

Draft Release

Cisco Icon Library

Application Conceptualization

by David Grabel / Andrew Wood

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Cisco UE Storyboard Icon Library - Goals

Short Term:

- **Reduced Cost via Simplification of Icon Upload, Maintenance, Review, and Request Processes**
- **Common Icon Resource Cisco-wide**
- **Improved Access and Usability**
- **Integration with existing UE and Engineering Resources**
- **Improved Search Capability**
- **Non-technical Maintenance**
- **True Multiplatform Icon Support and Delivery**
- **Statistics of Site Usage / Users**
- **Third Party Access to Public Folders**

Long Term:

- **Reduced Cost via Centralized Icon Repository**
- **Creation of a Development Version of the Icon Database to support Common UI Framework**
 - icons implemented through use of resource numbers & accessed via database
 - ability to dynamically update icons across all Cisco Applications
 - users would have access to usage reports that detail how an icon is used across applications
 - UE Team would have an easier time monitoring icon usage Cisco-wide

Cisco UE Storyboard

Icon Library - Individual Interview Summaries



Morry Katz

Software Architecture - SMNBU

- Wizard Process for icon selection
- Filtering Process for accessing icons
- Likes vertical and horizontal view
- People don't know where to find icons
- "what's the process for Icon Creation - this needs to be well understood"
- Does not think a sort by newest will be beneficial
 - people will use, but abuse it
- I'm not a heavy user
- Manages a team of engineers
- "Needs a process so engineers get the right thing"
- Engineers don't know how to find what they want.



Ken Chizinsky

Icon Library User / UE Team Lead

- Accesses the Library for application design
- Frequent Icon Library User
- Categories: Actions, Alerts, Devices
- Improved Search capability
 - Metadata:
 - Keyword
 - File type
 - Contact Info
 - Color Palette
- Problems: Could not see all devices at once
- Ability to Filter what's displayed
- Ability to see "All"
- "You should design this for the UE Team"



Jonathan Beakley
Software Engineer

- Infrequent User
- Responsible for CiscoWorks Security Monitor-
- Jonathon uses icons for UI for status and for toolbar buttons.
- Looks at Picasso first. "I've had good results. Used 10 icons."
- He uses screen capture to grab icons.
- If it's a state, he looks under that. If it's a device, he looks there.
- He uses the library visually.
- Questions he asks himself - Is it status or is it action? He looks in the appropriate place. Looking for actions is harder. Actions .
- It's not rocket science.
- He uses the categorization and then scans visually.
- He understand the categorization. "It's usable."
- He looks at the Icon Library to make sure he is not missing anything. He looks at all of our icons before making a selection. Looking through the icons helps me in the creative process. It often leads better understanding and awareness.
- He often modifies icons he finds in the Library



Tiffany Vu

Icon Library Webmaster / UI Engineer

- Infrequent User
- Most search the Library by browsing
- Search is generally ineffective
 - Metadata is added to the document header
- Some business units use the same icons differently
- Lots of requests come in for icons each month
- "Map Devices" category is most popular
- Users Download in sets versus right-clicking
- Icon Library hand coded
- People don't seem to understand States & Actions
- Icon Library needs clean up
 - Remove duplicates and improve categorization
- Application specific icons not placed in Library
- Developers don't understand the title "Objects and Actions" but once they see the table, they understand what it means.
- The search searches both meta tags and image names. The keywords are added to the html pages that holds the icons



Marilyn Krieger

Icon Librarian / Coordinator

- Frequent user
- Uses Library for review and inventory
- Submits icon to webmaster to post
- Would like to see an improved icon upload process
- Alerts for newly added icons
- Would like multi-platform icon support
- "Need a process for categorization"
- Users don't like browsing
- Emailing list for icon creation
- Requirements for Icons:
 - Colors
 - Sizes
 - Formats
- 60 web-based applications
- Does not know the site traffic statistics



Jeff Kouzmanoff
Software Engineer

- Infrequent User
- I look for icons that relate to status, actions, or images of devices
- It's too hard to find what you're looking for
- I'd like to know what applications use which icons
- I don't want to use icons in conflicting ways
- What's the difference between objects and actions & states and actions?
- I don't know what maps mean?
- I would like to just see them – it takes too long
- Icons are too far away from the text – it's hard to connect them
- Not sure about use about what color means
- Icons are too small – applications resize – should the icons scale – applications should have logic to scale – when re-sizing – we should move up to the next size.
- I used right click and – save as
- read labels for function –
- Its not clear which icons are for things you expect people to click on and which are for state.
- Does not use Search
- Doesn't have icons for current equipment – need all icons not just general icons – no icons for my needs?



Larry Jones
Software Engineer

- Infrequent User - "Every release there is a need for a icon or two."
- I look in two places: look at other MCs and I look at Picasso. So far I have been successful.
- The icons look good.
- I Like the organization.
- Likes the resource.
- Likes to see all of icon in one place.
- Has not made any icon creation requests.
- Looks for icons visually.
- When looking for a device, he looks for the object, states, or actions name.
- Sometimes draws his own. He does this at last resort.
- 1st – Looks at other MCs. 2nd – Looks in Icon Library 3rd – Draws his own.
- He understands the categorization.



Greg Wilson
Software Engineer

- Infrequent User - "Every release there is a need for a icon or two."
- I'm working on Devices, so I look for device icons a lot.
- Hunting, looking around, - looking at devices & services – looking for a specific name – alphabetically, looking for specific icon.
- I like to use industry standard icons
- The visual representation of our icons are too similar.
- We have a lot of icons – "twenty types of delete"
- It's nice to see a lot of icons on the same page
- Is there a Cisco-wide icon usage standard?
- I'd like to use icons that are industry acceptable as well as Cisco standard.
- I'd like to have an effective search engine– Alphabetic is a problem – because some things are under Cisco and some are not.
- I have not used search? It's not very visible on the page.
- Down-loaded them in zip format.
- We don't know how to manipulate icons. Recently, I resized a set of icons and got feedback that they weren't clear.
- The icons I used were blue. People commented that they had no color / style. I think there seems to be a conflict between icon design and color states.
- The category terms don't mean anything to me. They are not clear. I'm not a hardware guy. I view the icons left to right / top to bottom.
- I have never used Search



Russ Gregory
Software Developer - Security Monitoring Applications

- Once or twice a week for a while, now only occasionally.
- I search across the Library for icons that relate to processes.
- I usually use Objects and Actions and States and Actions.
- I spend time in the device tree.
- I search visually.
- I look at the terms on the left and then scan horizontally. If I don't like what I find I search through all of the icons.
- Criteria:
 - Product requirements
 - Assumes the icons that are here are standards for other products.
- I like the organization. Seems to make sense.
- It would be nice to have more options. It would be nice if there were a larger selection.
- "No. I don't know what the request process is."

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Icon Library - Personas



Joe Programmer
Software Engineer - icon User

Joe Programmer is a software engineer working on network management applications. Recently, Joe was tasked with a new release of a network monitoring application. Joe works on one project at a time in addition to BU Team meetings and bug report meetings. His project team usually consists of 3-5 individuals, each with their own area of expertise. Joe's specialty is front-end engineering. He takes care of all software look and feel issues. Joe uses Picasso process for application development. Picasso is application development process and a set of GUI widgets that establish a common application framework at Cisco. Often Joe's projects are under staffed and have a tight schedule.

Joe's new project will add functionality to an existing and well-used network monitoring application. Specifically, one of the key additions to the application is a device alerts system. Users will be able to view a list of network devices as a means to assess performance and status. This new functionality is found in various forms in other Cisco applications with the exception of some new states and a wizard process to create new alerts. Joe foresees the need to have a new icon created for the wizard, but should be able to find the alert states icons in the Picasso Icon Library. Joe has used the Icon Library three or four times in the last six months. He generally spends about a half hour browsing the library before he finds what he needs. If he does not find what he needs, he often finds an icon that "looks right" and edits to make it unique.

Icon Library Usage and User Characteristics:

- Infrequent user
- Time sensitive
- Structured Thinker
- Spends a lot of time using various code editors
- Technically proficient
- Not much exposure to visual design principles
- Does not know a lot about graphic manipulation
- Uses the icon library for application development
- Visual browser but looks at icon titles for reference
- May not understand the full breadth of the library



Jane Administrator
Icon Library Coordinator

Jane Administrator is the User Experience Team Member that is responsible for icon creation, usage standards, and archiving. Jane's other responsibilities include interaction design projects and acting as the UE representative for corporate marketing. Jane spends a lot of time in meetings. When icon requests come in, Jane typically calls an outside agency to commission a new icon. During the creative process, the icons get passed back in forth between Jane, the artist, and the requester until all parties agree the design requirements are met.

Once approved, the icon is forwarded to the icon via email to the requestor. The icon is later forwarded to the icon webmaster and is eventually posted to the Icon Library. The webmaster receives the icon in a email message which describes it's name and the metadata to be used for search criteria. The webmaster generally does not have a lot of extra bandwidth and it may be a few days before icons are posted. Only icons that are general purpose get posted to the Icon Library.

Jane has recently received a request to commission a set of icons that will be used in both web and the Microsoft XP applications. The icons should be identical but follow the standards of the development environment. These icons will eventually be migrated to a java applet and SunOS.

Icon Library Usage and User Characteristics:

- Frequent User
- Visual Design Expertise
- Productivity & Graphics application experience
- Not Technically oriented
- Managing the icon library is just one of many responsibilities
- The icon library was designed to handle web icons. Other icons can be posted, but break design rules.
- Use library to manage and distribute icon assets
- Spends time managing icon requests

Add background info on Jane's responsibilities to handle different platform types.

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Icon Library - Use Cases

This section lists likely scenarios under which the users will need to use Icon Library. These are not a comprehensive list of scenarios, but can be seen as a basic set of scenarios that users perform often. Designs, prototypes, products at various stages should be tested against this set of scenarios.

Finding Images in the Icon Library

- Ability to Sort based on name, date, and user-defined order
- Ability to see all icons on one page
- Ability to easily create new categories
- Ability to use a search tool
- Ability to identify a icon by number / identifier

Viewing Icons in the Icon Library

- Ability to see detailed meta data on specific icon usage: what, where, why, how
- Ability to have multiple collections
- Ability to browse and download from the same page
- Ability to see basic meta data and the icon from a list view
- Ability to see icons in a "contact sheet" format
- Ability to see detailed icon information

Downloading Images from the Icon Library

- Support for downloading Zips and right-clicking (Save As)
- Support for multiple file formats
- Ability to have "smart" grouping (ie. icon state collections)

Uploading Icons into the Library

- Non-technical means to upload images and meta data
- Ability to batch upload icon collections
- Ability to upload individual icons
- Ability to add icons and meta data in the upload process
- Ability to allow third parties to login and post icons for review (public folder)

Adding Meta Data to Icons

- Ability to add meta data to individual icons (Edit)
- Name, Collection, Keywords, Tooltip, Author, Contact Info, Color Palette, Size
- Ability to add meta data to icon collections

Organizing the Icon Library

- Easy creation of new categories
- Easy ordering of icons in a collection
- Icons can exist in more than one collection
- Ability to reference an icon by number

Icon Library Statistics

- Ability to get site usage statistics
- Ability to track icon usage in applications

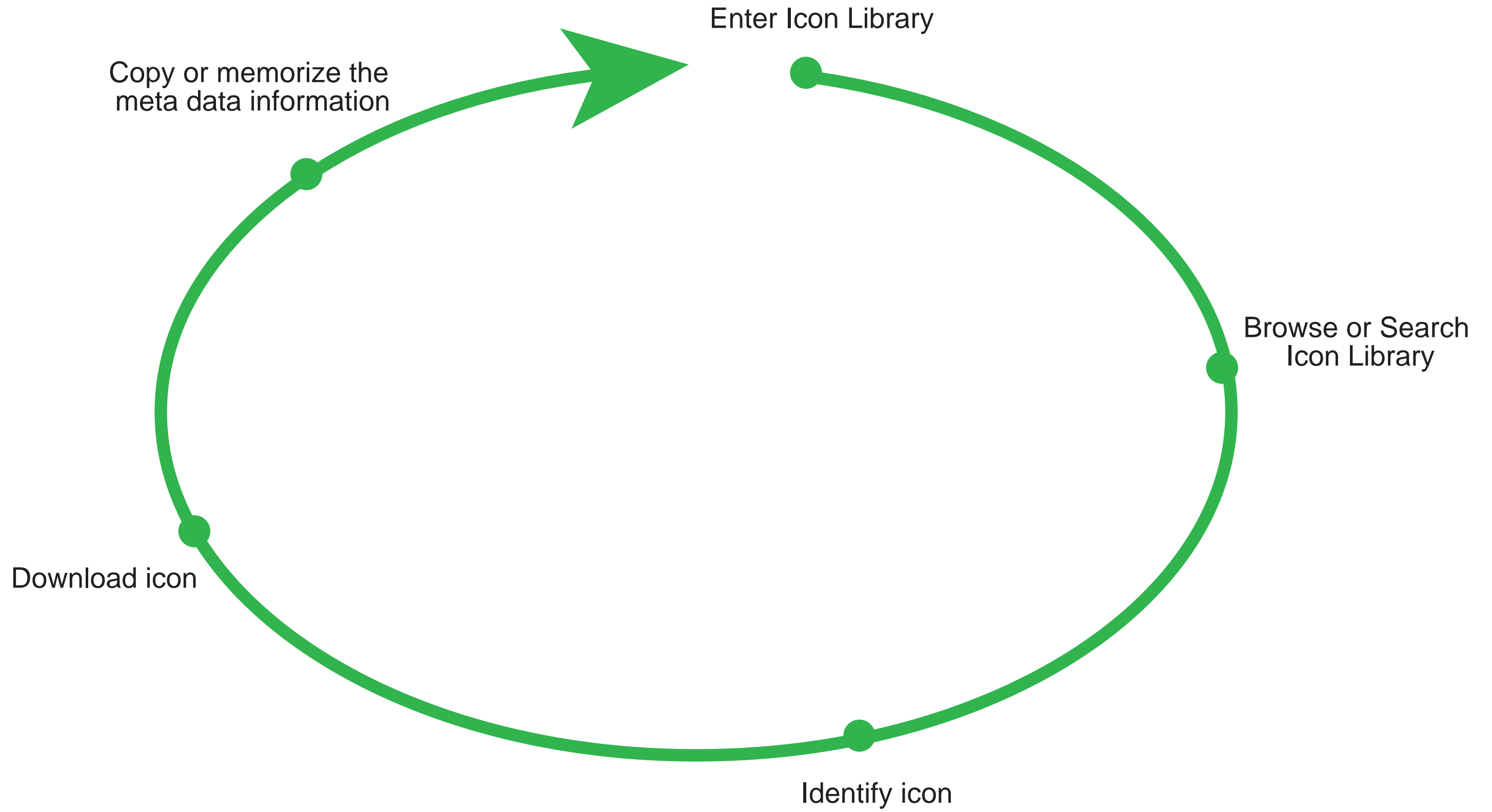
Icon Request Process

- Form-based icon request process

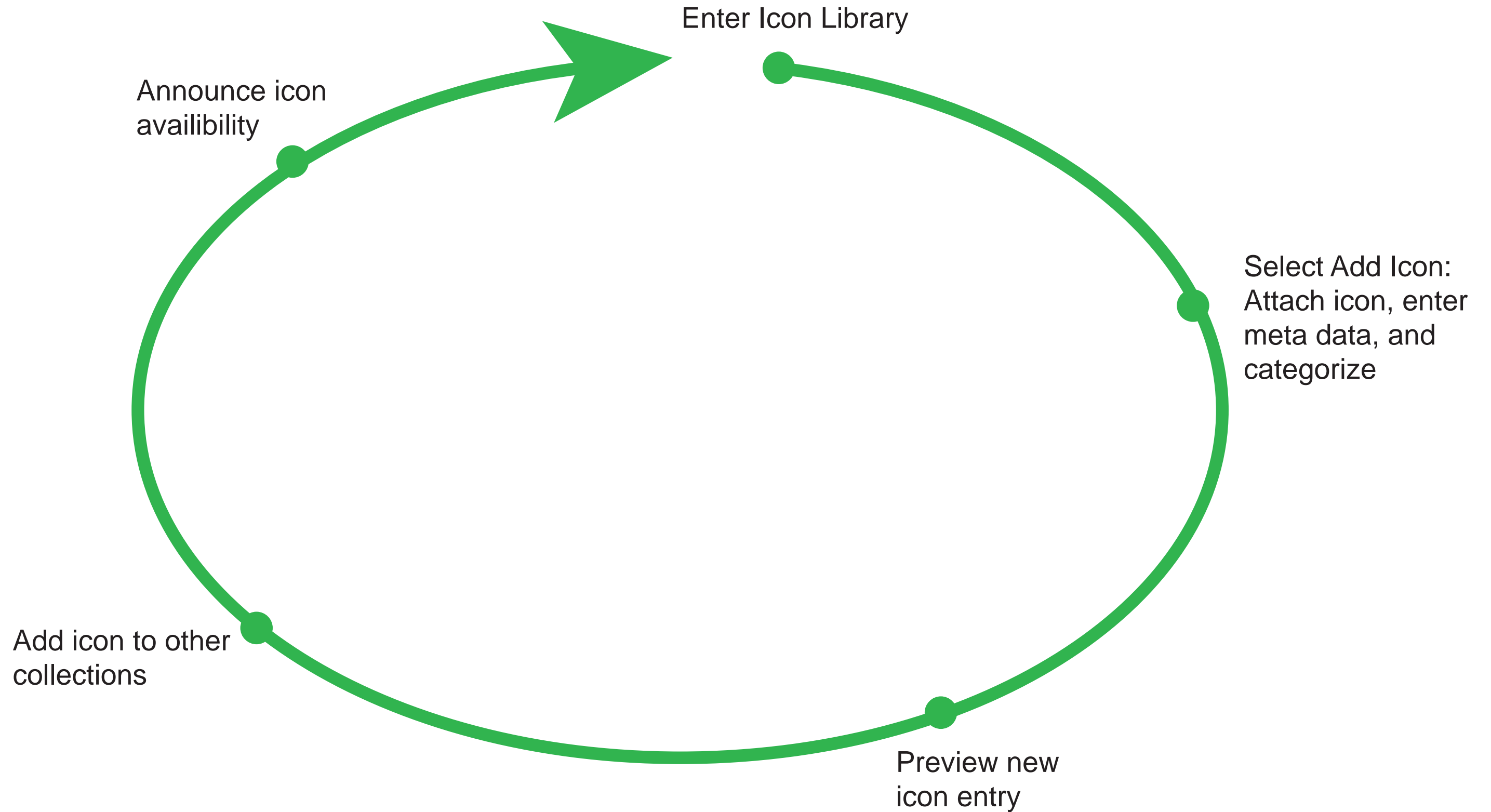
Security

- Administrator, User, and Guest Privelidges
- Public Folder

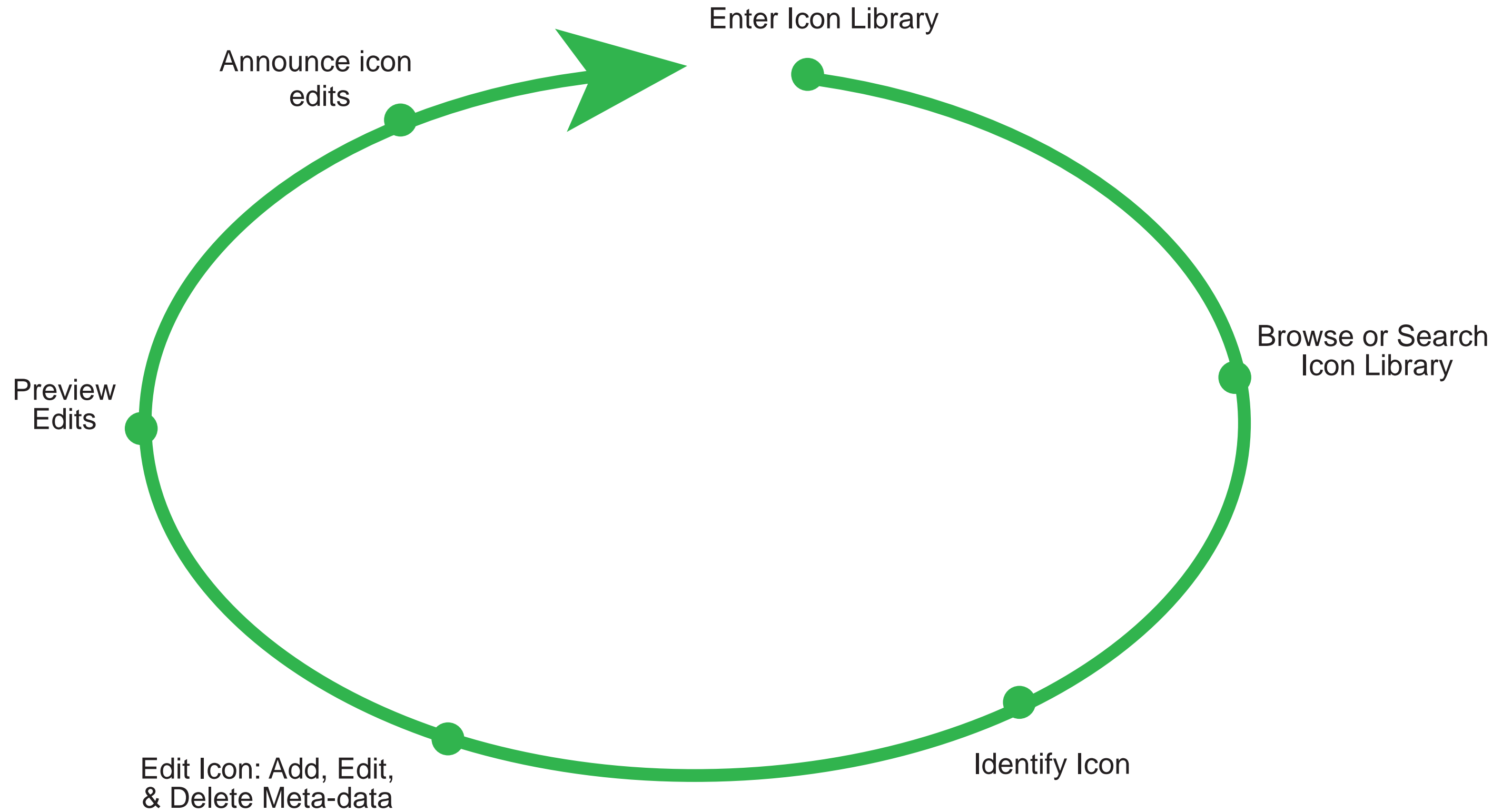
Icon Library - User Model: Accessing Icons



Icon Library - User Model: Administering Icons



Icon Library - User Model: Editing Icon Meta-data



Cisco UE Storyboard Icon Library - Digital Asset Management Products

Extensis Portfolio 6

Extensis Portfolio 6 takes over the grunt work of getting and staying organized by creating a visual database from your selected files and folders. Portfolio provides folder monitoring, database management, thumbnail previews, streamlined cataloging and much more to help you organize, find and distribute your files with ease.



Strengths

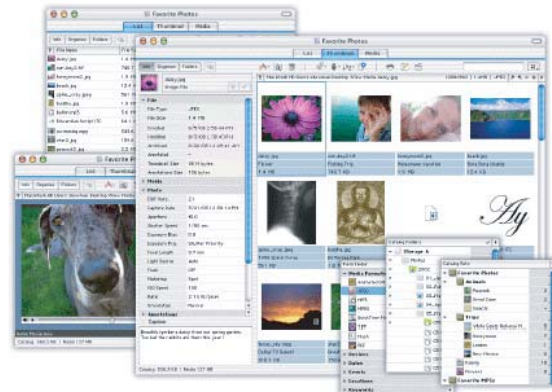
- Strong assets management system
- Maintains source file integrity

Weaknesses

- Confusing file management
- Competing Add, Edit, & Delete controls
- Single user version only
- Product integration w/ Cisco

iView Media Pro

Experience the Pro difference. iView MediaPro 2.0 is essential for creative professionals who need to organize, view, annotate, print, backup and repurpose media, as well as automate their workflow. Includes powerful slide show presentations, custom annotation fields, and support for digital camera raw formats.



Strengths

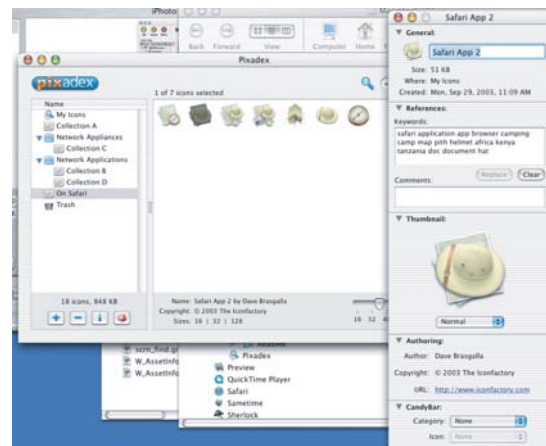
- Strong feature set
- Strong meta-data
- Multi-purpose application
- Best of Class on the Mac

Weaknesses

- Does not display GIFs
- Single user version only
- Product integration w/ Cisco

Pixadex

Pixadex is to icons, what Apple's iPhoto is to images. Brought to you by Panic and The Iconfactory, the team who created CandyBar, Pixadex lets you import, organize and search huge numbers of icons quickly & easily. Pixadex lets you store all of your icons in a single place, organized into collections that you create. This is the program icon lovers everywhere have been waiting for.



Strengths

- Simple interface
- Strong meta-data
- Icon specific application

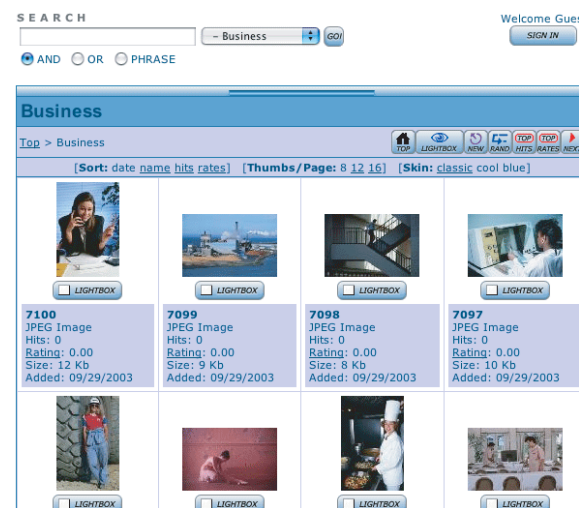
Weaknesses

- Does not display GIFs
- Single user version only
- Product integration w/ Cisco

ImageFolio

ImageFolio is a platform independent, webserver-based, digital asset management software product suite that fully automates the process of viewing, publishing, maintaining, distributing, archiving, and marketing your web-based multimedia gallery or store.

You are viewing a demo of...
ImageFolio Pro 3.1
[Admin Demo](#) | [More Information](#) | [Buy This Product](#)



Strengths

- Web-based application
- Skin-able application
- General purpose image database
- Customizable

Weaknesses

- Proprietary back-end
- Long-term support
- Clunky Design

Cisco UE Storyboard Icon Library - Digital Asset Management Products

Adobe Photoshop Album

Adobe Photoshop® Album® 2.0 is the fast, simple way to find, fix, share and preserve your life in pictures. Sort, arrange, fix flaws, create slideshows to display on your TV or e-mail to the ones you love. Make custom calendars and greeting cards, send your favorite shots to online labs for reprints and custom books. And now, Photoshop Album 2.0 brings you more and better ways to enjoy your digital photos.



Strengths

- Strong UI
- Unique set of image views
- Strong Engineering Team

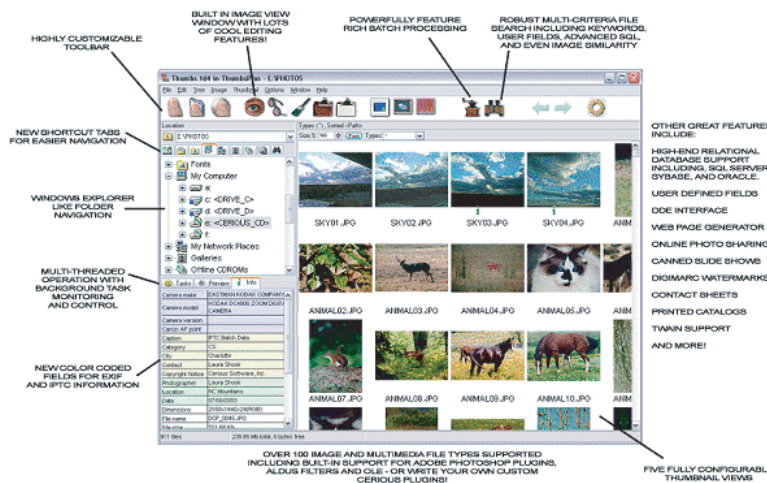
Weaknesses

- Photograph centric
- Does not support need for zip support in meta-data
- Single user version only
- Product integration w/ Cisco

Cumulus

Cumulus 5 Single User is the unique digital asset management tool for creative professionals who need to find, create, and share digital assets such as images, layouts, multimedia, video, audio, and text. It includes powerful search capabilities, multiple-size thumbnail previews, and comprehensive customizing options.

Supporting both MacOS and Windows platforms, Cumulus makes it easy to track assets, no matter where they are...in your computer, across the room, or down the hall...so you can spend your valuable time creating, not searching.



Strengths

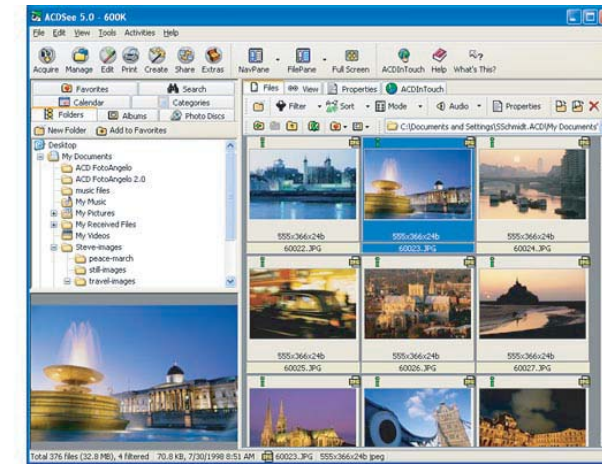
- 5th Generation Product
- Strong Features
- Client-Server Architecture

Weaknesses

- Too much functionality for our needs
- Product seems somewhat aged
- Product integration w/ Cisco

ACDSee

ACDSee digital photo software makes it easy to import, view, organize, print, enhance, share and archive your digital photos. ACDSee is easy to use for everyone from beginner to professional level, and also powerful and flexible enough to meet your needs as your image collection grows. "Indispensable," says American Photo Magazine of this picture viewer.



Strengths

- Simple interface
- Strong meta-data
- Icon specific application

Weaknesses

- Does not display GIFs
- Single user version only
- Product integration w/ Cisco

SAP Icon Library

The set of R/3 icons is subdivided into classes and groups in order to simplify the selection of icons. In addition, for each icon is specified in which usage contexts, such as on pushbuttons, on dialog windows, as field labels, etc. it can be used. Classes are broken down in the following manner:

Class 1 : Class Name (Group 1-2, Group 3, Group 4ff)

Generic, often used icons for standard functions (e.g. Copy, Next Screen, Approve, Information)

Group 1: Selection

Group 2: Navigation

Group 3: Functions

Group 4: Objects/Services

Group 5: States

Group 6: Fields

Icon ID	Name "ICON_..."	Short Text	Bitmap	Long Text	Class	Use
2T	SYSTEM_CUT	Cut	F_CUTO	The selected area is moved by the programmed clipboard.	1-1	Button, Function
2U	SYSTEM_COPY	Copy	F_COPY	The selected area is copied to the programmed clipboard.	1-1	Button, Function
2V	SYSTEM_PASTE	Paste	F_PAST	The contents of the programmed clipboard are pasted into the table where the cursor is positioned.	1-1	Button, Function
2X	SYSTEM_MARK	Selection mark, Select	F_MARK	The table entry where the cursor is positioned is selected. This function is superfluous in the table context.	1-1	Function
4B	SELECT_ALL	Select all	B_MIRK	All table entries are selected.	1-1	Button, Function
4C	SELECT_BLOCK	Select block	B_MIRK	A block of adjacent entries is selected in a table. First select one entry followed by	1-1	Button, Function

Strengths

- Strong categorization
- Simple
- Web-based

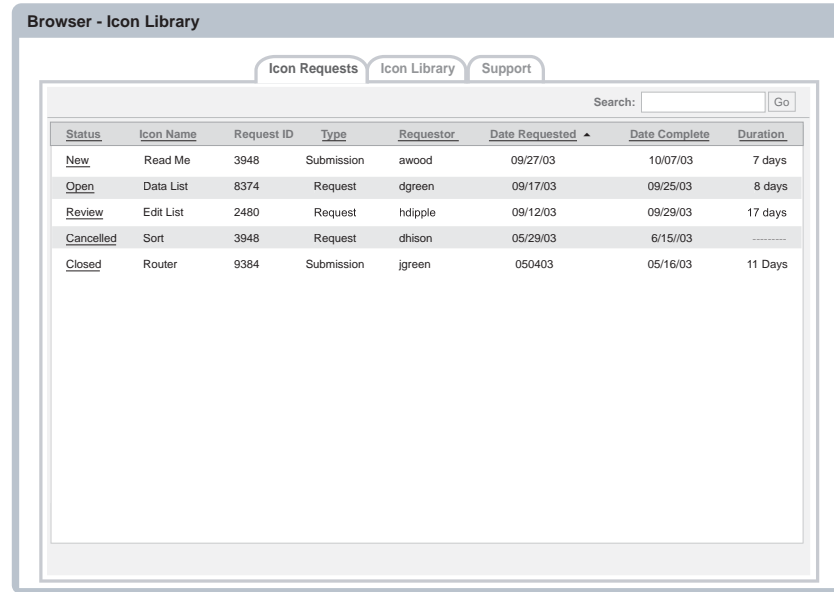
Weaknesses

- Not automated
- No search
- internally developed

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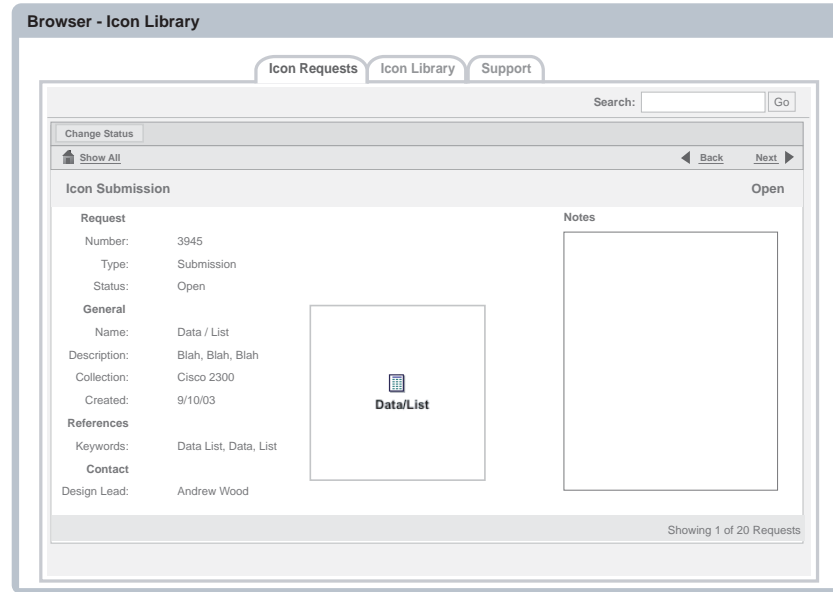
Icon Library - Wireframes

Browse Icon Library (Icon Request View- Administrator)



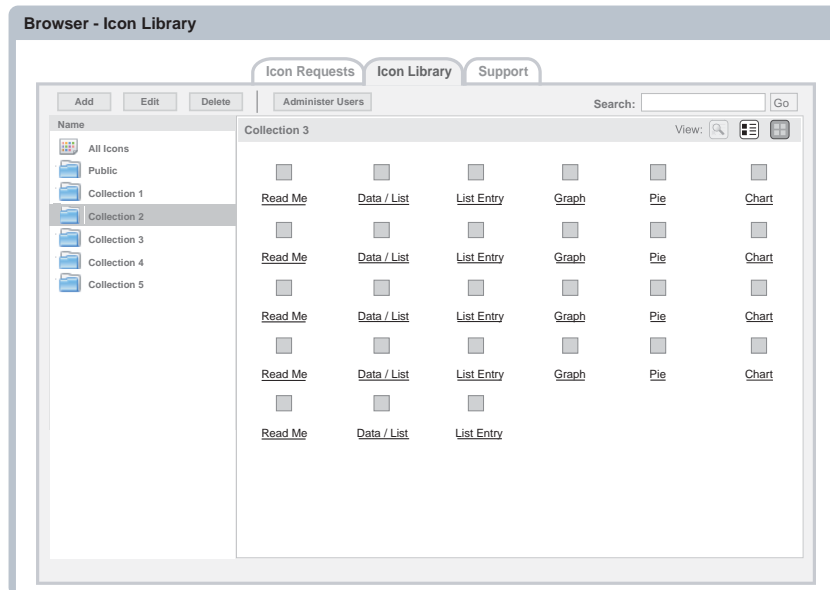
51. List of all icon requests
52. Request cannot be deleted.

Browse Icon Library (Icon Request View- Administrator)

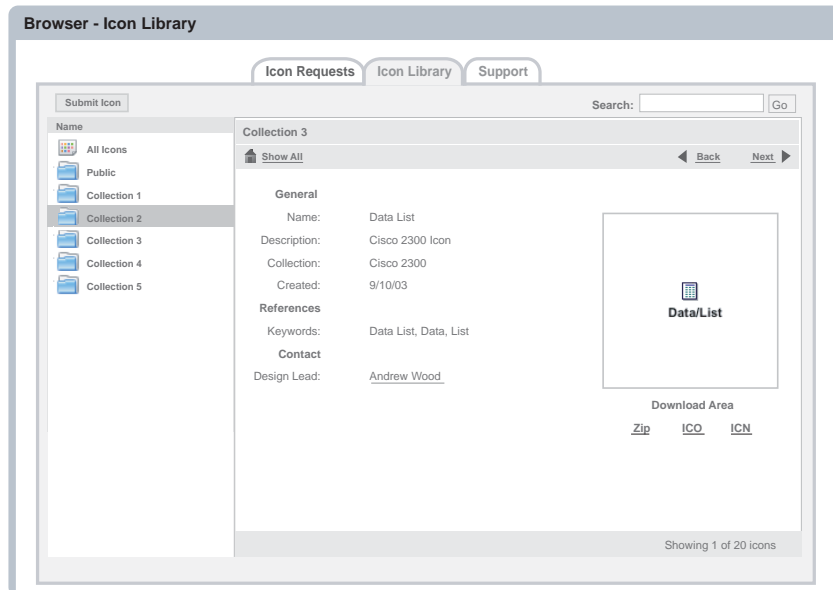


53. View of an Icon Request: request / submission details, appendable notes field, Change Status button.
54. Show All sends user back to the List View.
55. Next directs user to the next request.

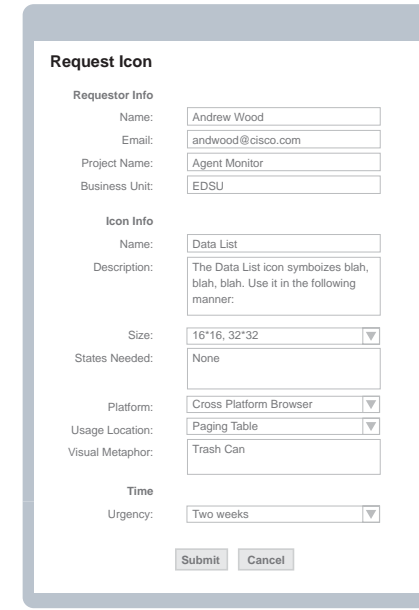
Browse Icon Library (Icon Request View- Administrator)



Browse Icon Library (Icon Request View- User)

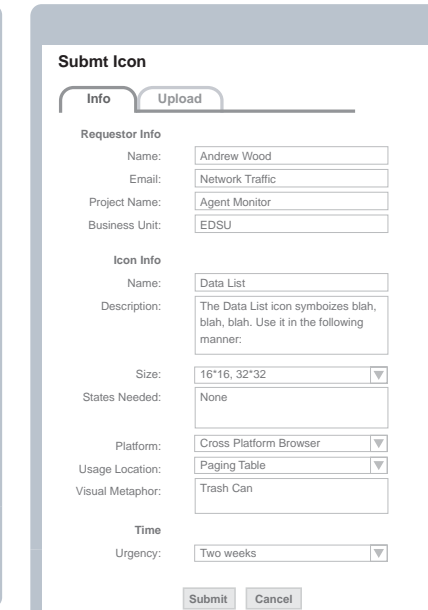


Request Icon



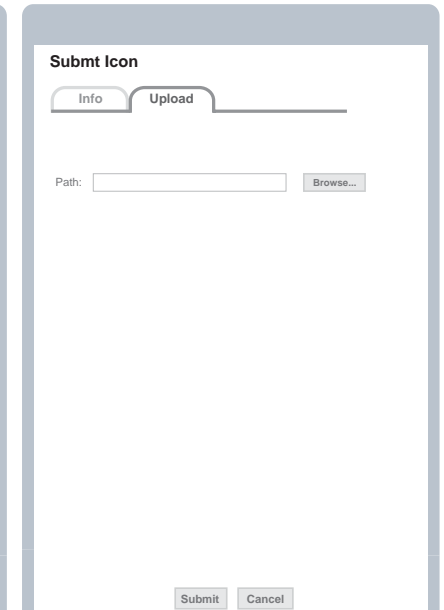
56. Icon Request Form

Submit Icon



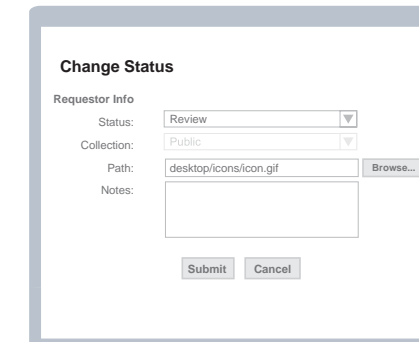
57. Icon Submission Form

Submit Icon



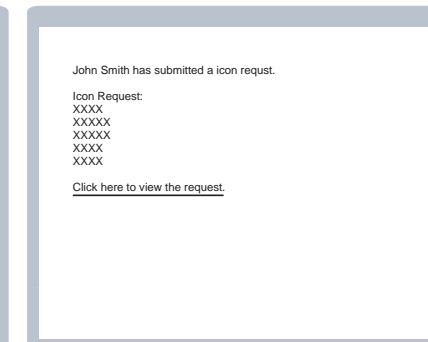
58. Icon Upload Dialog

Change Icon Status



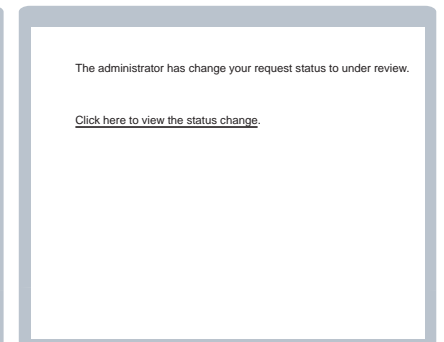
59. Change Status Dialog is modal based on whether it's a Request or a Submission.
60. If an icon is under review, the collection drop-downs are dimmed and the icon can be viewed in the public folder.

Requestor Email



61. Sample email message sent by Icon Library to the Administrator when a submission occurs.
62. Message contains what it is, all submission meta-data, and a url to the Requests page.

Admin Email

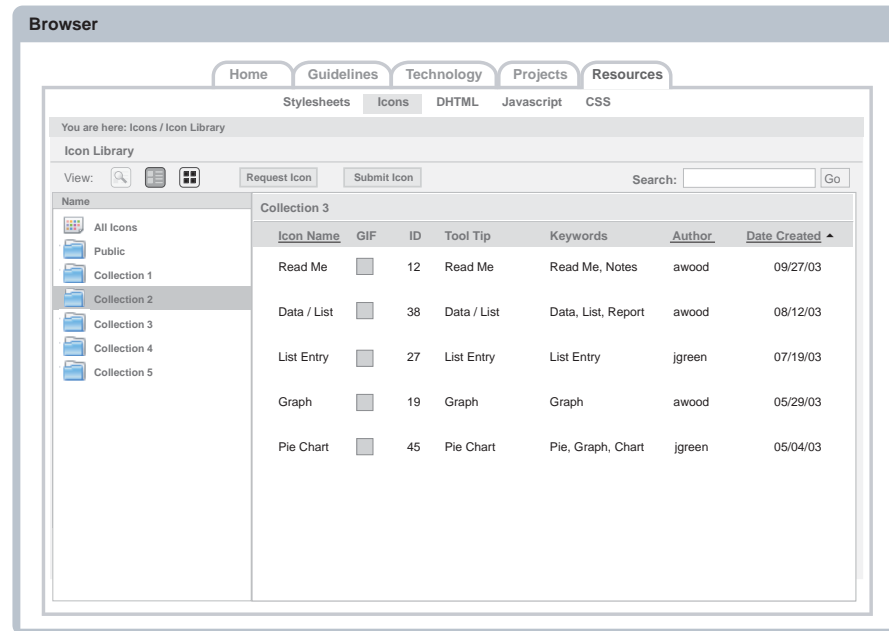


63. Sample email message sent by the Icon Library to the requester when request status is changed by the Administrator.

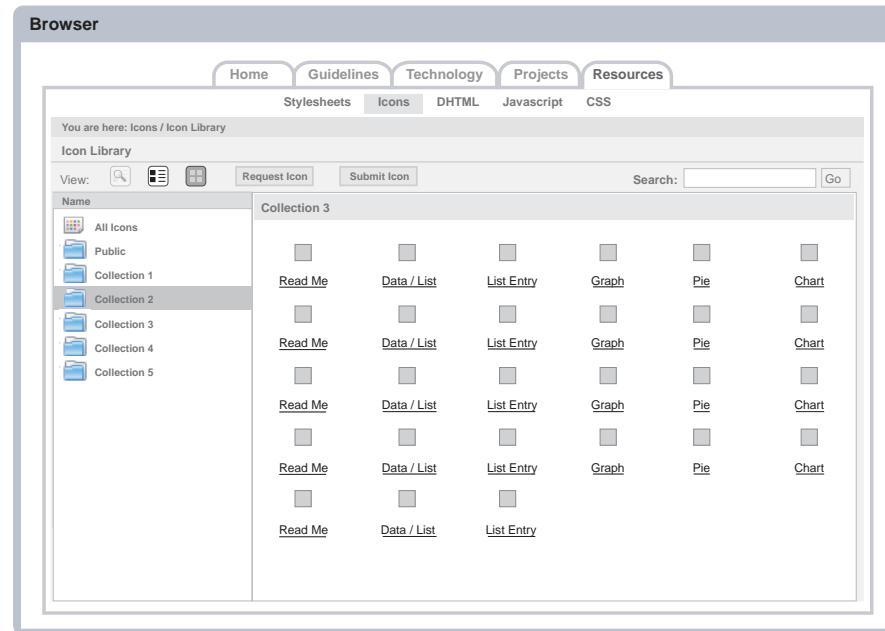
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Icon Library - Wireframes

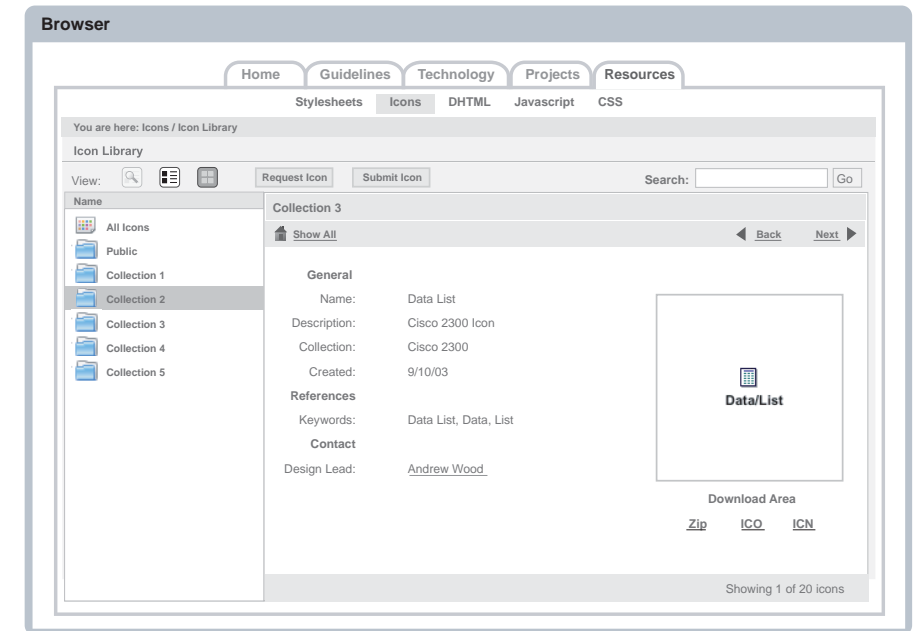
List View (User)



Contact Sheet View (User)

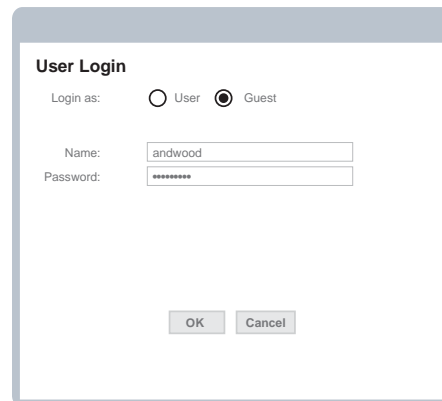


Icon Detail View (User)



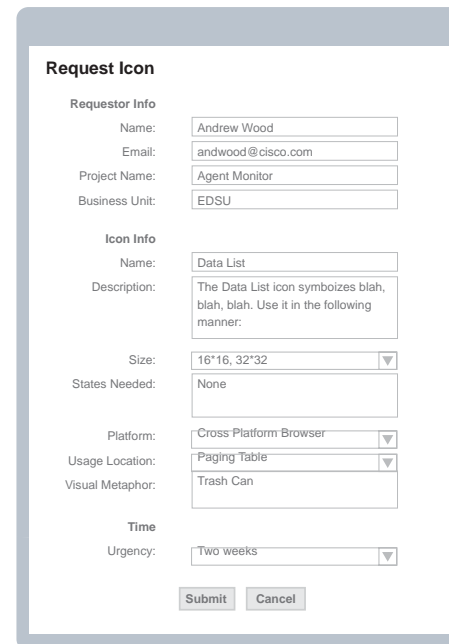
33. The User View is restricted to viewing and download. All other functionality is the same.
 34. The column headers in the list view is TBD. Possible candidates include: Icon Name, GIF, Tool Tip, Keywords, Author, Date Created, Designer, Color Palette, Size, Category, Filetype, and Collection Membership.
 35. Users can right-click icons to download from the list and contact sheet views.

Login Screen



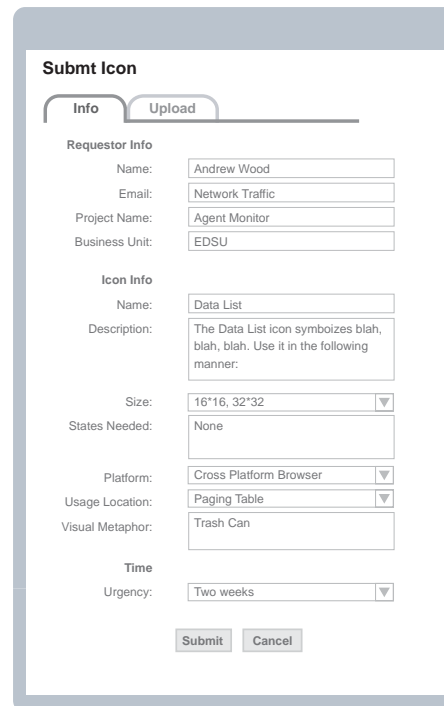
36. Administrators must log in.
 37. The Login details are TBD.

Request Icon



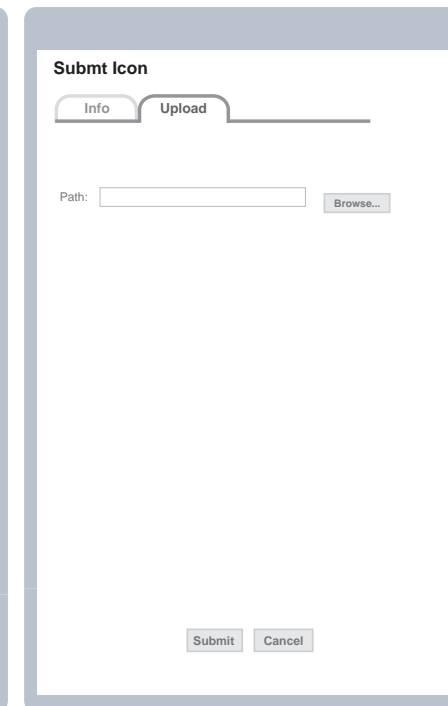
56. Icon Request Form

Submit Icon



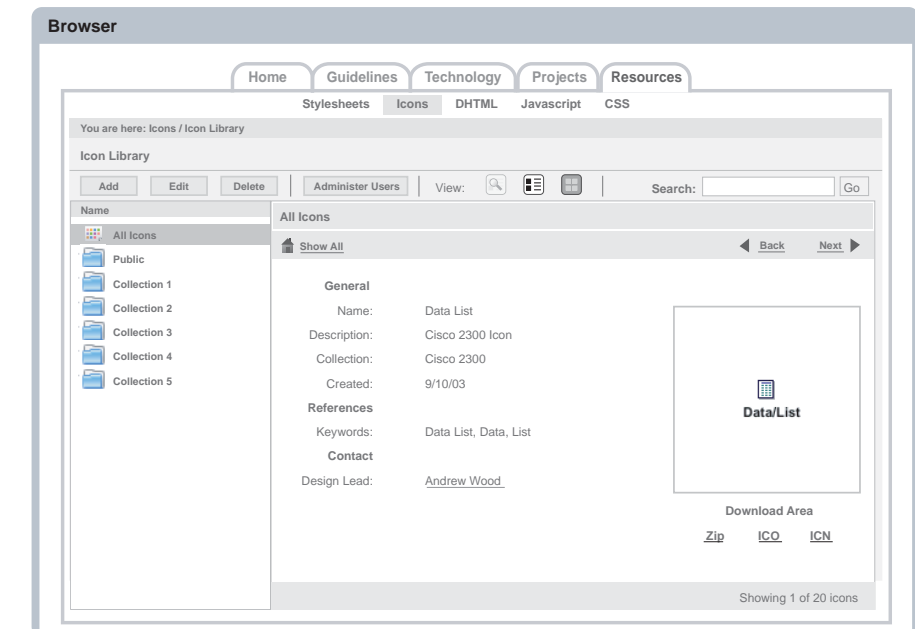
57. Icon Submission Form

Submit Icon



58. Icon Upload Dialog

Icon Detail View (All Icons: Icon Detail - Administrator)

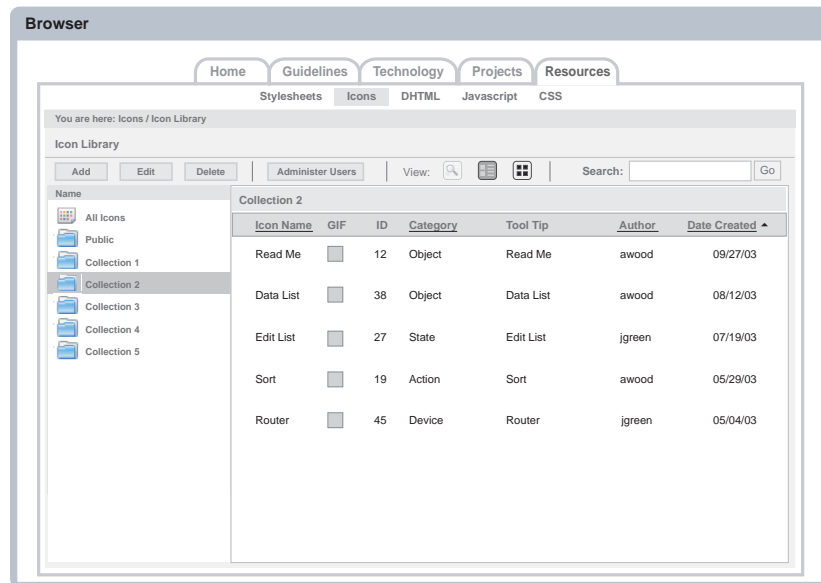


48. "All Icons" allows the display of all icon in the library.
 49. "All Icons" cannot be deleted.
 50. When Delete is used in the "All Icons" icon detail view, the icon dialog will be permanently deleted.

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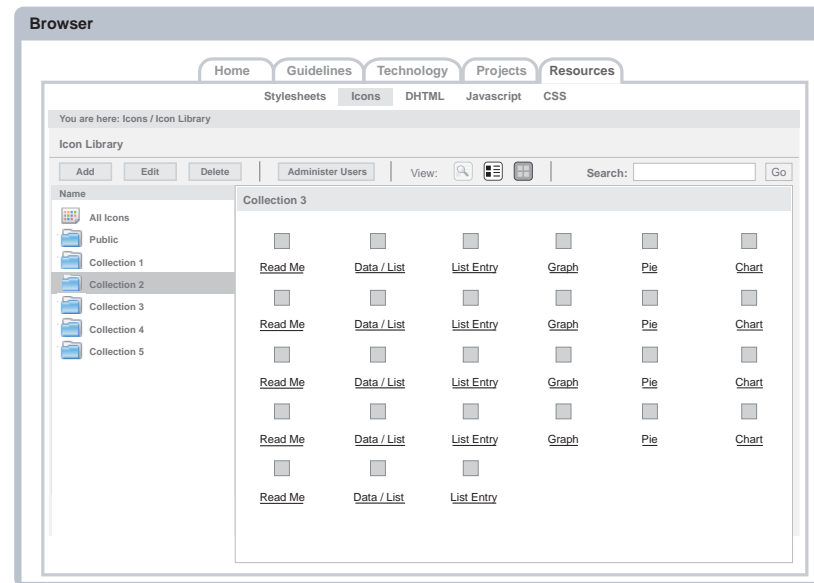
Icon Library - Wireframes

List View (Administrator)



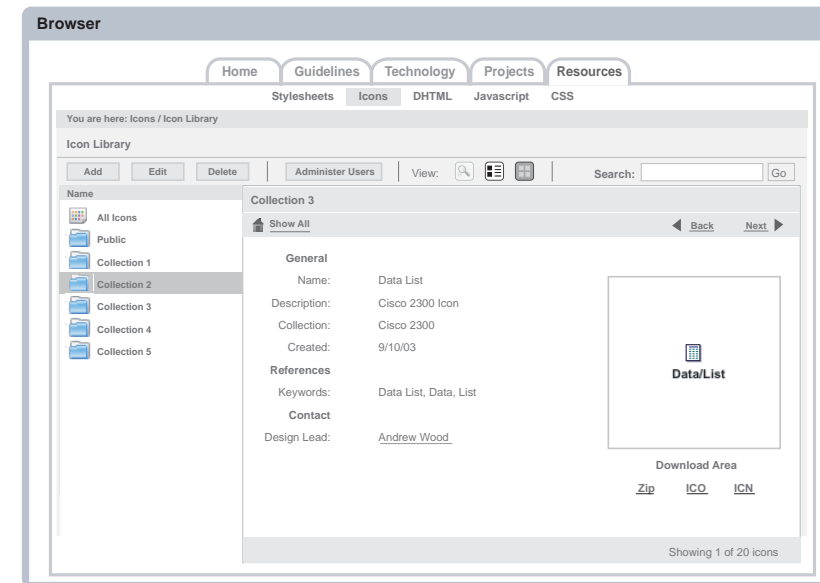
1. Icon Collections contain a flat list of icons. They are not hierarchical.
2. The "All Icons" master collection cannot be deleted. Individual icons can be deleted from the master.
3. Add, Edit, Delete, and Administer Users is available to Administrators only.
4. Icons can be viewed in list or contact sheet views.

Contact Sheet View (Administrator)



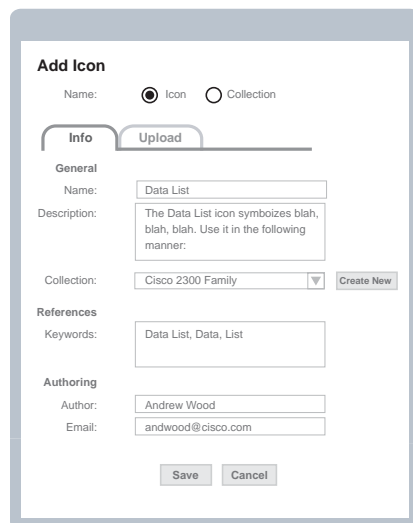
5. The List View can be sorted by some column headers.
6. Icons in the List and Contact Sheet Views are displayed in a fixed size (i.e. 32*32).
7. Users can drill down to the icon detail page in both the List and Contact Sheet View.
8. The Contact Sheet View is sorted alphabetically.

Icon Detail View (Administrator)



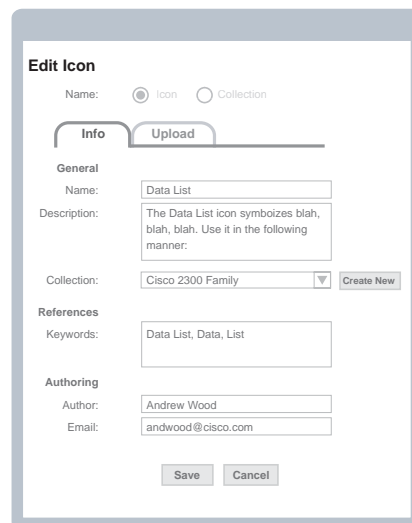
9. The Detail View displays icon name, icon, meta-data, and download links.
10. Navigation within the detail view is based on paginated pages with a link back up to the collection index page.

Add Icon

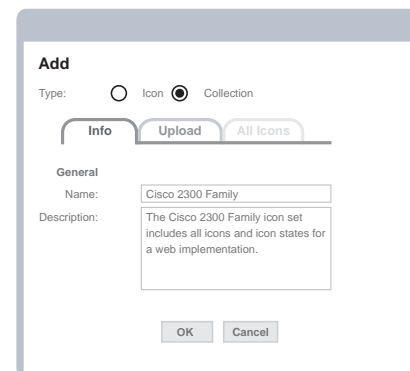


11. Icons can be added to the library either individually or in a collection.
12. The "Add" button defaults to adding an icon. Users select Collection in the "Add Dialog" to add a new collection.
13. "Create New" allows the creation of collections from the "Add Icon Dialog."
14. A GIF is required to add an icon even though the icon may be designed for another platform.
15. When "Edit" is selected from the "List" or "Contact Sheet" view, the selected collections meta-data is editable.
16. Supported icon types is TBD. GIF support is required.

Edit Icon

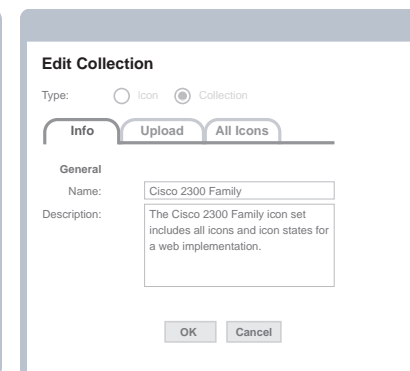


Add Collection

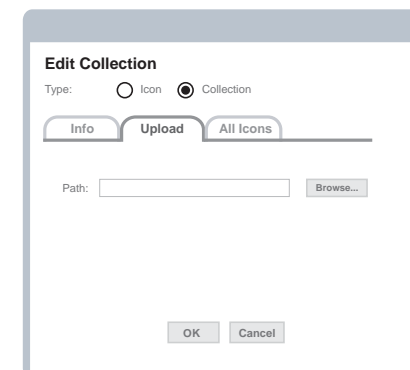


17. Add Collection displays general information, file upload, and access to the main icon repository.
18. When Ok is selected, all data and icon upload is processed and saved.
19. Icon Library access allows collections to add icons directly from the icon library.
20. All Icons is not available in the "Add Collection" Process. It's only available in Edit mode.

Edit Collection

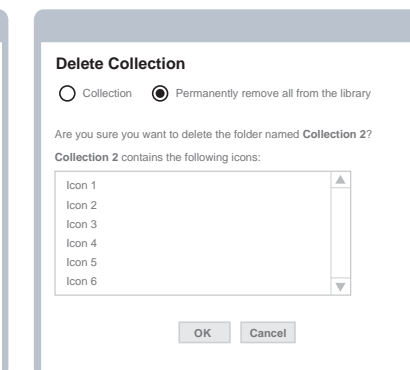


Edit Collection



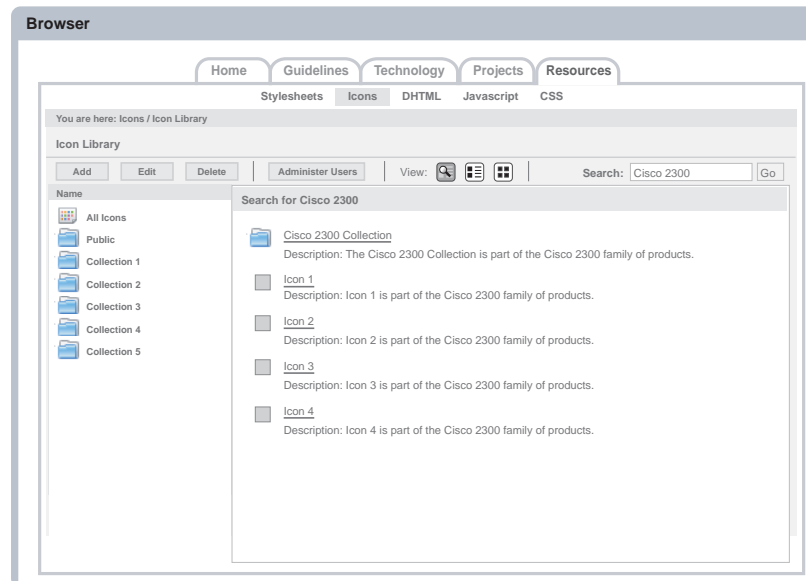
26. Upload works by pointing the browse dialog at the target directory or icon.
27. The upload completed after "OK" is selected.
28. Progress bar use is TBD for the upload process.

Delete Collection



29. A collection can only be deleted when selected.
30. A collection is selected by clicking on the desired collection in the left nav area.
31. A collection can be deleted from an icon detail page.
32. When a selected collection is deleted, a dialog cautions the user and identifies the collection name and all icons in its contents.

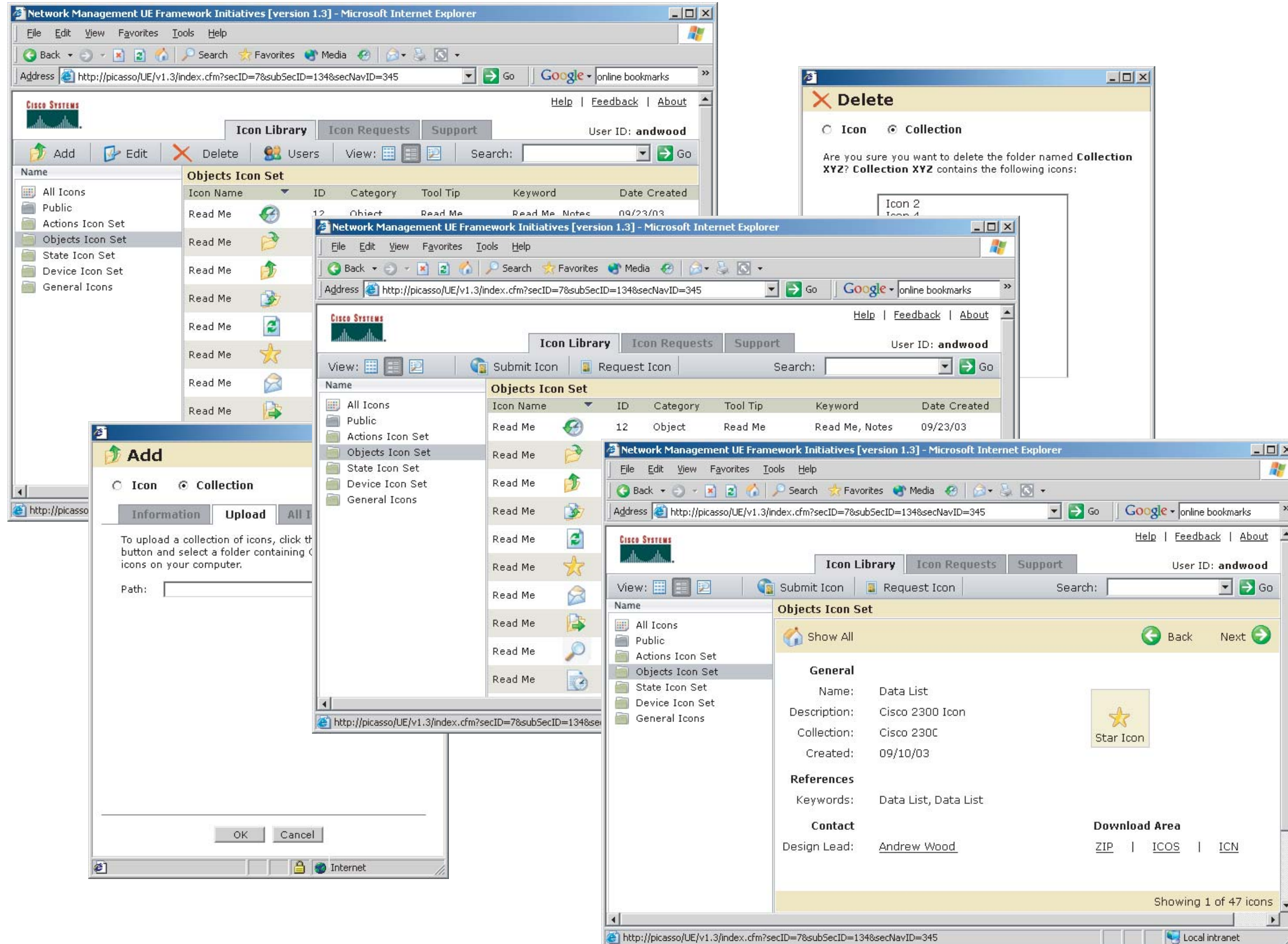
Search View (Administrator)



21. Search is available from all views.
22. Search uses all icon meta-data.
23. Search results are displayed in "typical" search format including both folders and icons as results.
24. The search string is appended to the search title.
25. Allowing "Views" to be used is TBD.

Cisco UE Storyboard

Icon Library - Visual Design



Cisco UE Storyboard

Icon Library - Post Design Follow-up Interviews



Morry Katz
Engineering Manager
• Call Friday 10/17/03



Ken Chizinsky
Icon Library User / UE Team Lead
• Likes the design in that he can see it all at once.
• Interested in the List View column headers
• Would like to have more meta-data for icons
(i.e. Product Version, Technology, Group ID, Platform, Version)
• Liked the idea of having admin functions in a row on top of left nav and content views.



Jonathan Beakley
Software Engineer
• It's as a easy way to download
• Likes the approach
• He usually takes screenshots and processes the images in Fireworks
• Design consistent with his use
• Would like to see all icons at once.
• "There is no substitution to "eye-balling" the icons



Tiffany Vu
Icon Library Webmaster / UI Engineer
• Likes the design
• Worries about the categorization
• Concerned about the icon scrub process
• Design seems to make sense
• Says there are two processes for icon requests:
- One for her BU where she's creates icons for free
- Cisco-wide process requires BU to pay for icons
• Thinks displaying icons in one size will be ok "Users will learn other sizes are supported."
• We need size info in the meta-data



Marilyn Krieger
Icon Librarian / Coordinator
• Meeting TBD



Jeff Kouzmanoff
Software Engineer
• Has not had a chance to review it yet. Call Monday at 10am Central Time.



Larry Jones
Software Engineer
• "Looks really nice."
• Likes the idea of a icon DB for application development
• Likes the "proof sheet" approach
• Would like to help
• Thinks it's a cool project
• The new approach to the icon library would be real helpful
• Put in a request a while back and has not heard from her.



Greg Wilson
Software Engineer
• Has not reviewed it yet.
• Wants me to call him Friday 10/17 (720 562-6369)



Russ Gregory
Software Developer - Security Monitoring Applications
• Well organized
• Likes what he sees
• Wanted to know if there was going to be a request form integrated into the library.
• Wanted to know who had permissions to delete icons