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# **Web-based Intranet Application User Interface (UI) Style Guide**

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Version 3.6  
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## Overview

This style guide defines the web-based user interface (UI) design, layout, and best practices to use when developing a user interface for thin-client html-based intranet applications. These applications use web-based technology to deliver functionality and systems to Northwestern Mutual's home office and field staff. Prior to web technologies becoming available, these web-based applications were created using fat client technology such as Visual Basic, C++, or Small Talk.

This document specifies the user interface standards and guidelines for the design and development of web-based systems at Northwestern Mutual.

## Purpose of Guidelines

- Allow designers and developers to focus on new/original development and problem solving
- Create reusable resources
- Enable repeatable processes for internal facing web-based applications and development
- Ensure and maintain high quality
- Help to better define internal facing web-based applications and development project resource needs
- Help to better define internal facing web-based applications and development technical training needs
- Shorten time to system delivery

## Commitment to Standards and Guidelines

- Adherence is expected (risk rework if not)
- Compliance checks to be built into the internal facing web-based applications development process
- Process to handle exceptions to standards to be established
- Process to maintain and update standards and guidelines to be established

## Not a How-to Guide

This is not a how-to guide that contains procedures to design and develop web-based user interfaces. These standards and guidelines, like any other system requirement, are input into the design and development process. Following these guidelines, as a part of the whole web-based user interface (UI) solution delivery process, will significantly contribute to the success of your web development project.

## Involve Web UI Design and Development Specialists

When you start a web development project, be sure to involve web UI design and development specialists in the earliest stages of your project. These people are knowledgeable and experienced in web UI design and development best practices that are required.

If your project is an **internal facing Intranet site**, such as Mutualnet or LINKnet, or your project is a **web-based application** such as Client Service System, the Network Store or Open Enrollment, you should contact the User-centered Design Team (formerly the SPD Team) in the I.S. Department—**Eric Strandt**.

## Revisions and Additions to these Guidelines

These guidelines will be regularly reviewed and revised as needed. For the most current version, contact Mick Rosolek or visit the UCD - Style Guides page on Mutualnet ([http://mutualnet.nml.com/is/ucd/docs/web-based\\_app\\_style\\_gd\\_v3.6.doc](http://mutualnet.nml.com/is/ucd/docs/web-based_app_style_gd_v3.6.doc)).

## Terminology used

Throughout this document, the following common terminology is used:

- **User**—the person/people who will actually use the web site/application. Although business clients could be users, the term user does not specifically apply to them.
- **Internet Site**—any web content or functionality that is delivered across the World Wide Web to external facing customers and the world at large.
- **Intranet Site**—web content and simple functionality that is delivered to our internal employees and the field, generally via Mutualnet or LINKnet.
- **Web Application**—functionality and systems that are delivered to our home office and field staff (via web technologies) to perform specific tasks. Prior to web technologies becoming available, these applications would have been done using fat client technologies such as Visual Basic, C++ or even Small Talk.

## Tier Two Standards and Guidelines

Northwestern Mutual takes a three-tier approach to define and set corporate user interface standards and guidelines for web-based systems. Tier one standards and guidelines are high level and cover all web-based systems developed and deployed at Northwestern Mutual. The tier one standards are published in a separate document and can be found at the User Centered Design MutualNet site. It is expected that all web-based systems adhere to tier one standards.

Tier two covers the four quadrants represented below. The scope of this document is the Intranet Web Application quadrant.

	<i>Internet</i>	<i>Intranet</i>
<i>Web Page</i>	NMFN.com	<i>LINKnet Mutualnet</i>
<i>Web Application</i>	CSI, BCIS	<b>CSS, Network Store, etc.</b>

This style guide provides the tier 2 standards and guidelines to use when creating the UI for a web-based Intranet application at Northwestern Mutual. This style guide works off tier 1 standards which covers the guidelines for all information displayed or viewed in a web browser. This includes all Internet and Intranet documents both static and interactive. The scope of this document is confined to the tier 2 of Intranet applications.

*NOTE: This guide does not define business requirements, processes, or tasks used to develop a web-based Intranet application. It also does not pertain to static web pages (e.g., Mutualnet department web pages) or simple html forms (e.g., employee personal data change form).*

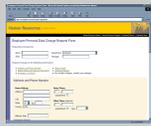
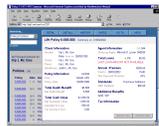
Web-based Intranet applications provide business process functionality that in the past would have been provided by thick client technologies such as Visual Basic, C++ and Small Talk. Current examples of web-based applications include the Client Service System, Competitive Reports, TNC Reporting, Open Enrollment, Network Store, Imprint Shoppe, and Client Builder Goals.

# Application Models

This section of the style guide covers the application model. The application model is a theory of construction and workflow that all tier 2 applications adhere to. The application model takes into consideration the organization of the task an application must perform into the interface and work flow design.

## Web-Based Information Classification

Northwestern Mutual uses five different classes of web-based information delivery systems to deliver a wide range of information and functionality – from static web pages to highly interactive applications.

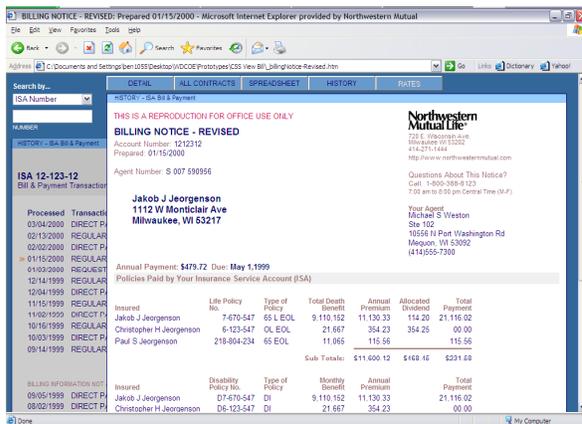
	Static Web Pages (Addressed with Mutualnet and LINKnet Guidelines)		Applications (Guidelines for these kinds of web applications are addressed in this document.)		
	Static Page	Simple Form	Inquiry Application	Calculator/Game Application	Highly Interactive Application
Metaphor	Flat paper	Flat paper with interactions	Flat paper with control panel	Game/ Simple tool	Complex Tool
Example	Mutualnet	Employee Personal Data Change Form	CSS	Open Enrollment	Network Store
Data Entry	No	Minor data entry, Form validation	Search Query	Form elements, Validation	Major data entry, Validation
User References	Single	Single	Single or Multiple	Multiple, Retains data	Multiple/ continuous use
Printable	Yes	Low Probability	Produces printable product	Produces printable product	Seldom Required
Interactions	Navigation, Scroll	Input, Submit, Cancel	Navigation, content change and read-only	Calculate, re-enter and view	Custom, data entry, change/view content and update
Window	Self	Self, Parent	Self, parent, child	Self	Process, save and new
Browser Tool Bar	Yes	Possible, Not necessary	Application dependent	No	No
Visual Example					

## Applications

The following are examples of the Inquiry Application, the Calculator/Game Application and the Highly Interactive Application. They are the applications covered in the scope of this manual.

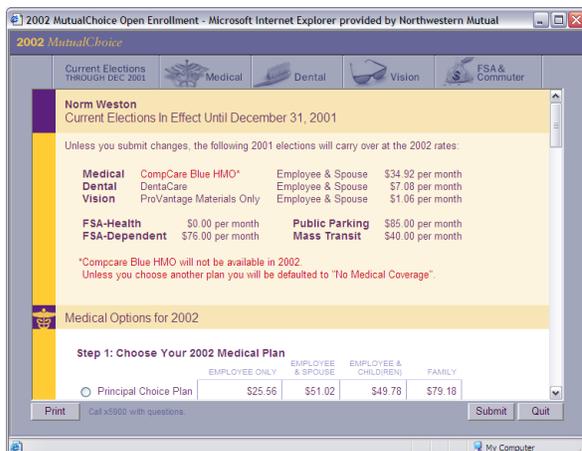
### Inquiry Application

Inquiry Applications can be compared to a flat piece of paper with a control panel. These applications are dependent upon another application and use the web browser toolbar. To access data in an inquiry application, the user can perform a query and print a paper copy of the query results. Although users can view data in the application, they can not edit it.



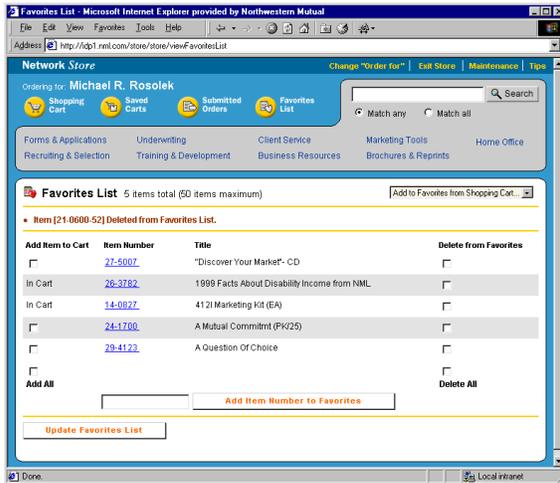
### Calculator/Game Application

Calculator/Game Applications are similar to data entry forms or other simple tools that are used infrequently. These types of applications are not dependent on other applications and do not use the browser toolbar. The user can calculate or reenter data in the application and print a paper copy of the data if desired. The application also validates and retains the data that is entered.



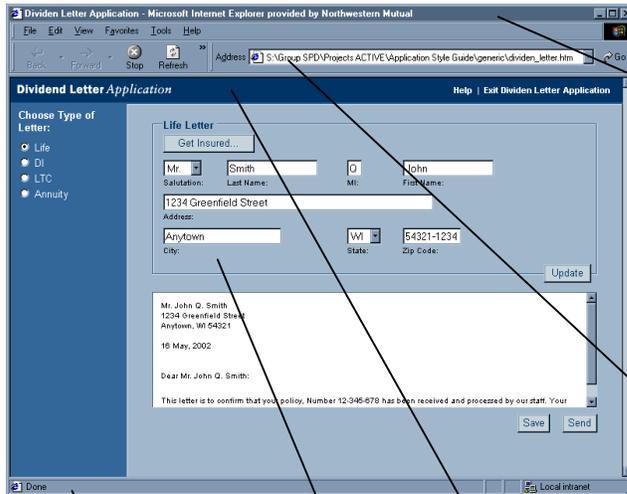
## Highly Interactive Application

Highly Interactive Applications are complex tools that are used frequently. They involve lots of data entry and form validation. In addition, custom interactions can be used to change and view the content. Highly interactive applications are not dependent on other applications and do not use the browser toolbar. The user can enter and edit large amounts of data in the application but can not print a paper copy of it.



# Primary User Interface Screen Overview

The five parts that make up an application are the Windows Title Bar, the Browser Tool/Menu Bar, the Banner, the Work Area and the Status Bar.



## Windows Title Bar

- Name of the application.
- Minimize, Maximize and Close buttons

## Browser Tool/Menu Bar

- The menu
- The tool bar
- The address bar

## Banner

- Includes the name of an application with a branded wordmark
- Minimally includes an exit link thus reinforcing the proper way to exit an application in our single sign-on WEBSign security environment.

## Work Area

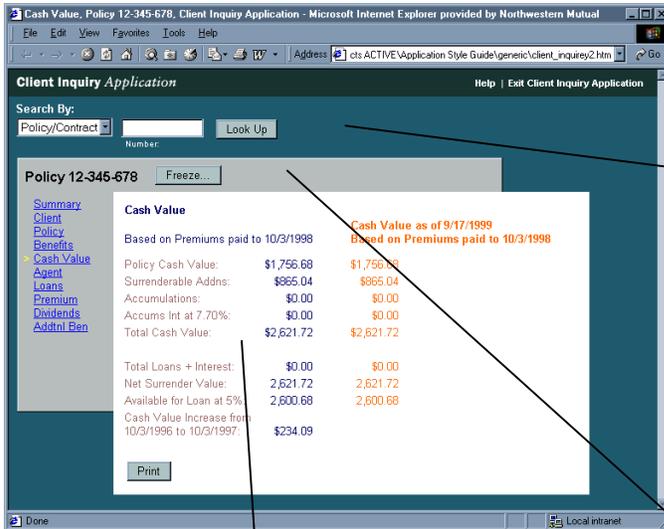
- The interactive area of the application
- 3D appearance to indicate functionality
- Colors used to group information
- White background areas indicates point of user focus or data entry/manipulation
- Layout, colors, controls and other elements included here are dependent on the needs of the application

## Status Bar

- Shows destination of links
- Shows security status of web page

# The Three Spaces of the Work Area

The work area is divided into three spaces: the Subject space, the Manipulation/Work space and the Results space. Every application conceptually has these three spaces. Each space may or may not be visible and exposed directly to the user, but conceptually each space is present in a completely devised application.



## Subject Space

- Subject space: dark in color with interactivity that influences the application on a global level.

## Manipulation/Work Spaces

- Manipulation/Work space: lighter and grayish in color with interactivity that effects the midground and foreground spaces.

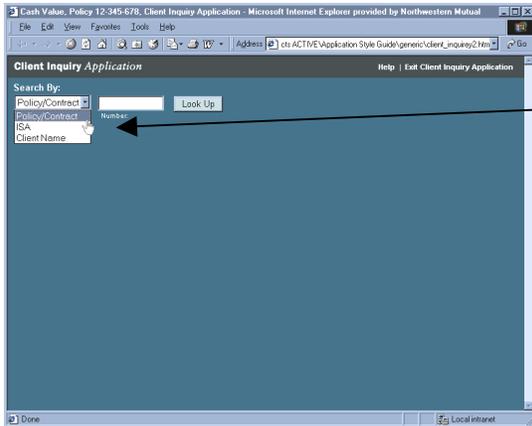
## Results Spaces

- Results space: white in color and contains the end results of the application.

The spaces are intentionally arranged to follow a workflow that starts in the upper left-hand corner of the application and proceeds to the lower right-hand corner working top to bottom and left to right of the screen.

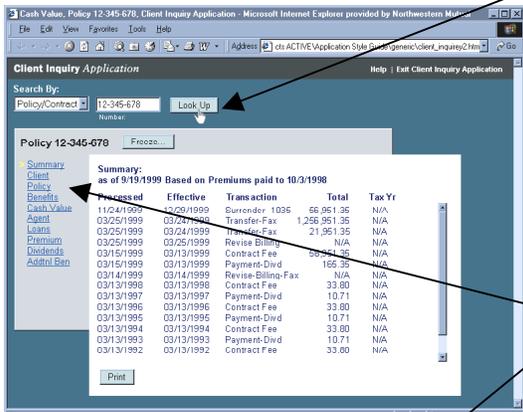
## Work Flow Model

Conceptually, all applications have the Subject space, the Manipulation/Work space and the Results space. To help differentiate work areas from each other, a different background color is used for each space. The background colors are muted and range from dark to medium dark to a lighter color. The workflow of an application follows a logical order from the upper left-hand corner of an application down through the application working left to right. Below is an illustration of what may be a typical workflow in a web-based application.



### Step One

The user's focus is in the Subject space; the user selects an option to begin the Application's workflow.

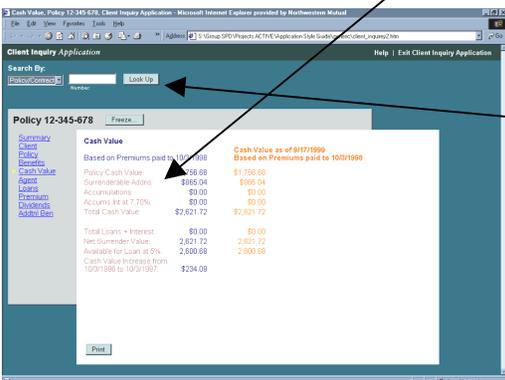


### Step Two

With the subject established, the default Manipulation space and the Results space are brought up.

### Step Three

Actions taken in the Manipulation space result in changes to the Results space.



### Step Four

When done with the current subject the user selects a new subject.

## Standards and Guidelines

The standards and guidelines in this style guide are based on the Northwestern Mutual corporate tier 1 standards and guidelines. This guide contains the tier 2 UI standards and guidelines for inquiry, calculator/worksheet, and highly interactive applications developed at Northwestern Mutual. This section describes the specific UI standards and guidelines to use when creating a UI for these types of applications.

**These guidelines build off tier 1 guidelines. Please consult tier 1 guidelines for standards that precede the standards outlined and illustrated within this document.**

### Usability

The UI for all web-based Intranet applications should be well-designed and easy to use. This requires planning time and should be addressed throughout the application's development lifecycle.

Following the tier 1 Usability standards and guidelines ensures you are meeting the tier 2 guidelines.

### Audience/End-users

Before designing a UI for a web-based Intranet application, you must identify the target audience and make them the focus of the application design and content.

The target audience for web-based Intranet applications at Northwestern Mutual includes home office employees, contractors, interns, and 20 real estate offices. These users have an Ethernet LAN connection, use Windows 95 or WinXP, and use Internet Explorer 5.5 and greater.

Following the tier 1 Audience/End-user standards and guidelines ensures you are meeting the tier 2 guidelines.

### Content

The UI Content in the web-based application must be well written, organized, and meets the end-user's needs, as well as its intended business needs.

Following the tier 1 Content standards and guidelines ensures you are meeting the tier 2 guidelines.

In addition follow these tier 2 content guidelines:

- The dialog box title should follow an "Action" and "Object Name" format (e.g., "Edit Cover Page Information")
- The window title text should follow a "Page Name" "Object Name" and "Application Name" format (e.g., "Cash Value, Policy 12-345-678, Client Service System")
- The wordmark must remain consistent throughout the entire application
- The workspace title text should be relevant to the context (subject and screen name) in which the workspace resides (e.g., "Policy 12-345-678 Cash Value")
- Remove unnecessary repeated words implied by context, i.e. 'NAME' preceding 'FIRST NAME' 'LAST NAME' should be replaced by; 'NAME' preceding 'FIRST' 'LAST'

## Interaction Design and Navigation

The web-based application's UI must utilize effective and easy-to-use navigation and interactions.

Following the tier 1 Interaction Design and Navigation standards and guidelines ensures you are meeting the tier 2 guidelines.

In addition follow these tier two content guidelines.

- Follow GUI control standards available on the UCD Mutualnet site.
- Launch each application into its own window (e.g., from the Human Resources department web site, the user can access the MutualChoice Open Enrollment System which opens into its own window)

## Visual Design

Visual design supports and enhances the web-based Intranet application's ability to communicate its functionality and content. Before focusing on or committing to a specific visual UI design, you should complete its information architecture. Follow these visual design standards and guidelines when creating a UI for a web-based application:

- Due to the inward facing nature of tier 2 applications, the Northwestern Mutual logo is not required.
- Visual designs are optimized for a 1024 x 768 screen resolution but can accommodate an 800 x 600 screen resolution
- Visual designs are compatible with the Northwestern Mutual supported browser.

Following the tier 1 Visual Design standards and guidelines ensures you are meeting the tier 2 guidelines.

### Screen Elements

Web-based Intranet applications contain similar design elements that include:

- Windows Title Bar
- Browser Tool Bar
- Banner
- Work Area
- Status Bar

## Windows Title Bar

The title text should be meaningful and define the specific active application page. This text should be comprised of the application name, object identifier, and the page identifier (e.g., Client Service System, Policy 12-345-678, Cash Value). Arrange these elements so that when the title bar text is viewed in the task bar or within the browser history list, the truncated text is meaningful. The title bar text should identify what makes the application page unique. This is important especially if multiple instances of the same application are running concurrently.



The Minimize, Maximize and Close buttons are required

### Application Name:

Minimally, display the application name in the title bar. This will generally match the name of the application in the banner's wordmark.

### Object Identifier:

Additionally, identify the object that the user currently has opened and is working on in the application.

Have the object identifier come before the application name as this helps the user to better locate the application among many that may occupy the task bar or browser history list.

### Page Identifier:

Lastly, add the page or data view the user has selected and is working with.

Have the page identifier come before the object identifier. This helps the user to further identify the application on a crowded Windows task bar or browser history list.

## Browser Tool Bar

The end-user configures the browser Tool bar, Menu bar and Address bar to suit their own needs and preferences. For instance the browser Tool, Menu and Address bars can all be on separate lines, they can have large or small icons and text can be included with the icons. (See examples below)

The web application designer/developer can only choose to display or not to display the Tool, Menu or Address bars. The developer cannot configure the appearance or content of the Tool, Menu or Address bars; only the end-user can.



Generally, a web application should include the Browser Tool/Menu bars if the interaction design is such that forward and back browsing makes sense to be supported. An example of this is the Client Service System.

Do not include the browser tool/menu bars if the application does not need to support forward and back browsing, such as the Competitive Reports application or Open Enrollment.

## Banner

The banner is located at the top of every web-based application.



### Banner Links

- Application level navigation: Help, Home, Exit, etc.
- Required "EXIT" link to reinforce consistent and proper exiting from any application.
- Link color: white or very light
- Font: default browser sans-serif font, 80% of the user setting as defined in a cascading style sheet.

### Background and size

- Background is a dark branded color that contrasts with, yet complements the color of the Work area below it.
- Height: 32 Pixels
- Scales to the width of the application window.

### The wordmark

- The name of the application
- Located on the left side of the banner
- A branded color that contrasts well with the banner's background color.
- Fonts: Franklin Gothic Demi for the leading word and Sabon Italic for the trailing word
- Font Height: 16 pixels

## Wordmark

Each web-based application has a wordmark, which is a unique identifier that is relevant to the specific type of application. Wordmarks are placed in the banner, reside in the upper left corner and remain consistent throughout the entire application.

Wordmarks use leading and trailing text. The leading wordmark settings include:

- font-family: FranklinGotITC, Arial, sans-serif
- font-weight: bold

The trailing wordmark settings include:

- font-family: Sabon, times new roman, serif
- font-weight: normal
- font-style: italic

## Banner Links

Banner links provide users with access to contact information and a way to exit the application. The global navigation settings include:

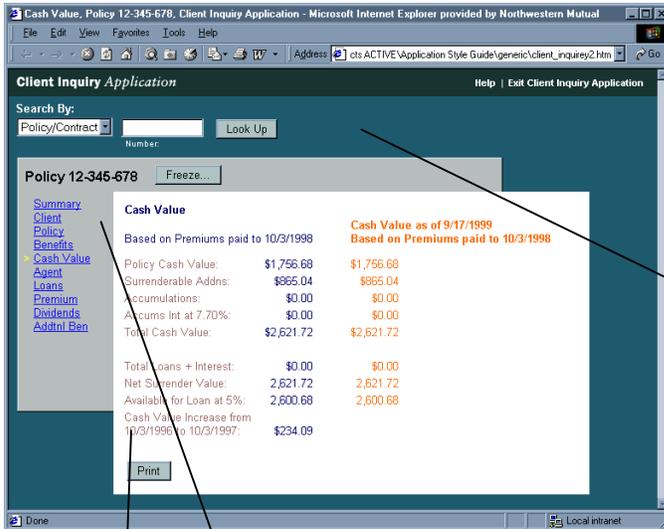
- font-size: 80%
- font color: white
- text decoration: none

When the mouse is moved over the global navigation text, the rollover (hover) effect adds underlining and changes the color of the text.

## Work Area

Ideally all data in the information area can be viewed without scrolling, yet depending on the scope of the application, some vertical scrolling may occur.

The following illustrates examples of the work areas and the spaces; these applications have been designed as examples and are *not* finite definitions of the work area. Actual interface design may vary depending on the goals of the application.



### Subject Space

- The farthest recessed space in the application and the darkest in color.
- Represents the space where the topic of the application is established.
- Does not change. It is the stationary grounding point of the application.
- Has a global presence: actions here affect the application in a global way.
- Subject elements that the user interacts with are grounded in the upper left-hand corner of the application. Whether visible or not, the subject space covers the entire work area.

### Manipulation/Work Spaces

- The second space hierarchically in the order of spaces.
- Placed to appear apart from the other spaces and is given a 3D look.
- Lighter color than the subject space: a muted grayish color, to look like windows graywear, as close to gray as possible with a tint of the background color.
- Gray tone color provides a very good work surface for GUI controls.
- When these elements are active they will appear white to indicate the place of user focus. When they are disabled they will appear the color of the midground space. This space is regarded as a means to deliver the application results.

### Results Spaces

- The forward most space, appears above and apart from the rest of the application spaces.
- Reflects a paper metaphor, it is white in color for viewing results.
- If intended, viewable result will be accessed in this space.

## Status Bar

The browser generates the Status Bar. The status bar shall always be visible regardless of the function of the application.

The status bar indicates: the security of the server when applicable, the destination of links when the cursor is positioned over the link, the network on which the application is running and other applicable information.

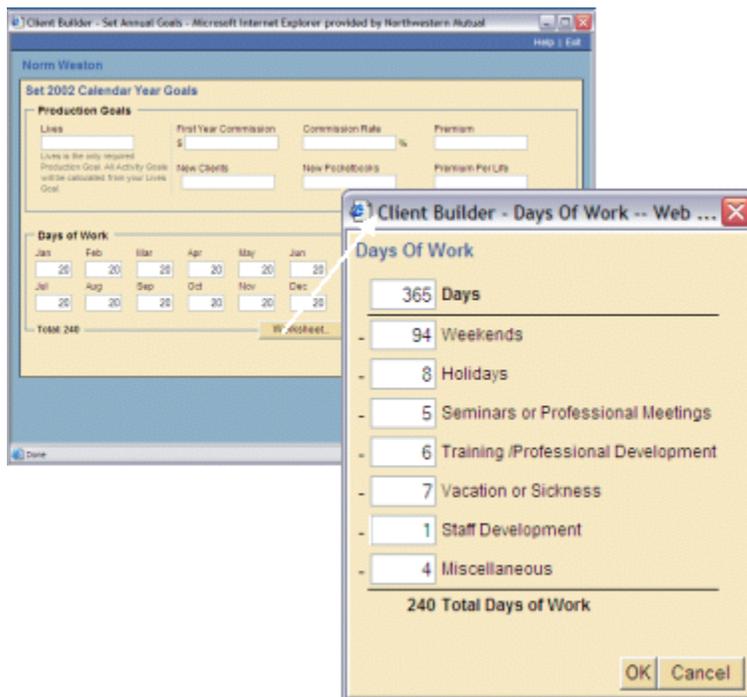


## Dialog Box Components

Depending on the scope of the application a dialogue box may be required to accomplish the Applications objective. Dialog boxes always have a three-dimensional edge and are used for small tasks that are deviations from the larger high-task flow. The "Confirm (OK or Save)" and "Cancel" buttons always appears in the lower right corner of the dialog box. In addition, the button names are reflected in the title bar. For example, clicking the **Worksheet** button in the Set <time period> Goals box opens the Days of Work Worksheet dialog box.

Dialog boxes are built from tables that have three rows. The height setting of the table is 100%. The title of each dialog box should follow a "Action" and "Object Name" format (e.g., "Edit Cover Page Information")

This graphic illustrates the primary components of most dialog boxes.



## Accessibility/Compatibility/Scalability

The purpose of these guidelines is twofold. First, the guidelines ensure that the content and functionality via web-based technologies delivered to Northwestern’s customers, field force, home office staff and the public at large reaches the widest number of people. Second, the same content and functionality delivered via web-based technologies accommodates and adapts to the widest range of existing and future technologies such as hand-held devices, large high resolution displays and technologies used by the disabled.

Following the tier 1 Accessibility, Compatibility and Scalability standards and guidelines ensures you are meeting the tier 2 guidelines.

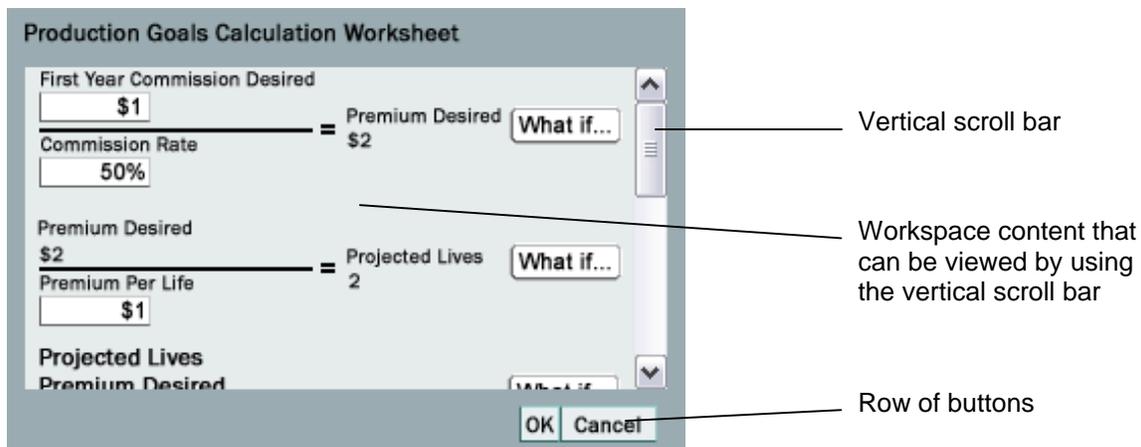
In addition follow these tier 2 guidelines.

- When designing a worksheet, window, or dialog box, be sure that no horizontal scrolling is required for 800 x 600 (and higher) screen resolutions. This means that the content should not exceed 800 pixels in width.

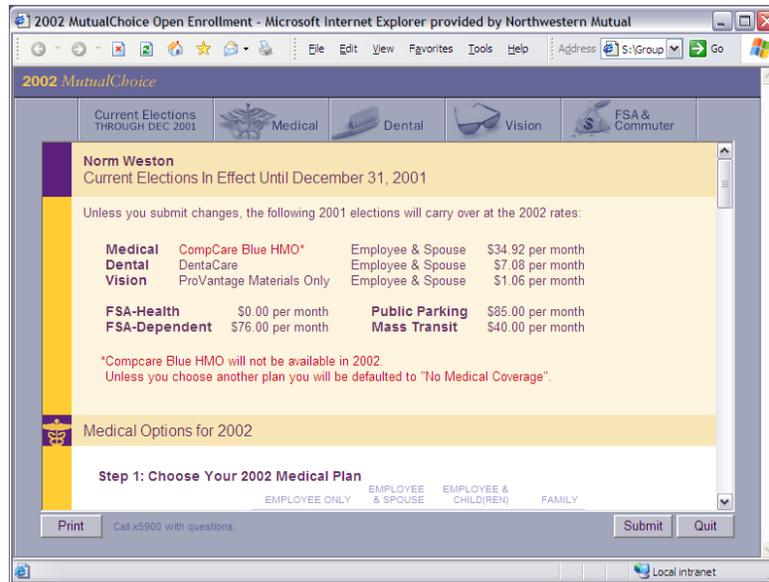
*NOTE: When creating a UI for an application that integrates with Siebel, consider that Siebel is optimized for 1024 x 768 screen resolution. Siebel's Active X browser has a viewing area of 800 x 600, which means that applications that integrate with Siebel can accommodate an 800 x 600 screen resolution.*

- When users resize any worksheet, window, or dialog box, a vertical scroll bar appears on the right side to allow the user to scroll though the dialog box content. The title bar and row of buttons (e.g., **OK**, **Cancel**, **Save**, etc.) always appear to allow the user to exit the window.

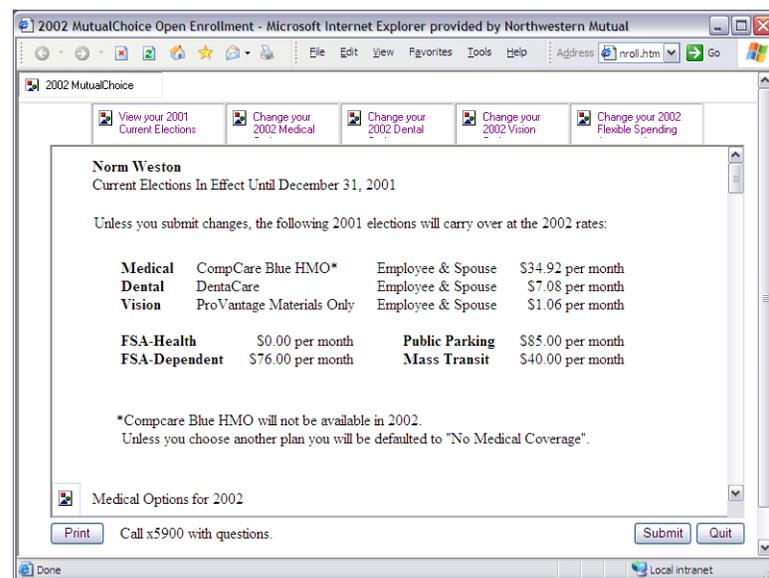
For example, this graphic illustrates a resized dialog box.



- The following example shows the Open Enrollment application with the default browser settings, and text set to the default medium size. The content area of the page scrolls in order to accommodate a large section of information yet the navigation and the command buttons are clearly visible and do not change position.



- The following example is the same screen. The browsers' accessibility settings have been changed to exclude graphics and to ignore specified colors, CSS styles and font sizes. Although the graphics are not visible, the user can clearly see the navigation with the use of ALT tags. As with the example above, the content area remains accessible with page scrolling yet the navigation and the command buttons, although less aesthetically pleasing than the example above, are clearly visible and do not change position.



## Cross Browser and Platform Compatibility

The target platform and browser for Northwestern Mutual intranet applications is Microsoft Windows and Internet Explorer—cross-browser and cross-platform functionality are not design issues for Northwestern Mutual's web-based intranet applications.

*NOTE: Following the tier 1 Cross Browser and Platform Compatibility standards and guidelines ensures you are meeting the tier 2 guidelines.*

## Printing

Following the tier 1 Printing standards and guidelines ensures you are meeting the tier 2 guidelines.

## Code

Following the tier 1 Code standards and guidelines ensures you are meeting the tier 2 guidelines.

## Directory Structure Names

This table describes the standard directory names to use to organize your content.

Standard Directory Name	Types of Content
/doc	Microsoft Word documents and portable document format (PDF) files
/html	Web page content
/image	Image files such as *.gif and *.jpeg
/script	JavaScript
/style	CSS files

## Media Elements

Following the tier 1 Media Elements standards and guidelines ensures you are meeting the tier 2 guidelines.

## Branding

The standards and guidelines outlined in this document ensure your application will be branded according to Northwestern Mutual standards.

Following the tier 1 Branding standards and guidelines ensures you are meeting the tier 2 guidelines.

For more branding information, see the Brand Management Mutualnet site.

*NOTE: although colors are selected from the brand color palette, a trained designer should choose colors.*

## Taxonomy and Search

Following the tier 1 Taxonomy and Search standards and guidelines ensures you are meeting the tier 2 guidelines.

## Performance and Availability

Following the tier 1 Performance and Availability standards and guidelines ensures you are meeting the tier 2 guidelines.

## Compliance, Audit, and Legal

Following the tier 1 Compliance, Audit, and Legal standards and guidelines ensures you are meeting the tier 2 guidelines.

## Security and Trust

Application developers are responsible to ensure that their web-based application is accurate, credible, and secure even if the application has not been modified recently. This means that the web-based application must be correct and up to date, originates from a reliable source, and has restricted access if necessary.

Follow tier 1 security and trust standards and guidelines.

Ensure all applicable Northwestern I.T. security standards and policies are adhered to.