnect: UserWorks will design the main page that is displayed when a public (non-registered) user visits the website.

8.7. ALAConnect Dashboard: UserWorks will design the dashboard page that is displayed when an ALA member logs into the ALAconnect website.

8.8. Community Homepage, Committee theme: UserWorks will design a typical Community homepage for a committee, which will include space for a committee logo and committee name. (See Community/Committee Home wireframe)

8.9. Community Homepage, Unit theme: UserWorks will design a typical Community homepage for a unit theme, which will include space for a division logo and the unit name. (See Community/Committee Home wireframe)

8.10. Community Homepage, Interest Group theme: UserWorks will design a typical Community homepage for a special interest community, which will include space optionally for a logo and the community name. (See Community/Committee Home wireframe)

8.11. Community Homepage, Event theme: UserWorks will design a typical Community homepage for a community focused on an event (such as a conference). The design should include space optionally for the event name, date, and logo or primary image. (See Community/Committee Home wireframe)

8.12. Content Page: UserWorks will design a typical content page displaying typical content, such as a page or forum post.

8.13. User Profile Display: UserWorks will design the preferred page that will display a user’s customized profile.

9. Information Architecture

9.1. Header Elements: The typical ALAconnect page will contain the following header elements:

9.1.1. Main navigation will include:
   ALA Home* | Browse Communities** | About ALAconnect | Help | Contact Us | Login / Register / Profile [Changes depending on role]

   * To be determined if this is ALAconnect Home or ALA Home.
   ** To be determined if this is Communities or “Browse Communities”.
9.1.2. [ ] Search | Advanced Search (option)

9.1.3. Breadcrumbs: ALAconnect Home > Community Name > Section > etc.
Breadcrumbs will be generated by the CMS.

9.1.4. Header from new ALA website design

9.2. Standard Page Layout

9.2.1. Left side: My/Personal/User-related information and content

9.2.2. Right side: Contextual and Community content

9.2.3. Center column: Primary content

9.3. Default ALAconnect Home Page Content: Please see wireframes for additional detail.

9.4. ALAconnect Dashboard Content: Please see wireframes for additional detail.

9.5. Community Home Page Content: Please see wireframes for additional detail.

10. Taxonomy and Tagging
The project team has identified the following user roles. An access permissions matrix is provided in the following table.

10.1. General All content; Free tagging; Optional.

10.2. Interests Profile; Free tagging; Optional.

10.3. Expertise Profile; Free tagging; Optional.

10.4. Community Defines which community content is in; Multiple select; Required (1)

10.5. Unit All content; Multiple select; Optional. Approximately 200 units

10.6. Committee All content; Multiple select; Optional. Approximately 1300-1400 active committees, 2700 total.

10.7. Year All content; Multiple select; Optional. Default view is current year, user-editable.

10.8. License status License status for uploaded files; Multiple select; Optional.

11. iMIS Integration
11.1. ALA is developing an Authentication web service which will return a value if the provided iMIS ID and password can be validated against iMIS. This web service will be used for authentication.

11.2. ALA is developing a GetProfile web service which will return a single row dataset of profile information for a specified iMIS ID (See WebService_Specs_v2.pdf). Selected fields returned are:

   11.2.1. ReturnValue of 0 validates iMIS ID (username) and password
   11.2.2. ID
   11.2.3. First name, Last name
   11.2.4. Member type and member type description
   11.2.5. Paid_thru

11.3. ALA is developing a GetRegParticipants web service which will return multi-row dataset of current participation information for a specified iMIS ID. (See WebService_Specs_v2.pdf). Selected fields returned are:

   11.3.1. Current committee(s)
   11.3.2. Current units

11.4. ALA is developing a GetSocialParticipations web service which will return a multi-row dataset of historical and current participation information for a specified iMIS ID. (See WebService_Specs_v2.pdf)

11.5. **Batch Imports**: My ALA will batch import iMIS membership data to update member profiles.

   11.5.1. iMIS will make three batch files available using existing web service XML formats:

      11.5.1.1. GetProfile
      11.5.1.2. GetRegParticipations
      11.5.1.3. GetSocialParticipations

   11.5.2. An ALAconnect import process will connect to the iMIS membership data repository and import each file to a temporary location on the ALAconnect hardware.
11.5.3. An import process will parse the GetProfile XML file and update membership user data in Drupal.

11.5.4. An import process will parse the GetRegParticipations XML file and update membership user data in Drupal. (This could be phase 2.)

11.5.5. An import process will parse the GetSocialParticipations XML file and update membership user data in Drupal. (This could be phase 2.)

11.5.6. Based on membership user data imported, member roles or community memberships may be added or removed.

11.5.7. The import process will happen nightly.

11.5.8. The import process will overwrite any data or settings that exist in Drupal for the fields that the import is set to populate.

11.5.9. The import process will log results.

11.5.10. Upon completion of the import, the temporary membership data files will be automatically deleted from the MyALA hardware.

11.6. **Membership Security Whitepaper:** To ensure the highest level of security, Chris Steins of UI and Tim Smith of ALA will prepare a Membership data security white paper that outlines the security precautions, processes, risks and mitigations in transferring membership data to an external system.

11.7. **Data Dictionary:** ALA will develop a summary data dictionary that clarifies the relationship of data from iMIS to ALAconnect community memberships.

11.8. **Membership Information Matrix:** UI and ALA will prepare a membership information matrix that clarifies how user roles and community participations are altered based on data imported from iMIS. Examples include:

- A Committee chair will be set as Community Administrator for his/her community in Drupal.

- Which of the 29 of the 81 member types are “members”.

- ALA members will be auto-joined to the communities in which they have subscriptions. e.g., a new member of the PLA division be will be automatically added to the PLA community.

- Every member is automatically a member of BigALA.
• Committee members are automatically added to their community; Committee Community manager will be set manually; if the iMIS role is “SL”, the user is moved into the committee community in the staff admin role.

• For events, users are automatically added to the event community. Staff admin role will be set manually. Community administrator is set manually.

• For special interest groups, all roles are manually set.

11.9. ALAconnect will not push information back into iMIS at this time.

12. **Authentication and Authorization**

*Authentication verifies who you are (your credentials). Authorization verifies what you have access to, or what you can do.*

12.1. Authentication: Authentication to ALAconnect will be performed via a Drupal module by using ALA’s iMIS Authentication web service or an iMIS COM service running locally on the iMIS server. For more details about the various authentication options, please see the following memo: *ALA Online Communities Authentication & Single Sign On Strategy, April 22, 2008, prepared by Chris Steins.*

12.1.1. A user supplies the user’s username and password on the Online Communities website.

12.1.2. UI will develop an iMIS Drupal module that communicates with the ALA iMIS Authentication and GetProfile web service.

12.1.3. If the iMIS Authentication web service confirms the user’s credentials, the iMIS Drupal module will authenticate the user to access Online Communities.

12.1.4. If the user exists in Drupal, the Drupal module will proceed to the authorization update step.

12.1.5. If the user doesn’t exist in Drupal, a new user account will be created for the member. (This may move to phase 2.)

12.1.6. If the user doesn’t exist in iMIS, the user will be asked to attempt to login again, or select a non-member registration option.

12.2. Authorization: Upon successful login, MyALA will attempt to update the user’s profile (roles, memberships) by using ALA’s iMIS GetParticipations web service.
12.2.1. The iMIS Drupal modules will communicate with the ALA iMIS GetParticipations web service by passing it the username and password entered by the user when authenticating.

12.2.2. If the iMIS GetParticipations web service returns information about the user, the iMIS Drupal module will update the user’s profile according to a previously defined matrix of permission/iMIS data.

12.3. Collage to Drupal Authentication: A user who logs into the ALA’s primary Collage-powered website should be automatically authenticated to the Drupal website without being required to login again.

12.4. Drupal to Collage Authentication: A user who logs into the ALAconnect Drupal-powered website should be automatically authenticated to the Collage website.

13. Wikis / Collaborative Documents
ALA units and members are currently maintaining a variety of wikis using MediaWiki hosted on Dreamhost with custom subdomains. There is no shared authentication or content repository for these wikis. Many users find the wiki markup confusing and are using the wikis to develop simple websites in the absence of a better alternative.

13.1. ALA will encourage users to begin using editable nodes in Drupal in place of wikis.

13.2. Pages created by users will be assigned compact URLs, for example: my.ala.org/node/12345.

13.3. Pages created by users need to log changes to the page, including who performed the last update.

14. Moodle Integration
ALA is currently running Moodle 1.8.2 on a shared Dreamhost web hosting account at classes.ala.org.

14.1. The system will enable the community administrator to add an RSS feed from one or more Moodle courses to the ALAconnect community to display current Moodle activity for the selected courses.

14.2. ALA will standardize the user of usernames in Moodle to match iMIS UserIDs.

14.3. The system will display the courses in which a user is registered in the user’s profile, based on information in the Moodle course registration system.

14.4. Logins to Moodle should be part of the overall single sign on strategy. This can be accomplished by developing a Moodle login routine that authenticates users against the iMIS authentication module and/or the local Moodle user table. While we are noting this requirement, UI does not interpret Moodle single sign on integration as
part of its scope of work, although we would be pleased to address this requirement in phase 2.

15. Blogs
ALA is currently supporting blogs using b2evolution and WordPress. B2evolution blogs are run on a Linux server hosted by ALA. WordPress blogs are hosted on a shared Dreamhost web hosting account with custom subdomains. Migration of these legacy blogs is covered in the requirements document under Data Conversion.

15.1. A blog post is owned by a user.
15.2. Each community can have zero, one, or more collections of blog posts.
15.3. A blog post can be associated to zero, one, or more communities.

Please also note that the Drupal model for blogs is user-centered, and not blog-centered, which is different from the WordPress model. In WordPress, you can have a blog with many contributors. In Drupal, you can have many blog posts, which can be categorized in any number of ways. The requirements set forth below are stated in the WordPress model, and may not easily translate to the Drupal model.

15.4. A blog owned by a community can have multiple participants.
15.5. Community blogs can be configured in three configurations:
   15.5.1. A blog can be open (anyone can read; community members can post).
   15.5.2. A blog can be regulated (only community members can read and post).
   15.5.3. A blog can be private (community members can read, selected members can post).

16. OpenAds
ALA is currently using OpenAds 5.8 patch J to deliver banner and text advertisements across several websites. An example of OpenAds in use is alfoc.us.ala.org.

16.1. ALA will either provide UI with access to the OpenAds server, or provide a sample code snippet for use in testing.
16.2. UI will integrate OpenAds code into the ALAconnect page template designs based on the code provided by ALA and the design by UserWorks.

17. Sympa
ALA is currently using the Sympa mailing list server to manage 1000 active lists, some with over 10,000 subscribers. The ALA Sympa installation is hosted at lists.ala.org.

17.1. UI will configure a community to enable the display of recent posts to one or more Sympa lists (and links to archived emails) once one or more Sympa mailing lists are selected for inclusion by the community administrator.

17.2. ALA will research how to get a real-time list of mailing lists from Sympa to allow the community administrator to select the list(s) from which to display recent posts.

18. Web 2.0 Services Integration

18.1. Twitter: User can use a widget to display their twitter status on their profile page.

18.2. Facebook: User can use a widget to display their Facebook status on their profile page.

18.3. Profile URLs: If the user provides the URL for an RSS feed, the feed will be displayed on the user’s profile page.

18.4. Delicious: Display bookmarks on profile page.

18.5. Second Life: Enable gadget to show status in Second Life.

18.6. RSS: Enable user to provide multiple RSS feeds, and display these on the profile page.

18.7. Dopplr: Display user’s travel plans from Dopplr (http://dopplr.com/) on profile page.

19. User Profile

User profiles will be initially established based on information provided via iMIS. Users will have the ability to customize the following aspects of their user profile.

19.1. Interests (via free-tagging).

19.2. Upload a photo.

19.3. Website URLs.

19.4. Professional work history.

19.5. Educational history: Undergraduate, Graduate, PhD. (If we provide a drop-down selected list for year and school name, this will provide a social networking opportunity in Phase 2.) Include an “add more” button for more than one listing.

19.7. Indicate if user is a mentor or needs mentoring for selected expertise.

19.8. IM screen name.

19.9. Twitter name.

19.10. RSS feeds.

19.11. Facebook status.


19.15. Friends / buddy list / add buddy (via Drupal)

19.16. LinkedIn Profile URL.

19.17. Things I want to learn more about. (via free-tagging).

19.18. ClaimID URL (http://claimid.com/)

20. Contact / Friends List

20.1. Members can maintain a friend list.

20.2. Members can make a request to a friend to create a friend connection.

20.3. The receiving member can confirm or deny the request.

20.4. If possible, Friends module should recommend friends with similar interests, similar communities, similar education, or similar expertise based on profile settings.

21. Online Status

21.1. Status should enable ability of a user to see the online status of others.

21.2. Status should enable users to see affinity messages or icons with online status. For example, if two users are members of the same community and are online at the same time, there should be some visual indication. Other affinities include: users in the same units, same interests, same expertise.

21.3. Status should show IM status of user if user provided an IM username in member profile.
21.4. Status should show Twitter status if the user provided a Twitter username in the member profile.

21.5. Status should show Facebook status if the user provided a Facebook username in the member profile, and if this is possible via the Facebook module.

22. Discussion Forum

22.1. Breadcrumbs should appear as ALAconnect > CommunityName > Forums > Topics.

22.2. The Community Administrator can create a new forum.

22.3. A community can have any number of forums and any number of topics within each forum.

22.4. A Community member can subscribe to a forum to receive email notification of posts in the forum. By default, no one is subscribed to the forum.

22.5. Forum generates RSS feeds.

22.6. Forum can be configured in three configurations:
   
   22.6.1. A forum can be open (anyone can read; anyone can post).
   
   22.6.2. A forum can be regulated (anyone can read; community members can post)
   
   22.6.3. A forum can be private (only community members can read and post).

23. Chat

23.1. Concurrently-logged on users can text chat with one another.

23.2. Chat transcripts can be stored for later review.

23.3. Chats can be scheduled in advance.

23.4. Ideally, the chat window will be accessible to users with disabilities.

24. Messaging

24.1. Members can opt-in to receive messages via the system. There are two options:
   
   24.1.1. Member can have messages delivered to his ALAconnect account.
24.1.2. Member can be notified via email of a new message that includes the full text of the message and a link to it.

24.2. ALAconnect messages can be stored on the system indefinitely by member.

24.3. Member can send messages individually to other users.

24.4. The community administrator can send a message to the entire community.

25. Surveys

25.1. Community administrator or staff administrator can create new surveys.

25.2. Surveys can be set to collect responses anonymously or tied to member profiles.

25.3. Survey results can be open (public) or closed (private).

25.4. Survey module should support as many survey collection types as possible when designing a new survey.

25.5. Survey module should enable results to be exported in csv format.

25.6. Survey module should provide some reporting options.

26. Poll/Voting

26.1. Community administrator or staff administrator can create new polls.

26.2. Poll results should be open (public).

26.3. Polls and poll results should be archived when poll closes.

27. Announcement

An announcement is a page on the community website that contains time-sensitive information and be used to notify community members about important events, issues, etc.

27.1. In any community, any community member can post an announcement

27.2. Announcements can be scheduled to appear at a date/time in the future and set to expire at a specific date/time.

27.3. Announcements can be tagged with free tags

27.4. Announcements can be made more visible by making the announcement “sticky” so that it appears in the center of the community’s home page.
28. **FAQs**

28.1. FAQs will be discrete pages (nodes) that can be edited.

28.2. FAQs will inherit permissions from their communities.

29. **Event Calendars**

29.1. An event calendar can be enabled for a community.

29.2. There will be a “master” ALAconnect calendar.

29.3. When an event is added to the community calendar, the user can optionally decide to include the event on the master ALAconnect calendar.

29.4. Any community member can add an event to the community calendar.

29.5. Event fields will include: date, title, start date/time, end date/time, taxonomy, description/content, location, include master calendar field, free tagging.

29.6. Users should be able to display a calendar that combines or excludes events from all of their communities. (User can choose to show all events.)

30. **File/Document Upload and Storage**

*The file/document upload and storage feature enables users to upload and share files.*

30.1. Users should have the ability to upload a file. A file can be any of the following formats:

- Audio file (mp3)
- Video file (avi, flv, wmv)
- Microsoft Word document (.doc, .docx)
- PDF document (.pdf)
- Microsoft Excel document (.xls, .xlsx)
- Microsoft PowerPoint document (.ppt, .pptx)
- Image file (.jpg, jpeg, .png, .gif, .tif, .tiff)

30.2. User can create a node, and upload one or more documents to be associated with the node. (Presumably the node contains metadata about the documents.)
30.3. Upon upload, user can set the file license status/taxonomy.

30.4. ALA will set an appropriate maximum file size for uploads.

31. **Image Gallery**

*The image gallery is used in place of the file upload when the image is part of a categorized collection of images.*

31.1. Members can upload images.

31.2. Members can specify a collection to which the image belongs when uploading images.

31.3. Community administrator determines the available collections. One collection, or make broad collections, separate from tagging.

31.4. Meta data for an uploaded image should include: caption, free tagging, year, license status, community, user who posted the item.

31.5. ALA will set an appropriate maximum file size for uploads.

32. **Member Search**

32.1. Members will be able to perform a search of other members. Members can filter/search the membership directory by:

32.1.1. Last name

32.1.2. First name

32.1.3. Organization

32.1.4. Business City

32.1.5. Business State

32.1.6. Unit Membership

32.1.7. Interests

32.1.8. Expertise

32.1.9. Status (Member/Staff)

32.2. Members who have not released their profile via checking the option in their profile settings show up in black, but their profile is not available as a link.
32.3. Default information displayed in the search results includes: name, title, organization and business address, unit membership, link to full profile, if a member.

32.4. Registered users don’t display in search results.

32.5. Staff are displayed in search results with a staff indicator icon/name.

33. **Syndication/RSS**

33.1. All content that can be syndicated via RSS should be.

33.2. Ability to check RSS feed using username and password for closed group.

33.3. Enable the member or community administrator to add a display widget on a community homepage to pull in external RSS feed on the homepage.

34. **Community Configurations**

34.1. Provide three “out of the box configurations” for communities:

34.1.1. Open – anyone can join, with preset modules.

34.1.2. Regulated: Committee members are authors, while other members can be observers.

34.1.3. Private community: All content is set to be private.

34.2. Proposed Default Community Configurations are as follows:

<table>
<thead>
<tr>
<th>Community Features</th>
<th>Open</th>
<th>Regulated</th>
<th>Private</th>
</tr>
</thead>
<tbody>
<tr>
<td>Announcements</td>
<td>✓</td>
<td>✓</td>
<td>✔</td>
</tr>
<tr>
<td>Discussion Forum</td>
<td>✓</td>
<td>✓</td>
<td>✔</td>
</tr>
<tr>
<td>Chat</td>
<td>✓</td>
<td>✓</td>
<td>✔</td>
</tr>
<tr>
<td>Messaging</td>
<td>✓</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>Surveys</td>
<td>✗</td>
<td>✓</td>
<td>✗</td>
</tr>
<tr>
<td>Poll/Voting</td>
<td>✗</td>
<td>✓</td>
<td>✔</td>
</tr>
<tr>
<td>Online Status</td>
<td>✓</td>
<td>✓</td>
<td>✔</td>
</tr>
<tr>
<td>FAQs</td>
<td>✓</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>Event Calendar</td>
<td>✓</td>
<td>✓</td>
<td>✔</td>
</tr>
<tr>
<td>Document Repository</td>
<td>✓</td>
<td>✓</td>
<td>✔</td>
</tr>
<tr>
<td>Image Gallery/Collection</td>
<td>✓</td>
<td>✓</td>
<td>✗</td>
</tr>
<tr>
<td>Add RSS Feed</td>
<td>✓</td>
<td>✓</td>
<td>✗</td>
</tr>
<tr>
<td>Link Directory</td>
<td>✓</td>
<td>✓</td>
<td>✔</td>
</tr>
</tbody>
</table>
35. Legacy Data Migration/Integration

35.1. .NET Nuke Online Community

35.1.1. There are approximately 2,300 documents in the .NET Nuke Community. ALA will evaluate these files and determine how many need to be migrated, since many appear to be duplicates of system configuration files.

- Microsoft Word documents: 1,309
- PDFs: 589
- Microsoft PowerPoint files: 53
- Rich Text Format (RTF) files: 67
- TIF (image) files: 29
- Microsoft Excel files: 70
- ZIP (archive) files: 6

35.1.2. Urban Insight will develop a migration plan to migrate as many of the documents from the existing .NET Nuke community as possible.

35.2. Blogs: ALA is currently supporting blogs using b2evolution and WordPress. B2evolution blogs are run on a Linux server hosted by ALA. WordPress blogs are hosted on a shared Dreamhost web hosting account with custom subdomains.

35.2.1. ALA members can elect to have their blog posts imported upon creation of the new ALAconnect community.

35.2.2. UI will work with ALA to identify a sample blog that will be necessary to migrate, and use this WordPress blog as a template to attempt to script a migration process.

35.2.3. B2evolution blogs will be manually migrated by ALA, if necessary.

35.3. Al Focus, Home of American Libraries Magazine videos (alfocus.ala.org) is currently running Drupal. Migrate videos, comments, categories, tags, themes, trackbacks, and users.

35.4. Techsource: techsource.ala.org/blog Migrate posts, authors, images, templates, comments, tags, and trackbacks.
35.5. **American Libraries Forum**: (al.ala.org/forum/) is an online forum maintained using PHPBB online forum, hosted by Dreamhost. There are approximately 20 topics, with a total of approximately 35 posts. Migrate topics, replies, and users who have contributed content.

36. **Analytics**

36.1. Urchin will be configured to automatically access (via FTP) and download ALAconnect log files and update analytics nightly.

36.2. Google Analytics will be configured for use on the ALA website.

36.3. Automated monthly Google Analytics reports will be emailed to alaconnect-admin@ala.org.

37. **Risks**

*The best way to ensure a successful project is to openly and explicitly identify the project risks, and to identify how these risks will be mitigated.*

37.1. **Aggressive Timeline**: The project team has identified an aggressive timeline for the project. The original planned completion date was June 6, 2008. Recognizing an official project start date of April 2, 2008, this allows just over two months for the entire project. *Mitigation: The project team is working to identify interim deliverables that will satisfy the June 6, 2008 deliverable requirements, while simultaneously outlining an aggressive, but still responsible and achievable 5-month development schedule.*

37.2. **Membership Data Security**: Confidential ALA membership data will need to be transferred between ALA’s iMIS server and the ALAconnect server. This data must remain secure. *Mitigation: Chris Steins of UI and Tim Smith of ALA will prepare a Membership Data Security Statement which outlines the security precautions, process, risks and mitigations that the team is undertaking to mitigate this risk.*

37.3. **iMIS/Drupal Integration**: Drupal must integrate with ALA’s iMIS system to import user information and to authenticate members. No Drupal/iMIS integration modules exist, and how the authentication process will work is presently unclear.

- *Mitigation #1: ALA is in the process of developing iMIS web services which will provide a standardized interface and data structure for transferring data and authentication. However, the timeline for completion of these web services is not yet know.*
- **Mitigation #2:** Urban Insight will treat as a critical path item the creation of several sample data sets in a standardized format that can be used during development to test the eventual membership data import process.

- **Mitigation #3:** Urban Insight expects to partner with one or more developers to create an iMIS integration module for use by the broader Drupal community.

- **Mitigation #4:** Urban Insight has identified as key elements the creation of a data dictionary and data matrix to define the relationships between iMIS data and Drupal roles/communities. This will aid in the current development process, as well as document system operations for future developers and ALA managers.

37.4. **Drupal Upgrades:** Security patches and minor version upgrades to Drupal core are released approximately monthly. Depending on the number of installed modules, there may be a variety of modules that need to be patched or upgraded each month. Additionally, new versions of Drupal are released approximately annually. Modules may take weeks or months to catch up, and certain modules may not ever be upgraded, requiring that modules in use by ALAconnect would need to be replaced or maintained by ALA. **Mitigation:** We will attempt to identify during the requirements phase the most popular and flexible modules for use in Drupal. ALA should plan and budget for these upgrades to ensure that the website is secure and operating effectively.

37.5. **Development Environment Setup:** Identifying, budgeting for, acquiring, and establishing the appropriate development, staging, and production environment may be a lengthy process. In order to proceed rapidly with development, an appropriate development environment must be identified and provisioned quickly. **Mitigation:** ALA and UI have, even before the official start of the project, identified the hardware, network, software, backup and security requirements for the ideal hosting development and production environments.

37.6. **Automating Complexity:** The new system will require complex automation for data import and transformation. There are a variety of failure points that can result in system failure or corrupt data. **Mitigation:** UI and ALA should implement manual weekly “sanity checks” by using a clearly-defined checklist to confirm system health and identify pending failures.

37.7. **Web 2.0 Service Integration:** In order to offer a variety of services to users, we will be integrating a variety of Web 2.0 services, such as Flickr, Facebook, Twitter, and others. Web 2.0 services are fast-moving, as new services are created, existing
services change their APIs, and older services are retired. Mitigation: UI will initially integrate the Web 2.0 services for which there are existing modules for Drupal.

37.8. **Ensure User Adoption:** Encouraging users to adopt a new system is always challenging. Adding to this challenge is that some progressive users have already adopted alternative systems (such as WordPress, or other non-ALA-based systems), and they may be hesitant to discard their previous investment by moving to a new and unproven system. **Mitigation #1:** ALA and UI should seek to ensure that whatever features are offered in the new ALAconnect system work well and are well-supported. It is preferable to offer fewer, but more stable, services. **Mitigation #2:** ALA and UI should plan to continue rolling out and improving the system even after the initial launch, to demonstrate to users that ALA is making a clear and sustained effort in the new system.

37.9. **Ensure Accessibility:** It is important that the website comply with Section 508 requirements for accessibility. ALA has an active and vocal community of users who advocate for accessibility. Ensuring accessibility, particularly with modules that may not fully comply with Section 508 requirements, or with user-entered content, can be a significant challenge. **Mitigation #1:** Urban Insight will perform accessibility testing during both theme design and pre-launch to ensure that system templates are fully accessible. **Mitigation #2:** To the extent possible, UI and ALA should ensure that making content accessible is addressed in user training materials.

37.10. **Legacy Data Conversion:** There are a variety of legacy data sources, including WordPress installations, Drupal websites, and the existing .NET Nuke-based online community. Data conversion can be a complex and lengthy process, especially when it cannot be easily automated. **Mitigation:** Shortly after we complete the requirements document and CMS architecture, we will begin to develop a data migration plan and schedule to identify which legacy data sources we will be able to migrate within the project budget, and how we propose to perform the migration. Additional data migrations that cannot be easily accomplished may be moved to a later phase of the project.

37.11. **Design Timeline:** The timeline to request UserWorks to develop design comps for several key pages on the ALAconnect website is aggressive. **Mitigation:** Urban Insight will treat design development as a critical path item, and will develop wireframes for UserWorks as quickly as possible.

37.12. **Scope Shift/Crep:** In any large, multi-month project, requirements and goals change or shift during development as the client and consultant learn more about the project at hand. If a project shifts too much, the timeline and budget feel the impact. **Mitigation #1:** The creation of a clearly-stated requirements document is a key step in
identifying the project scope. Mitigation #2: Urban Insight will promptly notify ALA when UI feels that the scope is shifting, and ALA and UI will confront the issues together promptly.

38. Success Metrics

It’s difficult to manage what you can’t measure. In order to determine if this project is successful, it is useful to define initial criteria that can be measured to define success upon project completion.

38.1. User adoption: Achieve user adoption of 5% of members within 6 months. Adoption is defined for this purpose as having logged in within the last 30 days. (5% x 65,000 members = 3,250 members logged in within the last 30 days.)

38.2. Community creation: Achieve a 5% quarterly increase in the creation of new interest group communities.

38.3. User activity: Achieve a 5% quarterly increase in user logins.

38.4. Content activity: Achieve a 5% quarterly increase in the creation of content in the form of nodes.

38.5. Community activity: Measure the growth in number of communities per month with new content.

38.6. ASCLA Validation: Achieve a Positive report from ASCLA that validates that ALAconnect meets Section 508 guidelines.

38.7. Project Completion: Achieve substantive completion of Urban Insight’s contractual requirements.

38.8. Analytics: Achieve a 5% quarterly growth in overall web traffic to ALAconnect, as measured by Google Analytics and Urchin statistics.

38.9. .Net Nuke vs. Drupal: Compare the web traffic to the new Drupal-based online community for a six-month period as compared to the existing .NET Nuke-based online community.

38.10. Ad Delivery: Measure the number of ads delivered via community pages.

38.11. Browser Compatibility: Document that the system and templates work in current browsers. As of April 3, 2008, current browsers were identified as: Firefox 2 on Win/Mac, Internet Explorer 6 and 7 on Win.

39. Timeline

For reference, key project dates through the creation of this document include the following:
• March 17-18, 2008  Project Kick-Off Meeting at ALA in Chicago
• April 1, 2008  Project contract finalized
• April 2, 2008  Official project start date
• April 7, 2008  Draft requirements, CMS architecture document for review
• April 25, 2008  Finalized requirement & CMS architecture document.
• June 6, 2008  Goal to have a sample online community available for review.

40. CMS Architecture

(Please see next page).
This document is a visual representation of the MyALA online communities website development project. It outlines the various components of the project and their interaction and integration with other applications and websites run by the ALA.

These schematic diagrams supplement and illustrate the Requirements & CMS Architecture document.

## Change Log

<table>
<thead>
<tr>
<th>Version</th>
<th>Date</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0</td>
<td>12 Apr 2008</td>
<td>Initial version</td>
</tr>
<tr>
<td>2.0</td>
<td>25 Apr 2008</td>
<td>Pg. 2: Updated IMIS integration, corrected spellings. Pg. 4: Updated Moodle integration</td>
</tr>
</tbody>
</table>

Prepared by:
Abhijeet Chavan
Urban Insight, Inc.
chavan@urbaninsight.com
Integration Overview

MyALA (Drupal)

Web 2.0 Services
Flickr, Twitter, Blogger, Del.ici.ous, YouTube, RSS, Dopplr, SecondLife, etc.

Sympa Email Lists

OpenAds

Moodle

IMIS E Series

IMIS

Custom Web Services

Profile & Participation Update

Profile & Participation Update

Batch Import

User's courses

User's courses

Via APIs & 3rd party widgets.

Via code snippet

Authentication

Authentication

One-time import

One-time import

One-time import

One-time import

One-time import

Blogs (Wordpress & b2E)

TechSource

AL Focus (Drupal)

ALA Forum (phpBB)

Wikis (MediaWiki)

ALA Main Website (Serena Collage)

MyALA Online Communities Website Architecture

Version: 2.0 Updated: Fri Apr 25 2008
Moodle Integration

- Moodle
  - Course
    - Service, File, or Database Connection
  - User

- MyALA (Drupal)
  - User Profile
  - User

- IMIS
  - Custom Web Services

- Moodle-IMIS Authentication
  (Not part of Scope of work)

- RSS
  - User's registered courses

Version: 2.0 Updated: Fri Apr 25 2008
MyALA Online Communities Website Architecture

Legacy Data: Blogs Import

MyALA (Drupal)

- User
-Blog Post
- Category

Blog

- Blog Post
- User
- Tag

Files

Images

One-time import
MyALA Online Communities Website Architecture

Legacy Data: TechSource

MyALA (Drupal)

- User
- Content Type(s)?
- Category

TechSource

One-time import
Legacy Data: ALA Focus

MyALA (Drupal)

- User
- Category

Content Type(s)?

One-time import

ALA Focus (Drupal)
MyALA Online Communities Website Architecture

Legacy Data: ALA Forum

MyALA (Drupal)

User

Forum

Forum Topic

Category

Forum Comment

ALA Forum (phpBB)

Forum

Topic

User

Reply

One-time import