

# **FSAnet Style Guide**

## **Version 2.0**

**December 2, 2002**

# Introduction

- **Scope**  
The primary purpose of this document is to describe and document all stylistic and technical details for Version 2.0 of FSAnet.
- **Intended Audience**  
FSA employees, Modernization partners, Web developers and content managers using FSAnet or developing content and material for presentation on FSAnet.
- **Outline of Document**  
This document is divided into 6 sections.
  1. **Site Design and Layout** - Give an explanation of the overall design and page layout of FSAnet.
  2. **Site Architecture** - Reconstruct the site architecture in full detail.
  3. **Site Development** - Describe the development process with use of templates and components of the site.
  4. **Design Guidelines** - Technical information on style and graphical display, HTML coding, accessibility, etc.
  5. **Applications** - Overview of the applications developed for FSAnet Version 2.0.
  6. **Content Submission** - Content Submission process and guidelines for users of FSAnet.
- **ED IT Standards**  
FSAnet follows the standards set by the Department of Education. This documentation is located in the Technology handbook: [FSA Technology Policies, Standards & Products Guide, Version 2.3.](#)
- **Technologies Used**  
For the design of FSAnet, ROH developed the site in accordance to standards of the World Wide Web consortium. Technologies include HTML, JavaScript, Cascading Style Sheets, Java Servlets, Java Server Pages, Oracle Database, Autonomy Search Engine, Macromedia's Dreamweaver and Interwoven's TeamSite.

# Contents

1	<u>Site Design and Layout</u> .....	1
1.1	<u>Home Page</u> .....	1
1.2	<u>Core Section Page</u> .....	1
1.3	<u>Channel Home</u> .....	2
1.4	<u>Channel Content Page</u> .....	3
1.5	<u>Application Server Pages</u> .....	3
1.6	<u>Site Wide Features</u> .....	4
1.6.1	<u>Navigation Banner</u> .....	4
1.6.2	<u>Left Content Navigation</u> .....	4
1.6.3	<u>Breadcrumb Navigation</u> .....	4
2	<u>Site Architecture</u> .....	5
2.1	<u>Site Directory in TeamSite</u> .....	5
2.2	<u>Channel Directories</u> .....	5
2.3	<u>Core Directories</u> .....	6
2.4	<u>Folder Naming and Content</u> .....	6
2.5	<u>File Formats</u> .....	6
3	<u>Site Development - Use of Templates and Components</u> .....	7
3.1	<u>Dreamweaver Templates</u> .....	7
3.2	<u>Interwoven's TeamSite Templates</u> .....	7
3.3	<u>Components - Object Oriented Programming Approach</u> .....	7
3.3.1	<u>Page Layout</u> .....	7
3.3.2	<u>Content and Style</u> .....	7
3.3.3	<u>Externally Linked Objects</u> .....	7
3.3.3.1	<u>Server Side Includes (SSI)</u> .....	7
3.3.3.2	<u>Cascading Style Sheets (CSS)</u> .....	7
3.3.3.3	<u>Javascript</u> .....	7
4	<u>Design Guidelines</u> .....	8
4.1	<u>Technical Specifications - HTML Coding Guidelines for FSAnet</u> .....	8
4.1.1	<u>Page Structure</u> .....	8
4.1.1.1	<u>Templates</u> .....	8
4.1.1.2	<u>SSI</u> .....	8
4.1.1.3	<u>CSS</u> .....	8
4.1.1.4	<u>Javascript</u> .....	8
4.1.2	<u>Page Layout</u> .....	8
4.1.2.1	<u>Site Wide - Navigation Banner (Figure 4-1)</u> .....	9
4.1.2.2	<u>Site Wide - Left Content Page</u> .....	9
4.1.2.3	<u>Site Wide - Snapshot of FSA</u> .....	10
4.1.2.4	<u>Site Wide - Announcements</u> .....	11
4.1.2.5	<u>FSAnet Home Page</u> .....	12
4.1.2.6	<u>Core Section Page</u> .....	12
4.1.2.7	<u>Channel Home Page</u> .....	13
4.1.2.8	<u>Channel Content Page</u> .....	14
4.1.2.9	<u>Application Server Page</u> .....	14
4.2	<u>Page Content</u> .....	15
4.2.1	<u>Title</u> .....	15
4.2.2	<u>Metadata</u> .....	15
4.2.2.1	<u>Author</u> .....	15
4.2.2.2	<u>Owner</u> .....	15
4.2.2.3	<u>Date</u> .....	15

4.2.2.4	<a href="#">Channel</a>	15
4.2.2.5	<a href="#">Path</a>	15
4.2.3	<a href="#">&lt;SPAN&gt; Tags</a>	16
4.2.4	<a href="#">&lt;DIV&gt; Tags</a>	18
4.2.5	<a href="#">HTML Tables</a>	18
4.2.6	<a href="#">Links - External and Internal</a>	18
4.2.7	<a href="#">Lists</a>	18
4.2.8	<a href="#">Forms</a>	18
4.2.9	<a href="#">&lt;FONT&gt; Tags</a>	18
4.2.10	<a href="#">&lt;BR&gt; and &lt;P&gt; Tags</a>	18
4.2.11	<a href="#">Graphics</a>	18
4.2.12	<a href="#">Frames</a>	19
4.2.13	<a href="#">Web Accessibility / Section 508 Standards</a>	19
4.2.14	<a href="#">Text Alternatives</a>	19
4.2.15	<a href="#">Other Technologies</a>	19
4.2.15.1	<a href="#">Extensible Markup Language (XML)</a>	19
4.2.15.2	<a href="#">Flash</a>	19
4.2.15.3	<a href="#">Audio/Video</a>	19
4.3	<a href="#">Style Specifications</a>	19
4.3.1	<a href="#">Text</a>	19
4.3.2	<a href="#">Links</a>	19
4.3.3	<a href="#">BODY</a>	20
4.3.4	<a href="#">Page Layout</a>	20
4.3.4.1	<a href="#">Pagelayout (style layout.css)</a>	20
4.3.4.2	<a href="#">Bkgrd_banner (on each page)</a>	20
4.3.4.3	<a href="#">leftcontent</a>	20
4.3.4.4	<a href="#">centercontent</a>	20
4.3.5	<a href="#">Home Page</a>	20
4.3.5.1	<a href="#">Leftcolumn (contained within &lt;div&gt; tag- centercontent)</a>	21
4.3.5.2	<a href="#">Rightcolumn (contained within &lt;div&gt; tag- centercontent)</a>	21
4.3.6	<a href="#">Navigation Banner</a>	21
4.3.6.1	<a href="#">Bannerimage</a>	21
4.3.6.2	<a href="#">Banner</a>	21
4.3.6.3	<a href="#">Greeting</a>	21
4.3.6.4	<a href="#">Navigation</a>	21
4.3.6.5	<a href="#">TabItems</a>	21
4.3.6.5.1	<a href="#">Regular</a>	21
4.3.6.5.2	<a href="#">User Mouse Over</a>	21
4.3.6.5.3	<a href="#">User Navigates in Tab</a>	22
4.3.6.6	<a href="#">SubNavigationMenus</a>	22
4.3.6.6.1	<a href="#">Dropdown Menu</a>	22
4.3.6.6.2	<a href="#">subnavmenu (span)</a>	22
4.3.6.6.3	<a href="#">pulloutnavmenu</a>	22
4.3.7	<a href="#">Boxes in Content Area (home page, announcements.html, fsa_snapshot.html)</a>	22
4.3.7.1	<a href="#">lvrTagName</a>	22
4.3.7.2	<a href="#">TagNameTip</a>	22
4.3.7.3	<a href="#">Heading</a>	23
4.3.7.4	<a href="#">Bullets</a>	23
4.3.7.5	<a href="#">moreclose</a>	23
4.3.7.6	<a href="#">Announcements</a>	23
4.3.7.7	<a href="#">Announcetitle</a>	23
4.3.7.8	<a href="#">Annoucesummary</a>	23
4.3.8	<a href="#">Boxes in Left Content Navigation</a>	23
4.3.8.1	<a href="#">leftcontentbox</a>	23
4.3.8.2	<a href="#">leftboxheader</a>	23

4.3.8.3	<u>leftboxtext</u> .....	23
4.3.8.4	<u>topofpageleft</u> .....	24
4.3.9	<u>Content Area</u> .....	24
4.3.9.1	<u>nav</u> .....	24
4.3.9.2	<u>subjecttitle</u> .....	24
4.3.9.3	<u>copytitle</u> .....	24
4.3.9.4	<u>summary</u> .....	24
4.3.9.5	<u>fineprint</u> .....	24
4.3.9.6	<u>copytable</u> .....	24
4.3.9.7	<u>block</u> .....	24
4.3.9.8	<u>topofpage</u> .....	24
4.3.9.9	<u>&lt;p&gt;</u> .....	24
4.3.9.10	<u>&lt;ul&gt;, &lt;ol&gt;, &lt;li&gt;</u> .....	25
4.3.10	<u>Graphics</u> .....	25
4.3.10.1	<u>Types of Graphics</u> .....	25
4.3.10.2	<u>Colors</u> .....	25
4.3.10.3	<u>Size of Images</u> .....	25
4.3.10.4	<u>Alternative Text</u> .....	25
4.3.10.5	<u>Storage and Naming of Images</u> .....	26
4.3.10.6	<u>Animated Images</u> .....	26
5	<u>Applications</u> .....	27
5.1	<u>Staff Directory</u> .....	27
5.2	<u>Message Board</u> .....	28
5.3	<u>Search</u> .....	29
5.4	<u>Acronym Finder</u> .....	29
5.5	<u>Mail Programs</u> .....	29
6	<u>Content Submission</u> .....	30
6.1	<u>Channel Content Managers</u> .....	30
6.2	<u>Posting content through content managers</u> .....	30
6.3	<u>FSAnet Content Management System</u> .....	30
6.4	<u>FSAnet Web Team</u> .....	30
6.5	<u>Interwoven Teamsite</u> .....	30
6.6	<u>Writing for the Web</u> .....	30
6.7	<u>Metadata</u> .....	30
6.8	<u>Content</u> .....	30
6.9	<u>Graphics</u> .....	30
6.10	<u>Document Naming Convention</u> .....	31
6.11	<u>File Formats and Size</u> .....	31
6.12	<u>Interactive Elements</u> .....	31
	<u>Appendix A</u> .....	32

# 1 Site Design and Layout

For the layout of FSAnet, ROH designed a consistent look and feel that would carry throughout all areas of the site. This is achieved by the use of a standard banner and 'stove pipe' layout, a standard font and graphics. There are 5 different page formats within the site. Each page contains elements that conform to the overall look and feel and provide some variation.

## 1.1 Home Page

The home page is the first access point for many of FSAnet users. We provided them with many avenues for discovery of information on FSAnet. The main area of the page displays 6 boxes. This information is the Core Section of FSAnet. The boxes were used to be able to show a large amount of information in the top portion of the page or 'above the fold' as it has been termed. Each box has the ability to expand downward on the screen to show summaries or links to more information. This design was created to accommodate users that preferred a "Yahoo" style homepage. Figure 1-1 shows the details of the boxes.



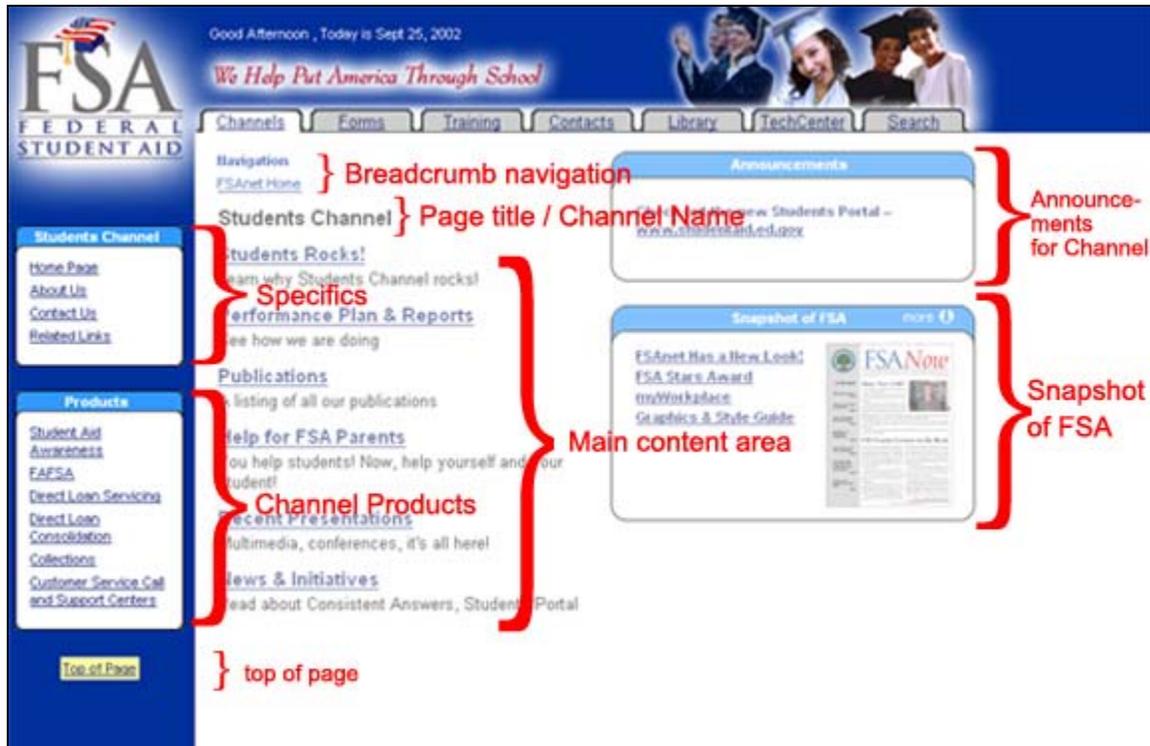
Figure 1-1

## 1.2 Core Section Page

If a user is to click on a link from the Core Section boxes, the FSAnet Content box or on the tabs in the banner, the next page to be displayed will be based on the design for the Core Section page. This page maintains the site-wide banner and the Left Content Navigation explained above. These pages replicate information displayed in the Core Section boxes of the home page or in the drop-down menus from the tabs in the banner. These pages go into further detail about their subject matter. See Figure 1-2.



The layout for the channel home pages are different from Figure 1-1 above (see Figure 1-4). The content of the page is broken up into 5 areas. We maintain the logo and top banner with navigation and use the left navigation for channels. The channel pages use a different style of left hand navigation than the home page and Core Section. For each channel, the top box contains *specific* information about the channel. It contains a link to the channel home page, About Us, Contact Us and Related Links. These areas will contain mission statements, contact lists, organizational charts and any links relevant to that channel. The lower box lists the Products each channel creates and distributes to customers.



**Figure 1-4**

The main area of the page contains items the channel would like to feature; it also contains the Announcements box and the Snapshot of FSA. The announcements box can include items that the channel wants to highlight. This area can contain pictures. Snapshot of FSA is included on each Channel Homepage for those who “bookmark” their channel page and do not normally go through the index page. This will allow users to be knowledgeable about events in FSA.

#### **1.4 Channel Content Page**

The content pages for each channel offer detailed information on what the channel has featured on their home page. The page layout consists of the navigation banner and the left navigation on each channel’s home page (see Figure 1-4). This is an area users can display graphics, tables of data, lists and descriptive text.

#### **1.5 Application Server Pages**

The applications for FSAnet use a different format for their layout. These pages reside on a different server and are called for specific applications rather than being directly integrated into FSAnet. The message board applications consist of: the Rumor Mill, the Car Pool, and General announcements. The search applications consist of: the Search Page and FSA Directory. Figure 1-5 below is a screenshot of the FSA Community. There are only four tabs on the banner and there is no drop-down menu when the user mouse over the tab. The banner graphic was created to let the user know this is a different area of FSAnet, but still have the same look and feel.



**Figure 1-5**

## 1.6 Site Wide Features

### 1.6.1 Navigation Banner

All of the pages produced for FSAnet contain a top banner with a navigation element. For the application server the layout varies. In Figure 1-3 we can see the banner includes a greeting and date. The banner graphic emphasizes FSA's slogan, logo and intended customers. The banner also contains 7 tabs of navigation. When users mouse over a tab, it will change color and produce a hidden menu for navigation of FSAnet.

### 1.6.2 Left Content Navigation

Figure 1-1 shows the left navigation for the home page and Core Section pages of FSAnet. These boxes provide exposure to popular and all-inclusive areas of FSAnet. FSACommunity contains the message board applications on the application server and other relevant links for FSA. Through customer research and Web Trends reports ROH found that the FSA Now is the most visited item on FSAnet. Therefore we have highlighted it on the left-hand side of the page for maximum exposure. The FSAnet Content boxes are for information pertaining to FSAnet as a whole.

### 1.6.3 Breadcrumb Navigation

FSAnet uses a form of link navigation common on popular web sites called 'breadcrumbs'. On Figure 1-2, the 'breadcrumbs' is pointed out below the banner. This feature is not displayed on the Home page (Figure 1-1) but is used on all Channel and Core Section pages of the site. The 'breadcrumbs' will list the home page link and up to three of the last visited pages.

## 2 Site Architecture

FSAnet is housed on several different servers. This provides multi-tier support for FSAnet and was implemented by Accenture and FSA. For development purposes the files are imported into the TeamSite server su35e1. The imported or updated files are submitted from each developer “WORK AREA” into the “STAGING” area of su35e1. The folder with the files is deployed into either the test server (su35e2) or the production servers (su35e10 and su35e12). The production environment is housed at the Virtual Data Center (VDC) and corresponds to the web site address of FSA (<http://fsanet.ed.gov>, <http://fsa.ed.gov>, <http://fqa>, etc.)

The applications for FSAnet are contained on the FSA application server. This is a shared server at the VDC. The folder for FSAnet is located on servers su35e9 and su35e13 in /www/intranet/web/FSAnetApps/ folder.

The Oracle Database for the staff directory and message board applications is contained at the VDC. The database is located at HPV2 on port 1633.

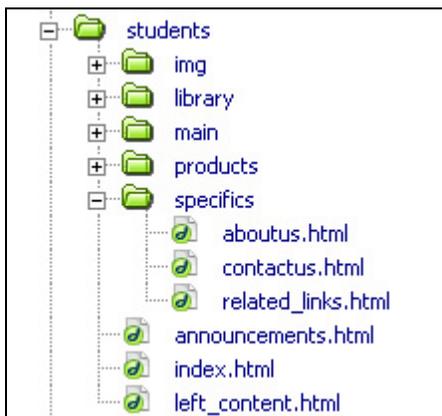
### 2.1 Site Directory in TeamSite

On the site directory there is a folder for each channel and core section. The root level of the web site is located in the ‘htdocs’ folder. There are also folders for original artwork, Templates and Interwoven’s templatedata.

### 2.2 Channel Directories

To ensure consistency with information architecture the channel directories have been designed to contain the following files and directories (see Figure 2-1):

- *img (folder)*
- *library (folder)*
- *main (folder)*
- *products (folder)*
- *specifics (folder)*
  - *contactus.html*
  - *aboutus.html*
  - *related\_links.html*
- *announcements.html*
- *index.html*
- *left\_content.html*



**Figure 2-1**

This structure allows developers to manage the architecture of the channels with ease and consistency. Other folders may be added to this level of the directory, but is not recommended. Sub-folders may be created in any of the above directories. The ‘img’ folder contains all of the pictures and graphics used

within this particular channel. The 'library' folder is used to contain all of the documents for this channel. This includes Microsoft Word, Excel, PowerPoint, Visio, and Acrobat PDFs, text files or any other document.

### **2.3 Core Directories**

The core directories are compiled of html pages or sub-folders that correspond to content within each section. There is no standard for these directories except logically following the subject areas or content within each section.

### **2.4 Folder naming and content**

All folders should have relatively short yet meaningful names. Long titles can be abbreviated, and known acronyms can be used. Do not use any spaces or characters that are not alphanumeric. The only exception is to place an underscore as a separator. Folder naming should be intuitive to its location and users should not have a hard time figuring out its content. Do not use any capital letters due to case sensitivity including all caps of the file name or its extension. The default page name for directories is index.html.

### **2.5 File formats**

All pages are created in Hypertext Mark-up Language (HTML). The pages on the application server are written as Java Server Pages (JSP). XML can be used on FSAnet, but not as a page extension. TeamSite uses a variation of XML, which have their own file extensions (.tpl, .cfg, .dcr). Reference Interwoven's TeamSite Manual for more detail.

Only common document formats should be used on FSAnet. Acceptable formats include .pdf, .txt and .rdf. For compressed applications and files use WinZip (.zip). Microsoft Office formats that can be used on FSAnet include MSWord (.doc), Excel (.xls), PowerPoint (.ppt or .pps) and Visio (.vsd). For graphics, common web formats should be used: .gif, .jpg and .png. Multimedia files can be posted on FSAnet; common formats (.wav, .mp3, .mpeg, .wma, .etc) should be used. If you want to use a file type that is not specified here, contact your content manager or owner of FSAnet for more details.

## **3 Site Development – Use of Templates and Components**

### **3.1 Dreamweaver Templates**

The site was created with the use of Dreamweaver Templates. This facilitated the creation of pages with the same look and feel as well as avoiding any error that could have occurred with page development. The Dreamweaver Templates are contained within the Templates folder of the main directory.

### **3.2 Interwoven's Teamsite Templates**

Templates were created for the use of FSAnet Version 2.0 but never fully implemented. Future use of these Templates may be an option for users of FSAnet in order to facilitate some of the routine content submissions or for content managers wishing to develop their own content. FSAnet's owner and content management team will determine the use of these Templates. The Templates are stored in the 'templatedata' folder in the main directory. Reference Interwoven TeamSite documentation for use and development.

### **3.3 Components – Object Oriented Programming Approach**

To preserve flexibility with design and future maintenance of FSAnet, ROH has used an object-oriented approach to designing the code, styles and site architecture. The components, or objects that are used throughout the site are located in one location and are accessed from another location, or features are inherited from object to object. If a script or style is to be added or changed, the developer will only have to update one single page on the site, instead of changing multiple pages.

#### **3.3.1 Page Layout**

The layout of pages on FSAnet may be referred to as the parts making up it's whole. Many of the Figures above show elements of the page layout. In Section 4.1.2, we will discuss how these elements or objects make up the pages of FSAnet.

#### **3.3.2 Content and Style**

A principle of an object-oriented approach is inheritance. ROH has used this principle in designing the content for FSAnet. All of the content, textual, is based on a single style. There are many variations, but all inherit their properties and attributes from a single source. This can be referred to as a parent-child relationship.

#### **3.3.3 Externally Linked Objects**

The flexibility of an object-oriented approach is the concept of objects being separate and independent of the other objects using their properties or methods.

##### **3.3.3.1 Server Side Includes (SSI)**

Server-side Includes are files that are linked from a web page and dynamically included into the page by the server.

##### **3.3.3.2 Cascading Style Sheets (CSS)**

A stylesheet is used to format text of the site as well as page layout, allowing style to be separate from structure. Instead of having the information on each page, it is contained on a small file for the entire site.

##### **3.3.3.3 Javascript**

JavaScript creates interactive objects on a web site. Scripts may be placed within an HTML page, but would need to be duplicated for use on other pages. To make accessible the scripts are contained in a central location and linked to from the document.

## 4 Design Guidelines

### 4.1 Technical Specifications – HTML Coding Guidelines for FSAnet

All pages are created in Hypertext Mark-up Language (HTML). The pages on the application server are written as Java Server Pages (JSP). Java Servlets are used with the applications or pages within FSAnet. The HTML code on FSAnet conforms to [specification 4.0](#) developed by the World Wide Web Consortium ([W3C](#)). For optimum results for coding on FSAnet, use the guidelines below.

#### 4.1.1 Page Structure

##### 4.1.1.1 Templates

Macromedia's Dreamweaver MX has been used to create the Templates. The templates were created in a fashion that would eliminate pertinent content from the template. The templates are designed for the structural layout of the pages. All other content is included onto the page with the use of SSI. Section 4.1.2 below details the layout and pages used for each template.

Editable areas of the Dreamweaver Templates are notated in the code as:

```
<!-- #BeginEditable "editable_name" --><!-- #EndEditable -->
```

##### 4.1.1.2 SSI

For html style includes, do not include a head or body tag for the included document. Only include the html code for the page and use the specified tag.

*i.e.-* `<!--#include virtual="/fsa_snapshot.html" -->`

Some SSIs on the site are used to contain other linked files or components.

*i.e.-* `<!--#include virtual="/channel_scripts.txt" -->`

##### 4.1.1.3 CSS

The style sheets are located in the 'css' folder. All the css files are listed in the 'site\_css.txt' or 'index\_css.txt' file in the 'htdocs' folder. To include a new css, place a new <link> tag in either of these files.

*i.e.-* `<link rel="stylesheet" href="/css/style_layout.css">`

Name the styles to reflect their purpose on FSAnet. The style sheets have commented code dictating where the styles are used.

##### 4.1.1.4 Javascript

All JavaScript should be separate from the actual html page. Each JavaScript should be linked from the 'scripts' folder and a <link> tag should be placed on the html page. Each script is labeled and comments are used to explain the function and usage of the script on FSAnet.

*i.e.-* `<link rel="javascript" href="/scripts/banner_navigation.js">`

Objects or event handlers calling JavaScript functions on the html page should reference the script as if it was on the page.

*i.e.-* `<a href="#" onmouseover="findExample(a)">`

#### 4.1.2 Page Layout

To define the layout of the page and the content, ROH used div and span tags instead of tables and paragraph tags to define the layout. By W3C standards, this is technically the proper way to format and code pages for html specification 4.0. By using this style of coding, the developer can identify or name

different div or span tags and produce text and page layout with the use of CSS on FSAnet. Div tags have generally been used for page or layer structure and design. Span tags were used for text styling. This will be discussed in Section 4.2 of this document.

Looking at the html code can be confusing. Sometimes span or div tags can be placed within other tags. The following section displays the layout and structure of the code and will help a developer to understand the html code. If a layout is based on a Dreamweaver Template, it will be notated.

#### 4.1.2.1 Site Wide – Navigation Banner (Figure 4-1)

All of the html pages on FSAnet contain a SSI linking to “banner\_navigation.html”. This file contains all of the html code for the navigational banner (Figure 1-3) used on FSAnet.

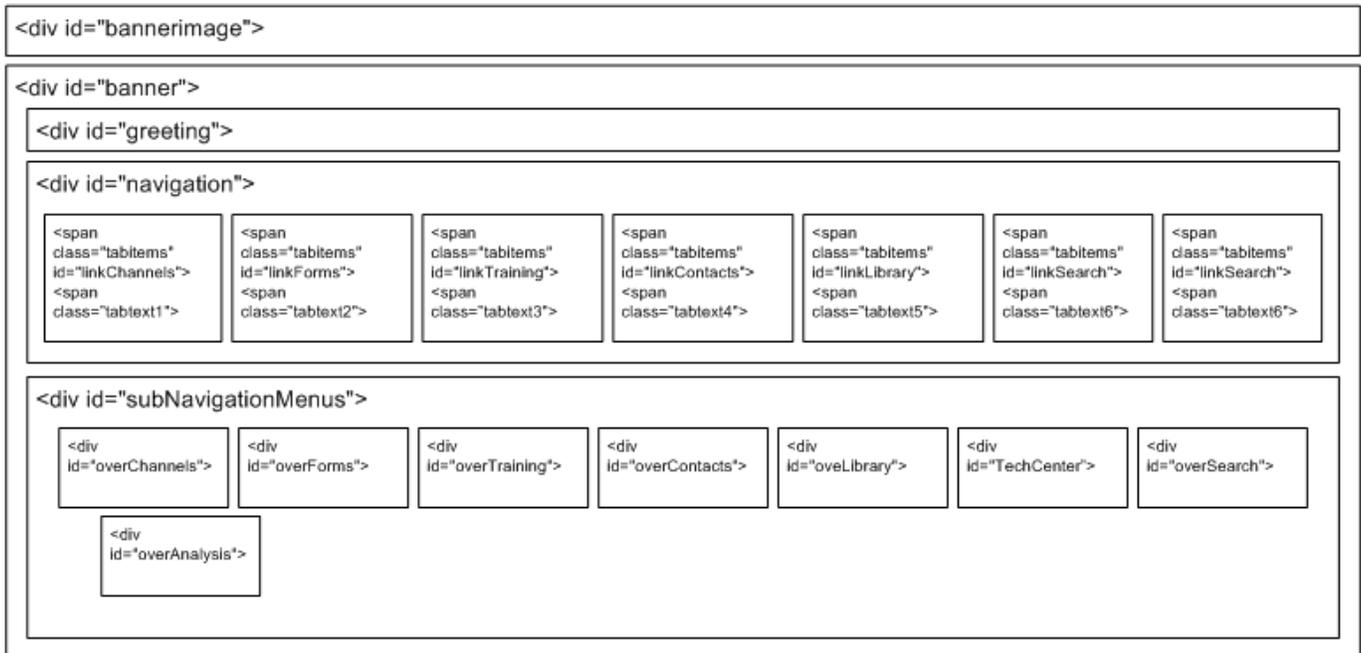
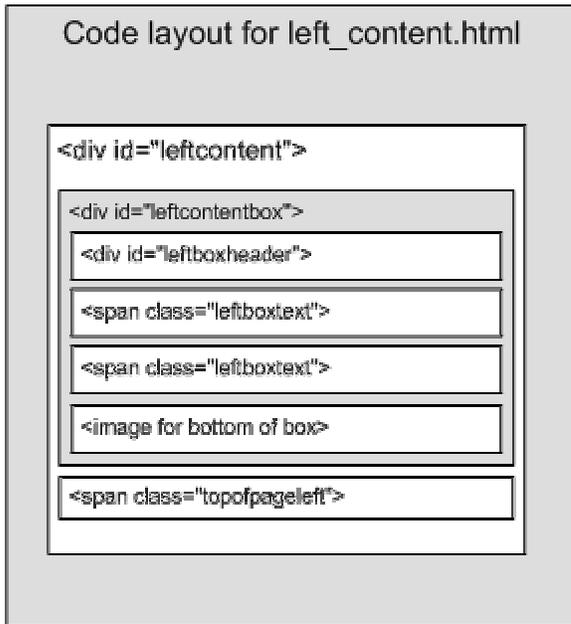


Figure 4-1

#### 4.1.2.2 Site Wide – Left Content Page

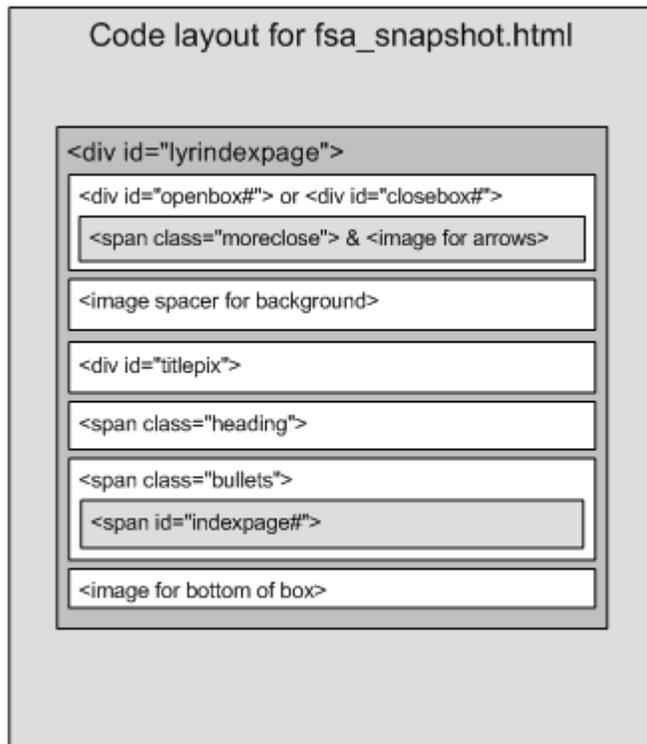
The Left Content page contains the boxes on the left hand side of each page of FSA.net. Figure 4-2 gives a view of the code layout for the left content pages. The left content pages for each channel is based on the template *channel\_left\_content.dwt*.



**Figure 4-2**

#### 4.1.2.3 Site Wide – Snapshot of FSA

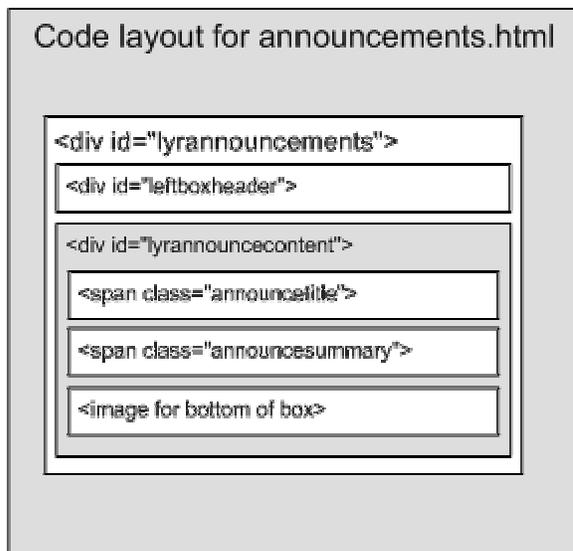
The page `fsa_snapshot.html` is used on all of the Channel homepages. It is located in the 'htdocs' folder of the site directory. The code and scripts are identical to the boxes on the FSAnet home page.



**Figure 4-3**

#### 4.1.2.4 Site Wide – Announcements

Each Channel has an `announcements.html` page located in that channel's directory. The pages were created from the template file `channel_announcement_box.dwt`.



**Figure 4-4**

#### 4.1.2.5 FSAnet Home Page

The home page has the most complex design of the site. Figure 4-5 shows the layout of the page. To make editing of the content easier, the file has it's own template (*index\_page.dwt*). If a bullet is added to a box, both the template and the editable region of the page must be updated.

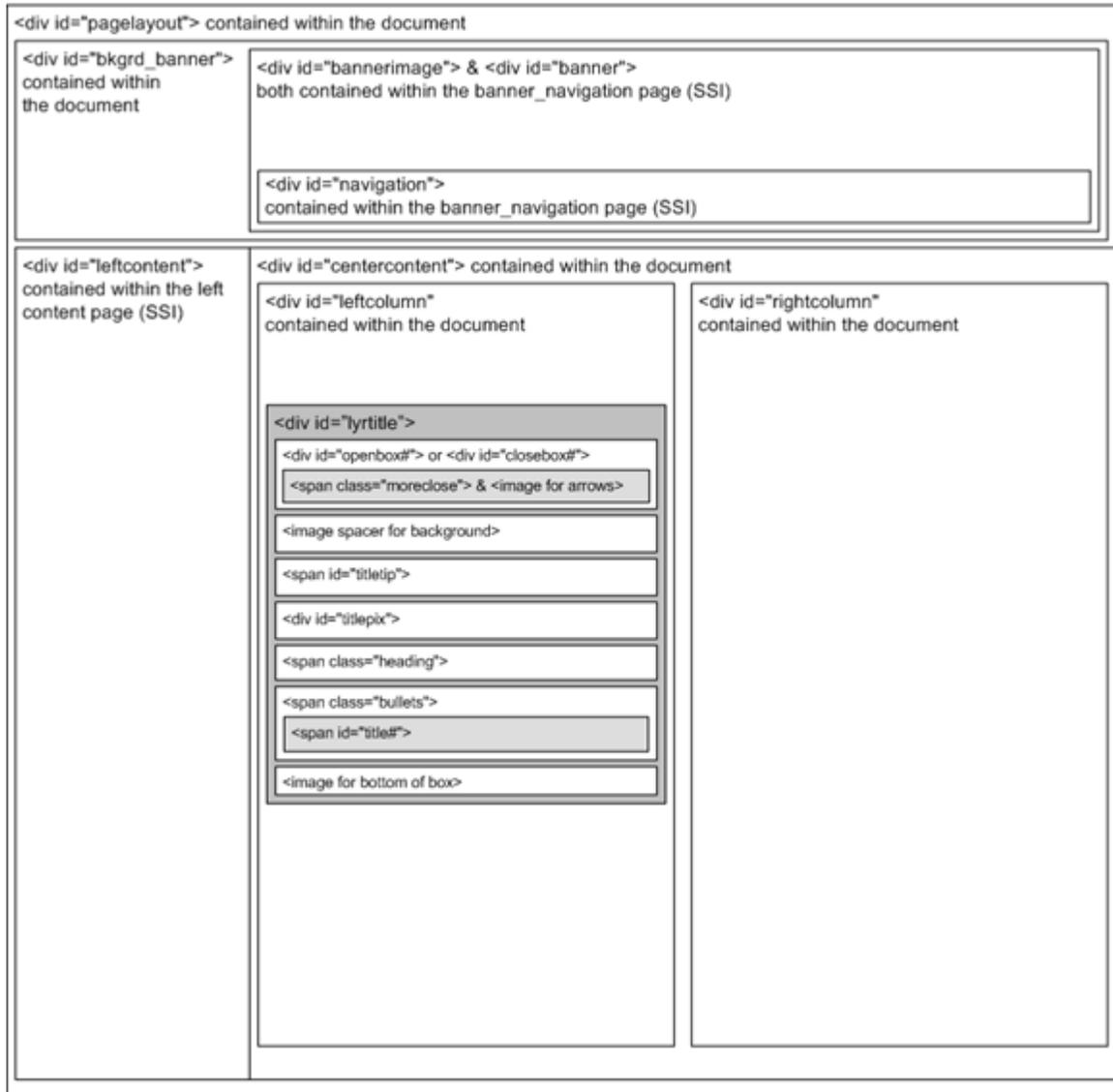
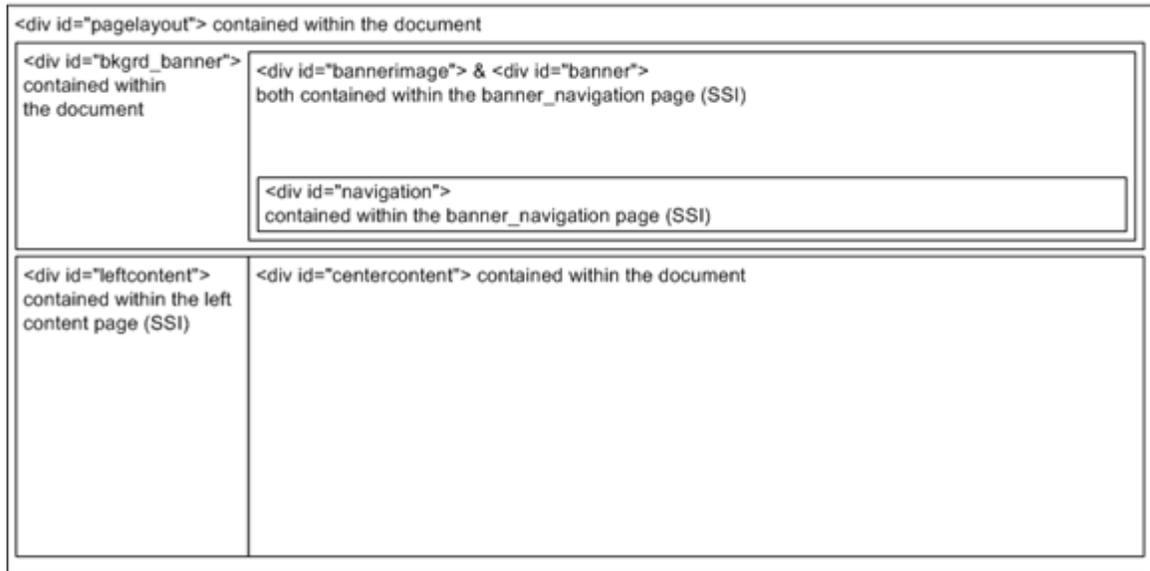


Figure 4-5

#### 4.1.2.6 Core Section Page

Figure 4-6 shows the basic layout for the pages on FSA.net. All pages in the Core content use the layout in Figure 4-6. The associated template is *core\_content\_page.dwt*.



**Figure 4-6**

#### 4.1.2.7 Channel Home Page

The basic layout of the Channel home page is the same as Figure 4-6, but `announcements.html` and `fsa_snapshot.html` are included in the document, (Figure 4-7). This layout is based on the template `channel_home_page.dwt`.

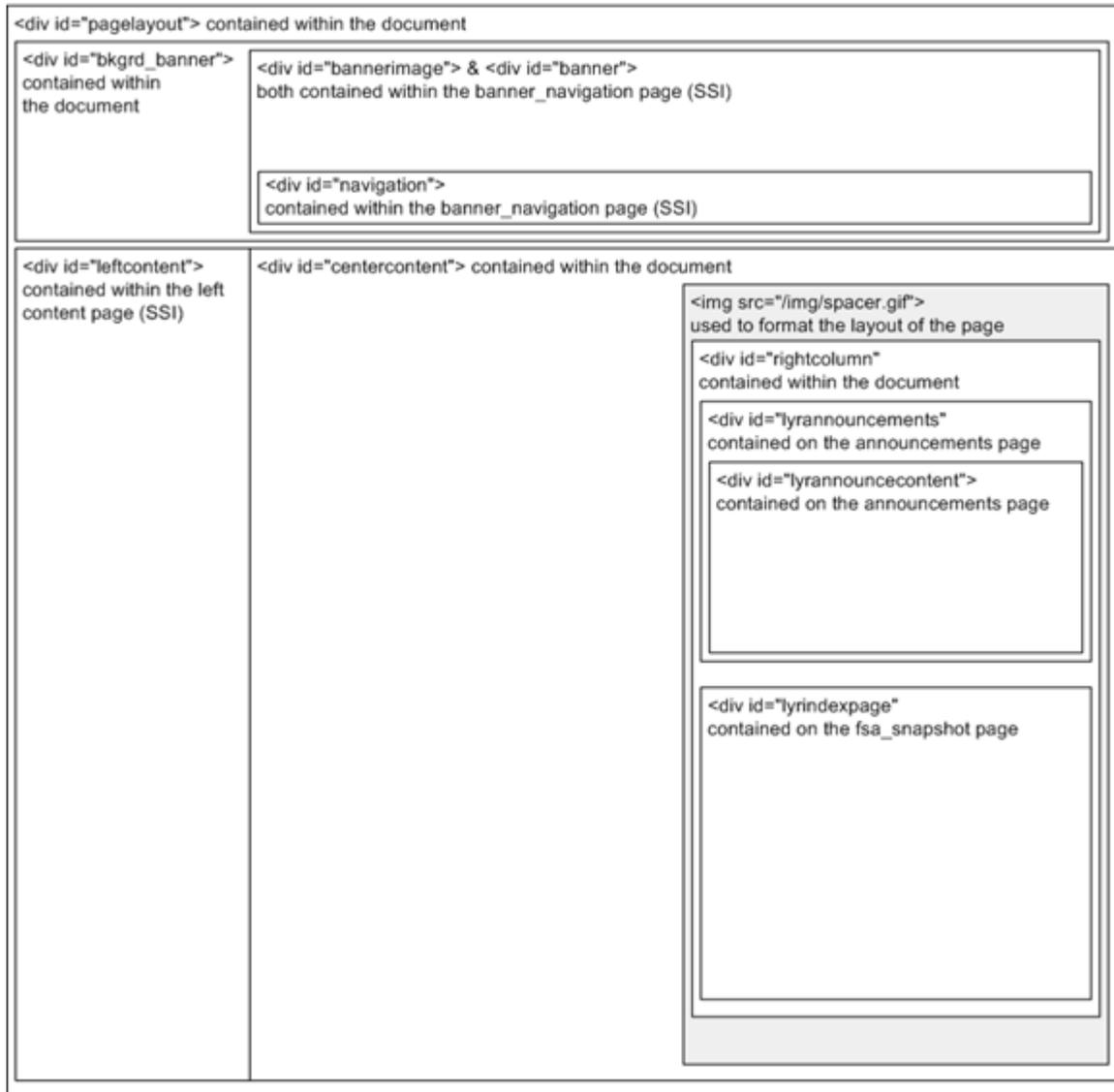


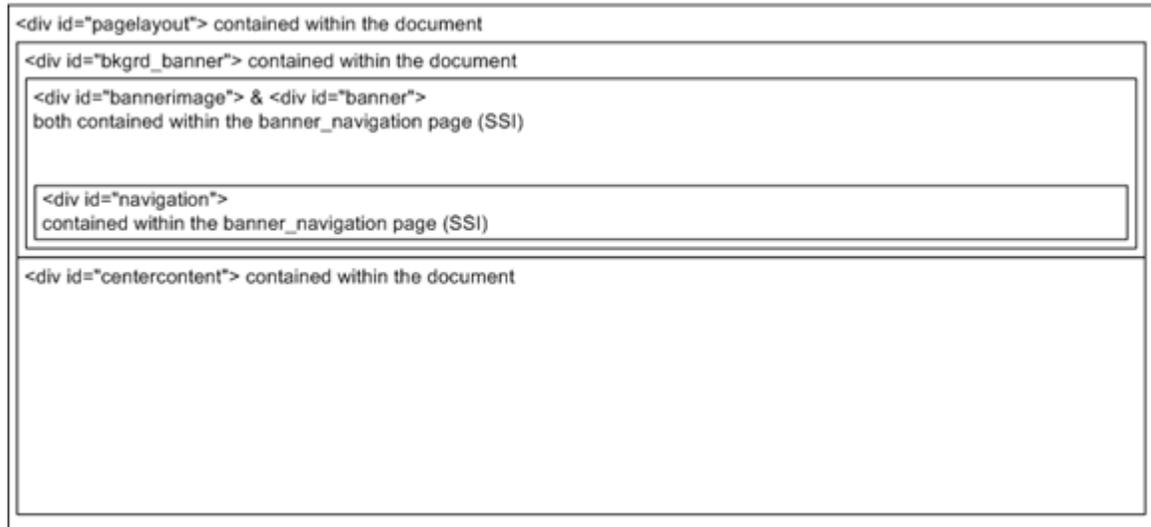
Figure 4-7

#### 4.1.2.8 Channel Content Page

Figure 4-6 shows the basic layout for the pages on FSA.net. All pages in the Channels use the same layout as for the Core Section pages, except for the channel home pages. The template used is `channel_content_page.dwt`.

#### 4.1.2.9 Application Server Page

The layout of the application server pages is different than the pages contained on the production servers. This judgement was based on development of the applications and page space or 'real estate' needed. The layout is the same for all pages using the template *app\_server\_page.dwt*. As shown in Figure 4-8, the structure is the same, but there is no left hand content.



**Figure 4-8**

## 4.2 Page Content

Most changes made after the launch of FSAnet will be in the content areas of the site. Most of the content is static for FSAnet.

### 4.2.1 Title

Document titles are defined by the <title> tag of the page. The title normally appears in the title bar of the browser, as bookmarks to the page, and in search results. For FSAnet the document title is also used with the 'breadcrumb' navigation explained above in Section 1.6.3. The document title is also in the <body> tag of the html. When creating pages for FSAnet, remember to duplicate the title in the <title> tag and in the <span class="pagetitle"> tag (see Figure 4-12).

### 4.2.2 Metadata

Metadata helps search engines find pages. It is essential to incorporate appropriate and descriptive metatags into each of page. Metatags capture the document title, a one-paragraph description of the content, and keywords. ROH has included several other metatags for document tracking, these include:

- 4.2.2.1 **Author – Author of content**
- 4.2.2.2 **Owner – Owner of the content or Director of Channel**
- 4.2.2.3 **Date – the date the page was last updated**
- 4.2.2.4 **Channel (or Core Section) – Section this page belongs to**
- 4.2.2.5 **Path – the location of the page within the site architecture (See Figure 4-9)**

When creating metatags, use words that your audience might use in searching for the kind of content available on the page. The metatags for the metadata are included in the <head> tag of each page.

```
6 <META HTTP-EQUIV="Content-Type" CONTENT="text/html; charset=iso-8859-1">
7 <!-- #BeginEditable "keywords" --><META name="keywords" Content="Channel"><!-- #EndEditable -->
8 <!-- #BeginEditable "description" --><META name="description" Content="description_paragraph"><!-- #EndEditable -->
9 <!-- #BeginEditable "author" --><META name="author" Content="Author Name"><!-- #EndEditable -->
10 <!-- #BeginEditable "owner" --><!-- Owner: Owner Name --><!-- #EndEditable -->
11 <!-- #BeginEditable "channel" --><!-- Channel: Channel --><!-- #EndEditable -->
12 <!-- #BeginEditable "date" --><!-- Date: 2002-07-10 --><!-- #EndEditable -->
13 <!-- #BeginEditable "path" --><!-- Path: /channel/index.html --><!-- #EndEditable -->
14
```

**Figure 4-9**

### 4.2.3 <SPAN> Tags

The <span> tag is used extensively on FSAnet. In fact, this is the preferred tag for all forms of text and content used on the site. Each <span> tag can be identified by the class property.

i.e. - <span class="copy">Content</span>

The class property is associated with the Cascading Style Sheets. The style sheets allow for a consistent look and feel across the site. Figure 4-10 shows the way to use the <span> tags and styles in the code for pages of FSAnet.

```
42 <span class="copy">
43 <!-- #BeginEditable "copy" -->
44 <span class="subjecttitle">Subject Title</span>
45 <span class="copytitle">Copy Title</span>
46 <span class="summary">Summary of the title</span>
47 <span class="fineprint">Use for small print</span>
48 <!-- #EndEditable -->
49 </span>
```

**Figure 4-10**

Figure 4-11 shows a screen shot and the styles of the span classes for FSA.net. The styles for each span class will be discussed in Section 4.3.9.

Good Afternoon , Today is Sept 25, 2002

**FSA**  
FEDERAL STUDENT AID

We Help Put America Through School

Channels Forms Training Contacts Library TechCenter Search

Navigation } **span class = nav**

FSA.net Home

Modernization } **span class = pagetitle**

Modernization Blueprint } **span class = subjecttitle**

Mod Blueprint } **span class = copytitle**

"Hairball"

The picture of the old, legacy financial aid systems. The Modernization Blueprint is FSA's transformation plan, including our plans for integrating and updating our computer systems from this "hairball" to an efficient, cutting-edge system. } **span class = summary**

Our Progress

How our new systems are simplifying the old "hairball"

Modernization Projects

FSA's current technology projects

Direct Loan Servicing System awards: - **copytitle**

- 2001 Digital Government Award (Massachusetts Institute of Technology and Accenture)
- 2000 Government Technology Leadership Award (Government Executive Magazine)
- 2000 Finalist for 'Excellence Gov Award' presented by CIO Councils } **<ul> and <li>**

e-Commerce Application Division  
Office of Financial Student Aid  
U.S. Department of Education  
690 First Street, NE Mail Stop 5277

Organization Code: ENIA  
Fax Numbers:  
Cubical 91G2 202.275.028  
Open Area 202.275.028 } **span class = copytable**

NAME	CUBE	NUMBER
Abebe, Samson	91F1	202.377.3532
Broadus, Wanda	91F3	202.377.3539

} **span class = copytable**

Note: The CRM/FSA team continues to comply with FSA's stop work request on 7-24-2002 and is working on options to move forward with the project. The team continues to monitor and assess the Release 1.0 (2002) call handling activities and report on business outcomes. The schedule for full implementation of Release 1.0 is to be determined. } **span class = fingerprint**

} **span class = copy**

Figure 4-11

For the content of FSA.net, all of the styles and span classes are based on the span class "copy". Figure 4-12 shows a screen shot of the Dreamweaver template. The `<span class="copy">` tag is located outside of the editable region of the template. All `<span>` tags and content inside of the `<!-- #BeginEditable "copy" -->` tag become the dependent on the "copy" class. This is a parent-child relationship explained earlier in the style guide.

```

39 <!-- layer for center content of the page -->
40 <div id="centercontent">
41   <a href="#skipbreadcrumbs" title="skip breadcrumb navigation" tabindex="4"></a>
42   <!--#include virtual="/breadcrumbs_include.html" -->
43   <a name="skipbreadcrumbs"></a>
44   <!-- Page Title and content -->
45   <span class="pagetitle"><!-- #BeginEditable "page_title" -->Page_Title<!-- #EndEditable --></span>
46   <!-- developer can use regular html tags within "copy" area or use the style tags provided in the st
47   <span class="copy"><!-- #BeginEditable "copy" -->copy<!-- #EndEditable --></span>
48   <!-- extra spacing at bottom of page -->
49   <p></p>
50   <!-- end div tag for center content -->
51 </div>

```

Figure 4-12

#### 4.2.4 <DIV> Tags

As seen in Figure 4-12 and earlier examples, the <div> tag is used throughout the site for page layout and structure, but can also be used for content. Use with extreme caution and it should be tested thoroughly before pushing to the production servers. Use <div> tags for formatting content on the page. Utilize current styles on FSAnet or update those style sheets with new styles.

#### 4.2.5 HTML Tables

A table may be used for layout of graphical or textual elements, but is suggested only for data content or simple objects. Do not use nested tables for layout, or a table within a table. This will conflict with proper html and web accessibility practices. For all tables, use the style span class="copytable" in the <table> tag.

*i.e.* - <table class="copytable">

Also include a name or summary property in the table tag to identify the table. For data content utilize the header tags (<th>) for column names of the tables. The section for "FSA Stars" uses HTML tables and XML as data islands.

#### 4.2.6 Links – external and internal

All links within FSAnet should use the relative format.

*i.e.* - `href="/students/index.html"`

All links to external web sites should use the absolute format.

*i.e.* - `href="http://www.website.gov"`

For links to external sites, independent applications, or documents, make the target property `target="_blank"` for the <a> tag.

#### 4.2.7 Lists

Lists used on FSAnet need to have either <ul> or <ol> for formatting purposes. Use the <li> tag for all the list items.

#### 4.2.8 Forms

Creating forms on FSAnet should follow common practices with html specification 4.0 and section 508 accessibility standards. If there are multiple forms on a page, use the name property in each <form> tag and use the <label> tag for the title of the form object. For forms that use JavaScript for navigation or form submission, include a text alternative link of the page. For an example, visit <http://fsanet.ed.gov/forms/>.

#### 4.2.9 <FONT> Tags

The use of the <span> tags and style sheets on FSAnet eliminate the need for <font> tags. The font properties of all text on are specified in the style sheets.

#### 4.2.10 <BR> and <P> Tags

If the images or text within the content need more spacing than the style sheets have specified, use the <br> tag or <p>&nbsp;</p> to provide more space. The developer can use the <p> tag for text content, but the use of <span class="summary"> tag is preferred.

#### 4.2.11 Graphics

All images on FSAnet must be common web formats. Please reference to Section 4.3.10 below for graphics specification.

#### **4.2.12 Frames**

Frames are not used on FSAnet due to the design and layout. Frames may be used if a new application is being used on FSAnet and is being launched into a separate browser window.

#### **4.2.13 Web Accessibility / Section 508 Standards**

All Federal agencies are required by law to make their web sites accessible to people with disabilities. Any content added to a page must adhere to FSAnet's standard and be in compliance with ADA guidelines listed in appendix A.

#### **4.2.14 Text Alternatives**

If a page on FSAnet uses a JavaScript style navigation or Image map, the developer should include a duplicate page on the site with the page's information. This page would be described as the 'text alternative' and should be referenced from the original page.

#### **4.2.15 Other Technologies**

##### **4.2.15.1 Extensible Markup Language (XML)**

XML is used for presentation of the FSA Stars Nominees and Awardees on FSAnet. The pages use a feature of Internet Explorer 5+ called data islands. Properly format XML can be displayed in a data table format on an html page. ROH uses a special Java program to extract the content from a text file and create an XML file. For more information, refer to the directory '/hr/library/fsa\_stars' on FSAnet. Other uses for XML are possible.

##### **4.2.15.2 Flash**

Flash or .swf files are not to be used on FSAnet. The Macromedia Flash Player does not conform to the Department of Education's security guidelines and is not available on most computers within FSA.

##### **4.2.15.3 Audio / Video**

Audio or video files may be posted on FSAnet. The files must conform to accessibility standards and are not to launch automatically on the page load. No streaming audio or video is capable on the FSAnet servers.

### **4.3 Style Specifications**

All of the pages on FSAnet have the same layout and styles. In Section 1, we gave an overview of the layout of each type of page, and in Section 4.2 we explained the use of <SPAN> and <DIV> tags for the structure of the site. Here we will detail the dimensions, colors and items used to format and stylize content on FSAnet.

#### **4.3.1 Text**

All of the text on FSAnet use the same font style. With the use of CSS, and not using the <font> tag, we can maintain the same font throughout the site. The measurement of font-size on FSAnet is based on ems. Ems provides the best flexibility with browser compatibility and accessibility. Most of the text is based off of the <span class="copy"> tag, see Figure 4-10. Other <span> tags are stylized by their own class property or inherited from another <span> or <div> tag and are detailed below. See the Figures earlier in this document for reference.

##### Style:

font-family: Arial, Helvetica, sans-serif  
font-size: 0.8 em (default size)  
font-color: #000000 (black, default)

#### **4.3.2 Links**

To maintain a consistent look and feel throughout the site, the links have been programmed to keep the same color whether the link has been visited or is active. Links on the home page will not have the

underlined feature that is on other pages. The underline will appear when the user mouses over a link. This gives the home page a cleaner look and feel.

#### Style:

Regular:

text-decoration: underline | home page- none

font-color: #2B377F (blue)

Hover (or mouse over)

text-decoration: none (underline disappears) | home page- underlined (appears)

font-color: #B9152C (red)

### **4.3.3 BODY**

Background image is the blue background for the left side of the page.

Height: 2000 pixels

### **4.3.4 Page Layout**

Figure 4-6 shows a basic layout for pages on FSAnet. The pages are created from a Dreamweaver template and with use of SSI and CSS we build the page. The associated CSS is next to each tag name. For a more detailed look at styles used with FSAnet, use a text-editor to view the associated CSS. Top and Left properties refer to the pixel coordinates from the upper left corner of the page on the browser. The percentage mark is a relative number in terms of CSS rules.

#### **4.3.4.1 Pagelayout (*style\_layout.css*)**

The pagelayout determines the page size, all content and layers are located in these parameters.

Top: 0 pixels

Left: 0 pixels

Width: 760 pixels

Height: 10% (*the percentage is a relative number in terms of CSS rules*).

#### **4.3.4.2 Bkgrd\_banner (*on each page*)**

Width: 100% of pagelayout (760 pixels)

Height: 100 pixels

Background color: #333399 (FSA blue)

#### **4.3.4.3 leftcontent**

This layer contains the FSA logo in the upper left-hand corner

Top: 0 pixels

Left: 0 pixels

Width: 130 pixels

Height: N/A

#### **4.3.4.4 Centercontent**

This layer is used for all the content material for the site, all content will adhere to the dimensions below.

Top: 115 pixels

Left: 165 pixels

Width: 598 pixels

Height: 120%

Background color: #FFFFFF (white)

### **4.3.5 Home Page**

The home page of FSAnet uses a different style sheet from the other pages on the site. The home page uses the same layout style as above plus two columns in the content area for the Core Section Boxes. This format may be used on other pages throughout the site and can be added with ease by the developer.

#### **4.3.5.1 Leftcolumn (contained within <div> tag- centercontent)**

Top: 0 pixels  
Left: 3 pixels  
Width: 283 pixels

#### **4.3.5.2 Rightcolumn (contained within <div> tag- centercontent)**

Top: 0 pixels  
Left: 310 pixels  
Width: 283 pixels

### **4.3.6 Navigation Banner**

*(the styles for the navigation banner are located in style\_layout.css and style\_ddmenu.css)*

Figure 4-1 shows the structure layout of the navigation banner.

#### **4.3.6.1 Bannerimage**

Top: 0 pixels  
Left: 147 pixels  
Width: 613 pixels  
Height: 100 pixels  
Background color: #333399 (FSA blue)  
Image of banner is included in this layer.

#### **4.3.6.2 Banner**

Top: 0 pixels  
Left: 147 pixels  
Width: 633 pixels  
Height: 100 pixels

#### **4.3.6.3 Greeting**

font-size: 0.7 em  
font-color: #FFFFFF (white)  
Top: 3 pixels (from <div> tag banner)  
Left: 3 pixels (from <div> tag banner)  
Color: #FFFFFF (white)

#### **4.3.6.4 Navigation**

Top: 80 pixels (from within banner)  
Left: 0 pixels  
Width: 633 pixels  
Height: 20 pixels (for tabs and text)

#### **4.3.6.5 TabItems**

All of the tabs in the banner use the same style but have a different ID for each instance.

##### **4.3.6.5.1 Regular**

Width: 87 pixels  
Height: 20 pixels  
background-color: #CCCCCC (grey)  
background-image: i\_tab\_off.gif (grey tab)

##### **4.3.6.5.2 User Mouse Over**

Width: 87 pixels  
Height: 20 pixels

background-color: #FFFF99 (yellow)  
background-image: i\_tab\_ovr.gif (yellow tab)

#### **4.3.6.5.3 User Navigates in Tab**

Width: 87 pixels  
Height: 20 pixels  
background-color: #FFFFFF (white)  
background-image: i\_tab\_in.gif (white tab)

#### **4.3.6.6 SubNavigationMenus**

Top: -20 pixels (from <div> tag banner, negative number used for placement)  
Left: 0 pixels (from <div> tag banner)

##### **4.3.6.6.1 Dropdown Menu**

The banner has dropdown menus which are contained within the subNavigationMenus layer. Each <div> tag style is duplicated for the layer. The <div> tags are named "overTagName".

##### Style:

Width: 120 pixels

##### **4.3.6.6.2 subnavmenu (span)**

This style is for each of the items in the dropdown menus. The style contains the borders.  
Border-color: #000000 (black)  
font-size: 0.7 em  
font-color: #000000 (black)  
background-color: #FFFF99 (yellow)

##### **4.3.6.6.3 pulloutnavmenu**

This is for the menu that pulls out for the Channel dropdown menu when the user mouse's over "Analysis". *\*Note: This can be duplicated if the need arises.*  
Border-color: #FFFF99 (yellow)  
font-size: 0.7 em  
font-color: #FFFF99 (yellow)  
background-color: #003399 (blue)

#### **4.3.7 Boxes in Content Area (home page, announcements.html, fsa\_snapshot.html)**

The boxes on FSAnet are created with the use of style sheets. All of the styles are listed in the files style\_boxes.css in the 'css' directory of FSAnet. All of the <div> tags for the boxes have a different ID (*lyrTagName*) but use the same style. The boxes have an image that is hidden when the user expands the box, each image has an ID (*TagNamepix*). On the home page, all boxes in the content area have a mouseover tip that describes the content of each box, the tips have an ID name (*TagNameTip*). The text in the boxes inherit the font properties from the layer it is in.

##### **4.3.7.1 lyrTagName**

Width: 283 pixels  
font-size: 0.7 em  
background-color: #3399FF (light blue)  
background-image: box\_top.gif (the top portion and outline of the box)

##### **4.3.7.2 TagNameTip**

Width: 100 pixels  
height: 60 pixels  
Border-color: #FFFF99 (yellow)  
font-color: #FFFF99 (yellow)

background-color: #003399 (blue)  
text-alignment: centered

#### **4.3.7.3 Heading**

font-color: #FFFFFF (white)  
font-weight: bold  
Width: 283 pixels  
text-alignment: centered

#### **4.3.7.4 Bullets**

The summary for each bullet is included in the <span class="bullets"> tag on the html page. The summary's <span> tag has its own ID and style on the html page.

font-color: #2B377F  
font-weight: bold

#### **4.3.7.5 moreclose**

This style is for the openbox# and closebox# layers located in the HTML documents. It is a link that opens and closes the box.

font-color: #FFFFFF (white)

#### **4.3.7.6 Announcements**

font-color: #FFFFFF (white)  
font-weight: bold  
text-alignment: centered  
Width: 283 pixels

#### **4.3.7.7 Announcetitle**

font-color: #2B377F  
font-weight: bold

#### **4.3.7.8 Announcsummary**

font-color: #2B377F  
font-weight: normal

### **4.3.8 Boxes in Left Content Navigation**

The styles for the boxes in the left content area are located in their own file, 'style\_left\_content.css' in the 'css' directory

#### **4.3.8.1 leftcontentbox**

Left: 5 pixels  
background-color: #3399FF (light blue)  
background-image: mbox\_top.gif

#### **4.3.8.2 leftboxheader**

font-size: 0.7 em  
font-color: #FFFFFF (white)  
font-weight: bold  
text-alignment: centered

#### **4.3.8.3 leftboxtext**

font-color: #000000 (black)  
font-weight: normal

#### **4.3.8.4 topofpageleft**

left: 40 pixels

font-size: 0.7 em

font-color: #003399 (blue)

border-color: #003399 (blue)

background-color: #FFFF99 (yellow)

text-alignment: centered

### **4.3.9 Content Area**

Below is the list of all style properties for each <span> tag used in the content area of FSAnet. All of the styles are derived from the <span class="copy"> tag. The font-size property in the list below is based on the font-size in <span class="copy"> (0.8 em). 1 em in these styles is equal to 0.8 em in <span class="copy"> and the rest of the text on FSAnet. For many of the text styles, the margin or padding property has been used to format and space the text on the page. For more detail, open the CSS, style\_layout.css, in a text editor. Also see Figure 4-11.

#### **4.3.9.1 nav**

font-size: 0.7 em

font-color: #003399 (blue)

padding property

#### **4.3.9.2 subjecttitle**

font-size: 120%

font-weight: bold

padding property

#### **4.3.9.3 copytitle**

font-weight: bold

padding property

#### **4.3.9.4 summary**

padding property

#### **4.3.9.5 fingerprint**

font-size: 0.8 em

#### **4.3.9.6 copytable**

font-size: 1em

font-color: #000000 (black)

padding property

#### **4.3.9.7 block**

margin property

#### **4.3.9.8 topofpage**

font-color: #003399 (blue)

border-color: #003399 (blue)

background-color: #FFFF99 (yellow)

text-alignment: centered

#### **4.3.9.9 <p>**

padding property

#### **4.3.9.10 <ul>, <ol>, <li> margin property**

### **4.3.10 Graphics**

For FSA.net Version 2.0, graphics on the site have been limited. Graphics should only be used to represent relevant information or content on FSA.net. Refer to the FSA Style Guide for use of FSA approved graphics. Other graphics can be created for the content area and should adhere to the guidelines below. The graphics currently on FSA.net were created as part of the redesign effort and are an integral part of the design.

#### **4.3.10.1 Types of Graphics**

The use of graphics gives a visual representation for content of FSA.net. All graphics should adhere to common web formats (.jpg, .gif, .png). Photographs can be used to promote employees or events. Illustrations can be used for icons, backgrounds or logos. It is recommended that no text be placed inside of images, or an alternative be provided.

#### **4.3.10.2 Colors**

The standard web palette should be used to create graphics on FSA.net. Refer to the FSA Graphic Style Guide for appropriate color choices and design. Use of transparency in GIFs should be considered on a case by case basis. Caution is recommended for use of "opacity" on illustrations, colors tend to change or appear faded and may not be the best choice.

#### **4.3.10.3 Size of Images**

Graphics being created for the content area of FSA.net should not exceed 595 pixels in width and should not consume much vertical height on the page. If a file must be viewed in a larger size create a thumbnail roughly 110 to 150 pixels wide while keeping restraints or ratio. Use the thumbnail to open in a separate window with the target property of a link tag or JavaScript function. The recommended size for images would be anywhere from 30 pixels to 150 pixels in width.

Despite high bandwidth on the Department of Education network, graphics should be optimized for the web due to the Extranet. Graphics and similar media should at most download by 7 seconds using a 56k modem. Optimize images to the lowest possible file size while still keeping good resolution. Keep in mind if a page is heavily populated with graphics and all use the maximum file size, the cumulative download speed of the page is increased exponentially.

#### **4.3.10.4 Alternative Text**

Every image or graphic is required to have text in the 'alt' property of the <img> tag. The alt tag replaces the images of the page with text describing what that particular image is in text-based browsers or screen readers. The alternative text message should be as descriptive as possible. One pixel gifs used as placeholders also must have alt tags to be 508 compliant. A space is all that is necessary. The alt tag should look like this: alt=" ". The screen readers will ignore the image. This can also be used if the alt tag duplicates information on the html page, or if the image does not contain pertinent information.

#### **4.3.10.5 Storage and Naming of Images**

All graphics for FSAnet should be contained in the 'img' folder of the directory where they are located. For example, a photo for the Students Channel should be located in the directory '/students/img/'. Naming of image files should either describe the image it is named for, or use a naming convention that is relevant to the page or section.

*i.e.- i\_tab\_off.gif*

*i.e.- i\_convention\_110402.jpg*

*i.e.- 01\_02\_fms.gif*

Original graphics created for FSAnet should be stored in the main directory of FSAnet in the folder 'original\_art'. Place files made by Photoshop, Illustrator, Fireworks, etc. into this location.

#### **4.3.10.6 Animated Images**

Animations are increasingly popular on the Internet and with use on Intranets. Unfortunately, they do not provide valuable information for visually impaired users, unless the animation is detailed in another location or on a <longdesc> property in the <img> tag. Use animated GIFs sparingly. Flash or vector based animations are not allowed on FSAnet.

## 5 Applications

Two new applications were added to FSAnet version 2, a staff directory and a multi-subject message board. Both applications were coded using Java2 and JSP's. Along with the new applications, two previous applications were modified to integrate with the redesign and various small web applications were introduced to assist in email and feedback forms.

### 5.1 Staff Directory

The staff directory allows users to insert and search for staff information against a stored database. The application was written using JSP1.0 and housed on Websphere 3.5 application servers which, reside at the VDC. The application connects to an Oracle 8i database also residing at the VDC. The database is located at HPV2 on port 1633. 'FSADIR' is used for both username and password. The complete code used for connection is as follows:

```
Class.forName ("oracle.jdbc.driver.OracleDriver");

java.sql.Connection connection = java.sql.DriverManager.getConnection (
"jdbc:oracle:thin:@HPV2:1633:SFAN","FSADIR","FSADIR");
```

JAR files that must be installed and configured on the application server are as follows:

```
java.sql
javax.sql
sun.jdbc.rowset.jar
java.servlet
java.util
oracle.jdbc.driver.OracleDriver
```

To help display paged results, some of the results pages utilize the cachedRowSet bean.

The application files reside on servers su35e9 and su35e13 in /www/intranet/web/FSAnetApps/staff-directory folder.

The schema used to create the FSADIR database is as follows:

FIRSTNAME	NOT NULL VARCHAR2 (40)
MIDDLENAME	VARCHAR2 (5)
LASTNAME	NOT NULL VARCHAR2 (40)
COMMONNAME	NOT NULL VARCHAR2 (80)
CHANNEL	NOT NULL VARCHAR2 (25)
DIVISION	VARCHAR2 (55)
REGION	NOT NULL VARCHAR2 (25)
EMAIL	NOT NULL VARCHAR2 (90)
PHONE	NOT NULL VARCHAR2 (15)
OFFICE_NUM	NOT NULL VARCHAR2 (10)
PRIMARYSKILL	VARCHAR2 (60)
SKILL1	VARCHAR2 (50)
SKILL2	VARCHAR2 (50)
SKILL3	VARCHAR2 (50)
SKILL4	VARCHAR2 (50)
SKILL5	VARCHAR2 (50)
SPECIALSKILL	VARCHAR2 (30)
CONTACT1	VARCHAR2 (80)
CONTACT2	VARCHAR2 (80)
CONTACT3	VARCHAR2 (80)
SEARCHLAST	VARCHAR2 (40)
SERACHEMAIL (do not change this)	VARCHAR2 (90)
SEARCHSPECIFIC	VARCHAR2 (300)

## 5.2 Message Board

The message board allows users to post and read messages to and from other users. The application was written using JSP1.0 and housed on Websphere 3.5 application servers which, reside at the VDC. The application connects to an Oracle 8i database also residing at the VDC. The database is located at HPV2 on port 1633. 'FSAMSGBRD' is used for both username and password. The complete code used for connection is as follows:

```
Class.forName ("oracle.jdbc.driver.OracleDriver");

java.sql.Connection connection = java.sql.DriverManager.getConnection (
"jdbc:oracle:thin:@HPV2:1633:SFAN","FSAMSGBRD","FSAMSGBRD");
```

JAR files that must be installed and configured on the application server are as follows:

```
java.sql
javax.sql
sun.jdbc.rowset.jar
java.servlet
java.util
oracle.jdbc.driver.OracleDriver
```

To help display paged results, some of the results pages utilize the `cachedRowSet` bean.

The application files reside on servers su35e9 and su35e13 in `/www/intranet/web/FSAnetApps/watercooler` folder.

The schema used to create the water-cooler database is:

```
CREATE TABLE messages (ID NUMBER (10) PRIMARY KEY,
whenmade VARCHAR2 (30) NOT NULL,
topic VARCHAR2 (20) NOT NULL,
subject VARCHAR2 (50) NOT NULL,
replied VARCHAR2 (3) NOT NULL,
author VARCHAR2 (50) NOT NULL,
body VARCHAR2 (2000) NOT NULL)

CREATE SEQUENCE ID
START WITH 1
INCREMENT BY 1
NOCACHE
NOCYCLE
NOMAXVALUE
NOMINVALUE

CREATE TABLE replies (REPID NUMBER (10) PRIMARY KEY,
frommessageid VARCHAR2 (10),
whenmade VARCHAR2 (30) NOT NULL,
topic VARCHAR2 (20) NOT NULL,
subject VARCHAR2 (50) NOT NULL,
author VARCHAR2 (40) NOT NULL,
body VARCHAR2 (2000) NOT NULL);

CREATE SEQUENCE REPID START WITH 1
INCREMENT BY 1
NOCACHE
NOCYCLE
NOMAXVALUE
```

NOMINVALUE

```
CREATE TABLE users (email VARCHAR2 (50) NOT NULL);
```

### 5.3 Search

The search page allows users to search FSAnet content by entering in keywords on the subject they would like to find. It has been modified from a perl CGI application to a JSP taglib based application. It uses the Autonomy search engine that indexes all the pages on FSAnet and stores them into an Autonomy database. The name of the database is "FSANetData\_MetaData". The page uses JSP 1.1 and the ITA Reusable Common Services (RCS) to query the database for results.

The RCS requires a JSP 1.1 processor. The search package includes:

```
jakarta-oro-2.0.1.jar  
jdom-B6.jar  
protomatter-1_1_5.jar  
rcs_exception-v1.5.jar  
rcs_logging-v1.5.jar  
utility.jar  
xerces.jar  
xml.jar
```

Because the search page uses the RCS taglibs the following must also be installed and configured on the application server:

```
search.tld  
rcs_search-v1.1.jar  
javax.servlet.jsp.*  
autonomy.properties  
errorMessages.properties
```

Further information on autonomy and the RCS can be found in the [ITA Reusable Common Services Search Users Guide](#).

### 5.4 Acronym Finder

The acronym finder is a java servlet that returns the definition of an acronym from a reference text file. The acronym finder has been modified to conform to the look and feel of the FSAnet redesign.

### 5.5 Mail Programs

All email applications utilize the java.mail api. The mail.jar and activation.jar files must be included on the servers' classpath. The i.p. address for the mail server is: 165.224.216.100.

## **6 Content Submission**

FSAAnet version 2.0 introduces new procedures for Content Managers of FSAAnet and how users can submit content for posting on FSAAnet. ROH conducted a study on the Content Management for FSA and is documented in *“Proposed Content Management Process for FSAAnet Version 2.0”*.

### **6.1 Channel Content Managers**

Responsible for managing FSAAnet activities within their specific channels. The Content Managers should develop and maintain channel content, serving as “editor-in-chief”. They should act as a management consultant for using the web to carry out Channel goals and a liaison to the owner of FSAAnet and the web team. Promote the Channel’s web site and provide customer service for customers

### **6.2 Posting content through content managers**

Employees of FSA who produce, identify, gather or develop an idea for new or existing content to be published on FSAAnet, will contact their Channel Content Manager. The Content Manager will request the information to be posted with the owner of FSAAnet or their appropriate manager.

### **6.3 FSAAnet Content Management System**

ROH is developing a Content Management System for submission of content to FSAAnet.

### **6.4 FSAAnet Web Team**

The Web Team consists of employees of ROH, Inc. of Arlington, Virginia. Their task is to develop, edit and post information and documents onto FSAAnet. ROH, Inc. is contracted by FSA Communications to provide this service. ROH, Inc. has also designed and implemented Version 2.0 of FSAAnet.

### **6.5 Interwoven Teamsite**

The FSAAnet Web Team uses the Department of Education’s standard tool for Content Management, Interwoven TeamSite. Each member of the Web Team is given “Administrator” access to the TeamSite server. All files associated with FSAAnet (except for the Application Server) are imported and deployed through TeamSite to the production servers of FSAAnet at the Virtual Data Center (VDC).

### **6.6 Writing for the Web**

All web pages must be checked for spelling and grammatical errors before they are posted. Unless deemed necessary all pages should be short and concise. Users tend to best take information from the web in “chunks”, or small paragraphs. Pages with an overabundance of information is discouraged.

### **6.7 Metadata**

Metadata is a crucial component of content submission for FSAAnet. As described in Section 4.2.2, metadata helps catalog the page content for the FSAAnet search engine. All new content being submitted must contain the information listed in Section 4.2.2 or the request will be returned.

### **6.8 Content**

Content can take many forms on FSAAnet. Most of the information on FSAAnet is textual information that has been coded onto an html page. FSAAnet may contain lists of information, tables with data, forms for submission, graphics, etc. Contact the FSAAnet Web Team for consultation.

### **6.9 Graphics**

The guidelines for graphics is detailed in Section 4.3.10 of this document. Graphics may be placed into the content area of pages on FSAAnet. Each channel home page has a location for graphics in the “Announcements” box, all other graphics should be posted on lower level pages of your channel.

## **6.10 Document Naming Convention**

All documents and attachments with submissions must be named in an appropriate manner. The name must detail the title or content of the file. Abbreviations help in storage of files. Do not include capital letters or spaces in your naming convention. For a space use an underscore (*i.e.*- “\_”). Numbers can also be used in naming files.

*NO – “Document for FSAnet.doc”*

*OK – “doc\_for\_fsnet.doc”*

*OK – “110202.xls”*

If submitting a daily, weekly or monthly newsletter or other document, ask the FSAnet Web Team for the naming convention used on the TeamSite server.

## **6.11 File Formats and Size**

File formats are detailed in Section 2.5 of this document. Most of the documents posted to FSAnet are Microsoft Office files or Adobe Acrobat PDFs. File size is irrelevant for documents accessed over the Intranet or Department or Education network, but may pose a problem for dial-in users or users of the Extranet.

## **6.12 Interactive Elements**

All applications or interactive elements to be placed on FSAnet should be discussed with the Channel Manager, FSAnet Owner and the FSAnet Web Team for development or posting. Certain requirements must be met and are detailed throughout this document.

## Appendix A

### Web Accessibility Guidelines

FSAnet's standard templates have been designed to ensure that all federal accessibility requirements are met to include 508 compliance and American Disabilities Act (ADA) Compliance. Complete regulations governing web accessibility are available on the Section 508 web site (<http://www.section508.gov/>).

1. You must provide a text equivalent for every non-text element.
  - a. alt tags for images
  - b. captioning for audio/ video
  - c. Real-time, synchronized captioning must be provided for multimedia presentations (including video/ audio/ etc
  - d. Webcasts, audio files, and any multimedia presentation that plays on its own, must have synchronized text captioning.
  - e. If you use color for navigation, to give text emphasis, or to convey meaning, you have to provide a text alternative
  - f. If color is used for any reason other than appearance, you must describe what the color is trying to convey. For example if you use color to highlight text
  - g. text descriptions of maps/ graphs
  - h. Client-side image maps rely on the browser to equate a portion of an image to a hypertext link. These types of image maps are accessible to those with disabilities.

If you use style sheets be sure that the page will still be usable if someone has a browser that doesn't support style sheets.

Test your page in a browser with style sheets disabled to ensure that the page is still readable and navigable, before you post to production.

2. If you use tables, be careful how you do it. Ensure the page makes sense to someone using adaptive technologies
3. Pages shall be usable when scripts are turned off or are not supported, or shall provide equivalent information on an alternative accessible page.
  - a. A user must be able to use your pages if they are using a browser that doesn't support scripting (such as JavaScript).
  - b. Your scripts should be coded so that browsers don't display or read the scripts (e.g., comment out JavaScript coding).
4. If your pages contain links to PDF files, audio, video, or anything else requiring a plug-in, you must also provide a link to an ADA compliant plug-in. If there isn't an accessible/ compliant plug-in, then you cannot use that format. This requirement applies to applications as well. Electronic forms shall be accessible to people using adaptive/ assist technologies. If you have on-line forms, they must be usable for someone using an assisted browser, such as JAWS for Windows.
5. Users of assisted technology should be given the option to skip repetitive navigation links. If a timed response is required, the user must be notified when a process is about to time-out and be given an opportunity to ask for more time.