Sun Java™ System

Communications Express 6 Customization Guide

2004Q2

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Contents

About this Guide

This guide explains how to customize the look and feel of Sun Java™ System Communications Express. Although the product architecture permits an almost unlimited customization, this guide focuses on how to perform the most commonly requested customizations. In addition, the customizations have been tied together into an application scenario so that examples, code, screen shots, all relate to one another and provide a common frame of reference.

Topics covered in this chapter include

- Who Should Read This Book
- What You Need to Know
- How This Book is Organized
- Where to Find Related Information
- Where to Find This Book Online

Who Should Read This Book

You should read this book if you are responsible for administering, configuring, and customizing Sun Java System Communications Express at your site. Developers may also find this guide useful for reference.

What You Need to Know

This book assumes a knowledge of Sun Java System Messaging Server software and an understanding of the following:

- JavaScript™
- HTML
- .jsp
- Email applications
- Web development

How This Book is Organized

Organization of the Sun Java System Communications Express Customization Guide

Table 0-1 Organization of the Sun Java System Communications Express Customization Guide

Chapter	Description
This Chapter	Describes the audience, requirements, organization, document conventions, and related information
Chapter 1, “Introduction to Communications Express and Customization”	This chapter provides a high-level overview on how to customize the look and feel of Sun Java System Communications Express.
Chapter 2, “Customizing General Features in Communications Express”	This chapter explains how to customize the general features in Sun Java System Communications Express.
Chapter 3, “Customizing General Features in Calendar”	This chapter explains how to customize the Calendar component in Sun Java System Communications Express.
Chapter 4, “Customizing General Features in Mail”	This chapter explains how to customize the Mail component in Sun Java System Communications Express
Chapter 5, “Customizing User Interface Features in Mail”	This chapter explains how to customize the User Interface Features of the Mail component in Sun Java System Communications Express
Chapter 6, “Customizing Advanced Features in Mail”	This chapter explains how to customize the Calendar component in Sun Java System Communications Express

Table 0-1 Organization of the Sun Java System Communications Express Customization Guide

Chapter	Description
Chapter 8, “Customizing Options”	This chapter discusses advanced customization techniques for the mail component.
Chapter 7, “Customizing General Features in Address Book”	This chapter explains how to customize the Address Book component in Sun Java System Communications Express
Chapter 10, “Localizing Communications Express”	This chapter explains how to localize Mail, Calendar and Address Book in Sun Java System Communications Express

Monospaced Font

`Monospaced font` is used for any text that appears on the computer screen or text that you should type. It is also used for file names, distinguished names, functions, and examples.

Bold Monospaced Font

`Bold monospaced font` is used to represent text within a code example that you should type. For example, you might see something like this:

```
./installer
```

In this example, **`./installer`** is what you would type at the command line.

Italicized Font

Italicized font is used to represent text that you enter using information that is unique to your installation (for example, variables). It is used for server paths, names.

For example, throughout this document you will see path references of the form:

msg_svr_base`/...`

The Messaging Server Base (*msg_svr_base*) represents the directory path in which you install the server. The default value of the *msg_svr_base* is `/opt/SUNWmsgsr`.

Italicized font is also used for variables within the synopsis of a command line utility. For example, the synopsis for the `commadmin admin remove` command is:

```
commadmin admin remove -D login -l userid -n domain -w password [-d domain]
      [-h] [-i inputfile] [-p port] [-X host] [-s] [-v]
```

In this example, the italicized words are arguments for their associated option. For example, in the `-w` *password* option, you would substitute the Administrator's password for *password* when you enter the `commadmin admin remove` command.

Where to Find Related Information

In addition to this guide, Sun Java Systems Communications Express comes with supplementary information for administrators as well as documentation for end users and developers. Use the following URL to see all the Communications Express documentation:

http://docs.sun.com/db/prod/

Where to Find This Book Online

You can view this documentation online in PDF and HTML formats by pointing your browser to the following URL:

http://docs.sun.com/db/prod/

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Chapter 1

Introduction to Communications Express and Customization

Sun Java™ System Communications Express 6 2004Q2 provides an integrated web-based communication and collaboration client that caters to the needs of Internet Service Providers, Enterprises, and Original Equipment Manufacturers.

As a web-based client, the Communications Express depends on a web server for access and a browser for presentation. The Communications Express consists of three client modules - Calendar, Address Book and Mail. The Calendar and Address Book client modules are deployed as a single application on any web container and are collectively referred to as Communications Express.

The Calendar component of Communications Express uses `.jsp` pages as the presentation layer. These Java Server Pages pages can be customized to suit the requirements of the client.

The Address Book component of Communications Express uses XML/XSL files that contain `XSL` tags, static `HTML` and `.js` scripts. The `XSL` and JavaScript code are used to display dynamic data. These XSL files can be edited for customizing the Address Book component.

The Mail component of Communications Express uses the JavaScript language that is read and interpreted by the client. The JavaScript files are located on the server and downloaded to the client. The client extracts data from the JavaScript code to customize Communications Express functions. All modifications and customizations are done on the server.

Most of the features in Communications Express are fully customizable. Most features can also be customized easily during an upgrade. This guide explains the important features that are customizable.

Chapter 2

Customizing General Features in Communications Express

This chapter describes how to customize some of the common elements in Communications Express. It also provides information related to `.jsp` files and their location along with details on the common features that are customizable in Communications Express.

This chapter provides details on

- Guidelines to be Followed Before the Customization Process
- List of Customizable and Configurable Files for Calendar and Address Book
- Customizing the Contents of themes.properties
- Customizing Images
- Customizing Text
- Customizing the Skin
- Customizing the Login Screen for the English Locale

Guidelines to be Followed Before the Customization Process

Before you start customizing the application, it is important to understand how to edit and deploy the .jsp files. The guidelines for customizing `.jsp` files are as follows.

1. Do not edit `.jsp` files directly in your production web server. Instead, make and test changes in a development environment.
2. Make a backup copy of the `.jsp` file.
3. Edit the `.jsp` file with any HTML or text editor. Typically HTML editors do not work well for `.jsp` files because of the amount of embedded Java code. In general when editing a `.jsp` file, be careful not to edit Java code.
4. After completing your edits, you can optionally compile the `.jsp` file. Because the `.jsp` file contains both HTML and Java code, this compilation ensures that you have not introduced syntax errors in the `.jsp` file.
5. Restart the web container for the changes to take effect.

List of Customizable and Configurable Files for Calendar and Address Book

The following list of files are customizable and configurable for Calendar and Address Book. It is assumed here that the customization has to be performed before configuring Communications Express. The directories mentioned are relative to <*install root*>`/lib/config-templates`. If configured, the files are available in the location `/var/opt/sunwuwc`

Table 2-1 List of Customizable files for Calendar and Address Book

File Location	Customizable Files	Name used in the document
`WEB-INF/config`	All the configuration files	<*config-dir*>
`WEB-INF/domain`	All i18n.properties files. i18n files are used to internationalize the interface for multiple languages and/or countries	<*domain-dir*>
`WEB-INF/skin`	themes.properties file	<*skin-dir*>
`WEB-INF/ui/html/abs`	All the .html, .xml and .xsl files	<*ab-ui-dir*>
`absimx`	All files such as .gif, .css, .html files	<*ab-images-dir*>
`uwc/css`	All stylesheets(.css files)	<*css-dir*>
`uwc/images`	All image files(*.gif, *.jpg)	<*uwc-images-dir*>
`uwc/.js`	.jsp files	<*js-dir*>
`uwc/calclient`	.jsp files	<*calclient-dir*>

Table 2-1 List of Customizable files for Calendar and Address Book *(Continued)*

File Location	Customizable Files	Name used in the document
uwc/mailclient	.jsp files	<*mailclient-dir*>
uwc/common	.jsp files	<*common-dir*>

Customizing the Contents of themes.properties

The `themes.properties` file contains the location of the style sheets and images that are customizable. For example, consider the following skin.

```
uwc.defaultskin = Christmas
```

To change this skin, perform the following steps.

1. Create <*skin-dir*>`/Christmas directory`
2. Copy `themes.properties` from <*skin-dir*>`/skin/` to <*skin-dir*>`/skin/Christmas`
3. Change the locations in `themes.properties` to point to the customized style sheets and images.
4. Restart theWeb Server.

The common components that are present include the Banner, Application bar, and calendar tool bar. You can also customize the overall layout look and feel.

Customizing Images

The calendar images can be customized by specifying the location for these icons in

<*skin-dir*>`/themes.properties.`

<*theme-name*> is the name of the theme configured for a domain. To customize the icons, edit the `themes.properties` file to change the names of properties to contain a value that points to the location of the new images. A default value for image location will be used if the corresponding key is not defined in the `theme.properties` file.

Table 2-2 lists the common images that are located in <*uwc-images-dir*>.

Table 2-2 Location of the Common images in <*uwc-images-dir*>

Image/Icon	Property Name	Value
Banner Image	uwc-common-bannerImage	Masthead_s1UMC.gif
Right Branding Image	uwc-common-RightBrandingImage	logo_sun.gif
Warning Image	uwc-common-WarningImage	Warning_Large.gif
Search Image	uwc-common-SearchImage	LrlSearch_1_wo.gif
Printable Image	uwc-common-PrintableImage	LrlPrintable_1_wo.gif
Import Export Image	uwc-common-ImportExportImage	LrlImpExp_1_wo.gif
Sort down and non selected image	uwc-common-Sort-Down-NonSelected-image	sort_down_nonsel_che.gif
Sort down and selected image	uwc-common-Sort-Down-Selected-image	sort_down_sel.gif
Sort up and non selected image	uwc-common-Sort-Up-NonSelected-image	sort_up_nonsel.gif
Sort up and selected selected image	uwc-common-Sort-Up-Selected-image	sort_up_sel.gif
Anchor Image	uwc-common-To-Anchor-image	to_anchor.gif
Subscribed Image	uwc-common-Subscribed-image	LrlSub_1.gif
Required Image	uwc-common-Required-image	required.gif
Error Message Icon	uwc-common-Error-Message-icon	Error_Large.gif
Warning Message Icon	uwc-common-Warning-Message-icon	Warning_Large.gif

Table 2-2 Location of the Common images in <*uwc-images-dir*>

Image/Icon	Property Name	Value
Question Message Icon	uwc-common-Question-Message-icon	Question_Large.gif
Information Message Icon	uwc-common-Info-Message-icon	Info_Large.gif

Customizing Text

Communications Express allows you to customize text that is displayed on web pages. This text is both customizable and localizable. You can also configure text on a per domain basis. To customize text, you to need to change the `i18n.properties` file that is deployed in <*domain-dir*>`/domain/en`. The `i18n.properties` file in <*domain-dir*>`/domain/en` is the default file. If the deployment is configured to work with multiple domains and multiple locales, then you need to create a directory by that domain name under <*domain-dir*> appropriately.

To customize the text of a domain called `example.com`, perform the following steps.

1. Create <*domain-dir*>`/domain/example.com`
2. Copy <*domain-dir*>`/domain/en/i18n.properties` to <*domain-dir*>`/domain/example.com/en`. This would be the default path of the `i18n.properties` for users in `example.com` domain.
3. Create directories for each supported locale such as en_US, ja, de_FR under that domain, copy `i18n.properties` to the domain, and change the locations accordingly

Customizing the Skin

To modify the skin, perform these steps.

1. The skin to be edited is defined in the `uwc.defaultskin` property in `uwcconfig.properties` file. Communications Express looks for the directory name specified for the supported locale under the <*skin-dir*>`directory`.
2. Copy the new skin to this location to replace the existing skin in this directory.
3. The default `themes.properties` can be accessed from <*skin-dir*>`/themes.properties`.

Customizing the Login Screen for the English Locale

This section describes how to modify the Communications Express Login screen shown in Figure 2-1.

You can replace the logo with a custom graphic on the Communications Express Login screen:

To modify the Communications Express Login Screen, you need to edit *<skin-dir>*`/themes.properties and the` relevant `.jsp` file is `login.jsp`.

Figure 2-1 Communications Express Login Screen.

Replacing the Logo With a Custom Graphic

You can modify the following on the Communications Express corner logo and link:

- Replace the logo with a custom graphic
- Change the destination of link

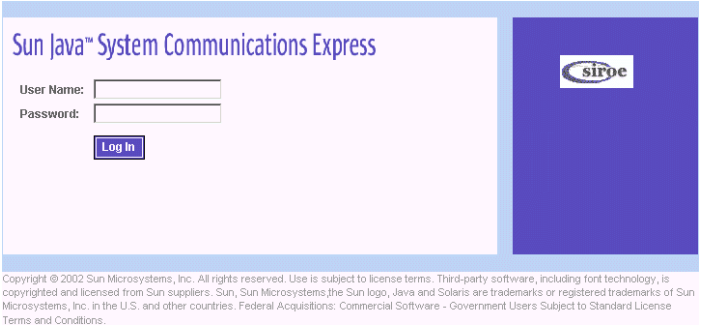
Figure 2-2 Communications Express Corner Logo and Link

Example—Logo Modification

The example shown in Figure 2-3 replaces the Sun logo with a custom logo having different dimensions.

Figure 2-3 Example Corner Logo

Figure 2-4 Login Screen with Customized Logo



Changing the Title Text

Figure 2-5 Communications Express Title Text

You can also do the following:

- Replace a title graphic with custom graphic
- Change the title text

Customizing Banner

You can modify the left image and the right image in the banner.

Figure 2-6 Left Banner Image Before Customization

Figure 2-7 Customized Left Banner Image

Figure 2-8 Right Banner Image Before Customization

Figure 2-9 Customized Right Banner Image

Customizing Branding

The `i18n.properties` has a property called `uwc-homepage` which can be changed to point to the 'Home' link on the Branding page.

Customizing Application Bar

You can modify the application bar by editing the `CalApplBarNormal.jsp` file located at <*calclient-dir*>`/CalApplBarNormal.jsp`

By default, the order in which the application tab appear, provided all services are enabled, is 'Mail','Calendar', 'Address Book' and 'Options'. This order can be changed to suit your requirements.

Figure 2-10 Default application tab order

Code Example 2-1 shows the default code that displays the default application tab order .

Code Example 2-1 Code for customizing the Application tab order

```
<td class="Tab1Gutter">
        <table border="0" cellspacing="0" cellpadding="0" class="Tab1Tbl">
          <tr>
            <td colspan="12"><img src="../uwc/images/spacer.gif" width="1"
height="6" alt=""></td>
          </tr>
          <tr>
<jato:content name="MailTab">
            <td class="Tab1Gutter" colspan="3"><img
src="../uwc/images/spacer.gif" width="1" height="3" alt=""></td>
</jato:content>
            <td rowspan="3" class="Tab1Sel">
              <div class="Tab1Sel"><span class="Tab1LblSel" title="<%=
getLocalizedLabel(session, "uwc-calclient-toolbar-tooltip-Calendar",
"Calendar") %>"><%= getLocalizedLabel(session,
"uwc-calclient-toolbar-Calendar", "Calendar") %></span></div>
            </td>
            <td rowspan="3" class="Tab1Sel"><img
src="../uwc/images/spacer.gif" width="10" height="3" alt=""></td>
            <td class="Tab1Gutter" colspan="7"><img
src="../uwc/images/spacer.gif" width="1" height="3" alt=""></td>
          </tr>
          <tr>
<jato:content name="MailTab">
            <td class="Tab1NotSel">
              <div class="Tab1NotSel"><a href="<%= getContextURI(request)
%>/mailclient/Mail" title="<%= getLocalizedLabel(session,
"uwc-calclient-toolbar-tooltip-Mail", "Mail") %>" class="Tab1LblNormal"
onmouseover="status='Mail'; return true;" onmouseout="status='';"><%=
getLocalizedLabel(session, "uwc-calclient-toolbar-Mail", "Mail")
%></a></div>
            </td>
            <td class="Tab1NotSel"><img src="../uwc/images/spacer.gif"
width="10" height="1" alt=""></td>
            <td class="Tab1Gutter"><img src="../uwc/images/spacer.gif"
width="3" height="1" alt=""></td>
</jato:content>
            <td class="Tab1Gutter"><img src="../uwc/images/spacer.gif"
width="3" height="1" alt=""></td>
```

Code Example 2-1 Code for customizing the Application tab order

```
<td class="Tab1Gutter">
            <td class="Tab1NotSel" nowrap>
              <div class="Tab1NotSel"><a href="<%= getContextURI(request)
%>/abclient/AddressBook" title="<%= getLocalizedLabel(session,
"uwc-calclient-toolbar-tooltip-AddressBook", "Address Book") %>"
class="Tab1LblNormal" onmouseover="status='Address Book'; return true;"
onmouseout="status='';'"><%= getLocalizedLabel(session,
"uwc-calclient-toolbar-AddressBook", "Address Book") %></a></div>
            </td>
            <td class="Tab1NotSel"><img src="../uwc/images/spacer.gif"
width="10" height="1" alt=""></td>
            <td class="Tab1Gutter"><img src="../uwc/images/spacer.gif"
width="3" height="1" alt=""></td>
            <td class="Tab1NotSel">
              <div class="Tab1NotSel"><a href="<%= getContextURI(request)
%>/base/CalendarPreferences" title="<%= getLocalizedLabel(session,
"uwc-calclient-toolbar-tooltip-Options", "Options") %>"
class="Tab1LblNormal" onmouseover="status='Options'; return true;"
onmouseout="status='';'"><%= getLocalizedLabel(session,
"uwc-calclient-toolbar-Options", "Options") %></a></div>
            </td>
            <td class="Tab1NotSel"><img src="../uwc/images/spacer.gif"
width="10" height="1" alt=""></td>
            <td class="Tab1Gutter"><img src="../uwc/images/spacer.gif"
width="3" height="1" alt=""></td>
          </tr>
          <tr>
            <td colspan="3" class="Tab1Gutter"><img
src="../uwc/images/spacer.gif" width="1" height="1" alt=""></td>
            <td colspan="7" class="Tab1Gutter"><img
src="../uwc/images/spacer.gif" width="1" height="1" alt=""></td>
          </tr>
        </table>
      </td>
```

Figure 2-11 Changing the application tab order to display Address Book, Mail, Calendar and Options

To change the order of Application tabs for example 'Address Book', 'Mail', 'Calendar', 'Options' re-arrange the code shown in Code Example 2-1 to the following:

Code Example 2-2 Customizing the order of the application tabs

```
<td class="Tab1Gutter">
<table border="0" cellspacing="0" cellpadding="0" class="Tab1Tbl">
<tr>
<td colspan="12"><img src="../uwc/images/spacer.gif" width="1" height="6"
alt=""></td>
</tr>
<tr>
            <td class="Tab1Gutter"><img src="../uwc/images/spacer.gif"
width="3" height="1" alt=""></td>
            <td class="Tab1NotSel" nowrap>
              <div class="Tab1NotSel"><a href="<%= getContextURI(request)
%>/abclient/AddressBook" title="<%= getLocalizedLabel(session,
"uwc-calclient-toolbar-tooltip-AddressBook", "Address Book") %>"
class="Tab1LblNormal" onmouseover="status='Address Book'; return true;"
onmouseout="status='';'"><%= getLocalizedLabel(session,
"uwc-calclient-toolbar-AddressBook", "Address Book") %></a></div>
</td>

<jato:content name="MailTab">
            <td class="Tab1NotSel">
              <div class="Tab1NotSel"><a href="<%= getContextURI(request)
%>/mailclient/Mail" title="<%= getLocalizedLabel(session,
"uwc-calclient-toolbar-tooltip-Mail", "Mail") %>" class="Tab1LblNormal"
onmouseover="status='Mail'; return true;" onmouseout="status='';'"><%=
getLocalizedLabel(session, "uwc-calclient-toolbar-Mail", "Mail")
%></a></div>
            </td>
            <td class="Tab1NotSel"><img src="../uwc/images/spacer.gif"
width="10" height="1" alt=""></td>
            <td class="Tab1Gutter"><img src="../uwc/images/spacer.gif"
width="3" height="1" alt=""></td>
</jato:content>

<jato:content name="MailTab">
            <td class="Tab1Gutter" colspan="3"><img
src="../uwc/images/spacer.gif" width="1" height="3" alt=""></td>
</jato:content>
            <td rowspan="3" class="Tab1Sel">
              <div class="Tab1Sel"><span class="Tab1LblSel" title="<%=
getLocalizedLabel(session, "uwc-calclient-toolbar-tooltip-Calendar",
"Calendar") %>"><%= getLocalizedLabel(session,
"uwc-calclient-toolbar-Calendar", "Calendar") %></span></div>
            </td>
            <td rowspan="3" class="Tab1Sel"><img
src="../uwc/images/spacer.gif" width="10" height="3" alt=""></td>
            <td class="Tab1Gutter" colspan="7"><img
src="../uwc/images/spacer.gif" width="1" height="3" alt=""></td>
          </tr>
          <tr>
```

Code Example 2-2 Customizing the order of the application tabs

```
<td class="Tab1Gutter">
            <td class="Tab1NotSel"><img src="../uwc/images/spacer.gif"
width="10" height="1" alt=""></td>
            <td class="Tab1Gutter"><img src="../uwc/images/spacer.gif"
width="3" height="1" alt=""></td>
            <td class="Tab1NotSel">
              <div class="Tab1NotSel"><a href="<%= getContextURI(request)
%>/base/CalendarPreferences" title="<%= getLocalizedLabel(session,
"uwc-calclient-toolbar-tooltip-Options", "Options") %>"
class="Tab1LblNormal" onmouseover="status='Options'; return true;"
onmouseout="status='';"><%= getLocalizedLabel(session,
"uwc-calclient-toolbar-Options", "Options") %></a></div>
            </td>
            <td class="Tab1NotSel"><img src="../uwc/images/spacer.gif"
width="10" height="1" alt=""></td>
            <td class="Tab1Gutter"><img src="../uwc/images/spacer.gif"
width="3" height="1" alt=""></td>
          </tr>
          <tr>
            <td colspan="3" class="Tab1Gutter"><img
src="../uwc/images/spacer.gif" width="1" height="1" alt=""></td>
            <td colspan="7" class="Tab1Gutter"><img
src="../uwc/images/spacer.gif" width="1" height="1" alt=""></td>
          </tr>
        </table>
      </td>
```

Chapter 3

Customizing General Features in Calendar

The look and feel of the calendar is provided by a set of style sheets, images and localizable strings. These strings pertain to the text that is displayed on the pages. The Code examples show how to modify icons, text and stylesheets for Calendar.

NOTE This chapter does not provide code samples for all customization scenarios in Calendar. The code samples have been provided only for illustrative purposes. This cannot be used directly for customization.

These are some common customization scenarios.

- Customizing Icons
- Customizing Views
- Customizing Pop ups
- Customizing Full Page Error

Customizing Icons

- Customizing the Order of Calendar Toolbar Icons
- Customizing Toolbars

- Customizing the Toolbar Images
- Customizing Task Related Informative Icons
- Customizing the Error Icon for Full Page Errors
- Customizing Icons in Pop ups
- Customizing Search for Events

Customizing the Order of Calendar Toolbar Icons

The file to be modified to change the calendar toolbar icon order is *<calclient-dir>* / `caltoolbarnormal.jsp`

Figure 3-1 shows the default order of the Calendar Toolbar Icons.

Figure 3-1 Order of Calendar Toolbar Icons

Code Example 3-1 shows the default code used to display the Calendar Toolbar Icons in the order, New Event, New Task, Check Availability, Search for Calendar, Printable and Import / Export.

Code Example 3-1 Default code that displays the default Calendar Toolbar Icons

```
<div class="Toolbar">

<a name="toolbar"></a>

<script language="JavaScript" src="../uwc/js/define_images_cal.js">
</script>
<table border="0" cellspacing="0" cellpadding="0">
  <tr>
New Event
    <td nowrap><a href="javascript:void(0)" accesskey="e"
onMouseOver="over('newEvent')" onMouseOut="out('newEvent')"
onClick="openWinAutoHeight('<jato:text name="NewEventUrl"
```

Code Example 3-1 Default code that displays the default Calendar Toolbar Icons

```
<div class="Toolbar">
escape="false"/>',’eventWin’,’scrollbars=yes,resizable=yes,width=700’);
return false;"><img name="newEvent" src="<%= getLocalizedLabel(session,
"skinModel", "uwc-calclient-NewEventImage",
"../uwc/images/LrlNewEvent_1_wo.gif") %>" width="24" height="24"
align="absmiddle" border="0" title="<%= getLocalizedLabel(session,
"uwc-calclient-toolbar-tooltip-NewEvent", "New Event") %>" alt="<%=
getLocalizedLabel(session, "uwc-calclient-toolbar-tooltip-NewEvent", "New
Event") %>"></a>
      <a href="javascript:void(0)" title="<%= getLocalizedLabel(session,
"uwc-calclient-toolbar-tooltip-NewEvent", "New Event") %>" class="ToolLbl"
onClick="openWinAutoHeight(’<jato:text name="NewEventUrl"
escape="false"/>’,’eventWin’,’scrollbars=yes,resizable=yes,width=700’);
return false;"><%= getLocalizedLabel(session,
"uwc-calclient-toolbar-NewEvent", "New Event") %></a></td>
New Task
    <td class="ToolbarItem" nowrap><a href="javascript:void(0)"
accesskey="t" onMouseOver="over(’newTask’)" onMouseOut="out(’newTask’)"
onClick="openWinAutoHeight(’<jato:text name="NewTaskUrl"
escape="false"/>’,’task’,’scrollbars=yes,resizable=yes,width=700’); return
false;"><img name="newTask" src="<%= getLocalizedLabel(session, "skinModel",
"uwc-calclient-NewTaskImage", "../uwc/images/LrlNewTask_1_wo.gif") %>"
width="24" height="24" align="absmiddle" border="0" title="<%=
getLocalizedLabel(session, "uwc-calclient-toolbar-tooltip-NewTask", "New
Task") %>" alt="<%= getLocalizedLabel(session,
"uwc-calclient-toolbar-tooltip-NewTask", "New Task") %>"></a>
      <a href="javascript:void(0)" title="<%= getLocalizedLabel(session,
"uwc-calclient-toolbar-tooltip-NewTask", "New Task") %>" class="ToolLbl"
onClick="openWinAutoHeight(’<jato:text name="NewTaskUrl"
escape="false"/>’,’task’,’scrollbars=yes,resizable=yes,width=700’); return
false;"><%= getLocalizedLabel(session, "uwc-calclient-toolbar-NewTask",
"New Task") %></a></td>
Check Availability
    <td class="ToolbarItem" nowrap><a href="javascript: void(0)"
accesskey="a" onMouseOver="over(’checkAvail’)"
onMouseOut="out(’checkAvail’)" onClick="openWinAutoHeight(’<jato:text
name="AvailabilityUrl"
escape="false"/>’,’availability’,’scrollbars=yes,resizable=yes,width=800’);
return false;"><img name="checkAvail" src="<%= getLocalizedLabel(session,
"skinModel", "uwc-calclient-CheckAvailabilityImage",
"../uwc/images/LrlCheckAvail_1_wo.gif") %>" width="24" height="24"
align="absmiddle" border="0" title="<%= getLocalizedLabel(session,
"uwc-calclient-toolbar-tooltip-CheckAvailability", "Check Availability")
%>" alt="<%= getLocalizedLabel(session,
"uwc-calclient-toolbar-tooltip-CheckAvailability", "Check Availability")
%>"></a>
```

Code Example 3-1 Default code that displays the default Calendar Toolbar Icons

```
<div class="Toolbar">
      <a href="javascript: void(0)" title="<%= getLocalizedLabel(session,
"uwc-calclient-toolbar-tooltip-CheckAvailability", "Check Availability")
%>" class="ToolLbl" onClick="openWinAutoHeight('<jato:text
name="AvailabilityUrl"
escape="false"/>','availability','scrollbars=yes,resizable=yes,width=800');
return false;"><%= getLocalizedLabel(session,
"uwc-calclient-toolbar-CheckAvailability", "Check Availability")
%></a></td>
Search for Calendar
<!-- Show SearchCalendar if and only if the parent view is not manage
calendars -->
<jato:content name="ShowSearchCalendars">

    <td class="ToolbarItem" nowrap><a href="javascript: void(0)"
accesskey="s" onMouseOver="over('search')" onMouseOut="out('search')"
onClick="openSearchForCalendarsPopup(); return false;"><img name="search"
src="<%= getLocalizedLabel(session, "skinModel", "uwc-common-SearchImage",
"../uwc/images/LrlSearch_1_wo.gif") %>" width="24" height="24"
align="absmiddle" border="0" title="<%= getLocalizedLabel(session,
"uwc-calclient-toolbar-tooltip-SearchCalendar", "Search for Calendar") %>"
alt="<%= getLocalizedLabel(session,
"uwc-calclient-toolbar-tooltip-SearchCalendar", "Search for Calendar")
%>"></a>
      <a href="javascript: void(0)" title="<%= getLocalizedLabel(session,
"uwc-calclient-toolbar-tooltip-SearchCalendar", "Search for Calendar") %>"
class="ToolLbl" onClick="openSearchForCalendarsPopup(); return false;"><%=
getLocalizedLabel(session, "uwc-calclient-toolbar-SearchCalendar", "Search
for Calendar") %></a></td>

</jato:content>
Printable
<!-- Show Printable f and only if the parent view is not invitations -->
<jato:content name="ShowPrintable">

    <td class="ToolbarItem" nowrap><a href="javascript: void(0)"
onClick="openWinAutoHeight('<jato:text name="PrintUrl"
escape="false"/>','print','menubar=yes,scrollbars=yes,resizable=yes,width=7
00,height=650'); return false;" accesskey="p" class="ToolLbl"
onMouseOver="over('printable')" onMouseOut="out('printable')"><img
name="printable" src="<%= getLocalizedLabel(session, "skinModel",
"uwc-common-PrintableImage", "../uwc/images/LrlPrintable_1_wo.gif") %>"
width="24" height="24" align="absmiddle" border="0" title="<%=
getLocalizedLabel(session, "uwc-calclient-toolbar-tooltip-Printable",
"Display a Printable Page") %>" alt="<%= getLocalizedLabel(session,
"uwc-calclient-toolbar-tooltip-Printable", "Display a Printable Page")
%>"></a>
```

Code Example 3-1 Default code that displays the default Calendar Toolbar Icons

```
<div class="Toolbar">
      <a href="javascript:void(0)" onClick="openWinAutoHeight('<jato:text
name="PrintUrl"
escape="false"/>','print','menubar=yes,scrollbars=yes,resizable=yes,width=7
00,height=650'); return false;" title="<%= getLocalizedLabel(session,
"uwc-calclient-toolbar-tooltip-Printable", "Display a Printable Page") %>"
class="ToolLbl"><%= getLocalizedLabel(session,
"uwc-calclient-toolbar-Printable", "Printable") %></a></td>

</jato:content>
Import/Export
    <td class="ToolbarItem" nowrap><a href="javascript: void(0)"
accesskey="i" onMouseOver="over('importExport')"
onMouseOut="out('importExport')" onClick="openWinAutoHeight('<jato:text
name="ImportExportUrl"
escape="false"/>','importexport','scrollbars=yes,resizable=yes,width=700');
return false;"><img name="importExport" src="<%= getLocalizedLabel(session,
"skinModel", "uwc-common-ImportExportImage",
"../uwc/images/LrlImpExp_1_wo.gif") %>" width="24" height="24"
align="absmiddle" border="0" title="<%= getLocalizedLabel(session,
"uwc-calclient-toolbar-tooltip-ImportExport", "Import and Export Calendar")
%>" alt="<%= getLocalizedLabel(session,
"uwc-calclient-toolbar-tooltip-ImportExport", "Import and Export Calendar")
%>"></a>
      <a href="javascript: void(0)" title="<%= getLocalizedLabel(session,
"uwc-calclient-toolbar-tooltip-ImportExport", "Import and Export Calendar")
%>" class="ToolLbl" onClick="openWinAutoHeight('<jato:text
name="ImportExportUrl"
escape="false"/>','importexport','scrollbars=yes,resizable=yes,width=700');
return false;"><%= getLocalizedLabel(session,
"uwc-calclient-toolbar-ImportExport", "Import/Export") %></a>
    </td>
  </tr>
</table>
</div>
```

Figure 3-2 Changed order of the Toolbar Icons

Code Example 3-2 shows the edited code that changes the order of icons in calendar tool bar to - New Task, New Event, Printable, Check Availability, Import / Export, Search for Calendar

:

Code Example 3-2 Customizing the toolbar icon order

```
<div class="Toolbar">

<a name="toolbar"></a>

<script language="JavaScript" src="../uwc/js/define_images_cal.js">
</script>
<table border="0" cellspacing="0" cellpadding="0">
  <tr>
New Task
    <td class="ToolbarItem" nowrap><a href="javascript:void(0)"
accesskey="t" onMouseOver="over('newTask')" onMouseOut="out('newTask')"
onClick="openWinAutoHeight('<jato:text name="NewTaskUrl"
escape="false"/>','task','scrollbars=yes,resizable=yes,width=700'); return
false;"><img name="newTask" src="<%= getLocalizedLabel(session, "skinModel",
"uwc-calclient-NewTaskImage", "../uwc/images/LrlNewTask_1_wo.gif") %>"
width="24" height="24" align="absmiddle" border="0" title="<%=
getLocalizedLabel(session, "uwc-calclient-toolbar-tooltip-NewTask", "New
Task") %>" alt="<%= getLocalizedLabel(session,
"uwc-calclient-toolbar-tooltip-NewTask", "New Task") %>"></a>
      <a href="javascript:void(0)" title="<%= getLocalizedLabel(session,
"uwc-calclient-toolbar-tooltip-NewTask", "New Task") %>" class="ToolLbl"
onClick="openWinAutoHeight('<jato:text name="NewTaskUrl"
escape="false"/>','task','scrollbars=yes,resizable=yes,width=700'); return
false;"><%= getLocalizedLabel(session, "uwc-calclient-toolbar-NewTask",
"New Task") %></a></td>
New Event
    <td nowrap><a href="javascript:void(0)" accesskey="e"
onMouseOver="over('newEvent')" onMouseOut="out('newEvent')"
onClick="openWinAutoHeight('<jato:text name="NewEventUrl"
escape="false"/>','eventWin','scrollbars=yes,resizable=yes,width=700');
return false;"><img name="newEvent" src="<%= getLocalizedLabel(session,
"skinModel", "uwc-calclient-NewEventImage",
"../uwc/images/LrlNewEvent_1_wo.gif") %>" width="24" height="24"
align="absmiddle" border="0" title="<%= getLocalizedLabel(session,
"uwc-calclient-toolbar-tooltip-NewEvent", "New Event") %>" alt="<%=
getLocalizedLabel(session, "uwc-calclient-toolbar-tooltip-NewEvent", "New
Event") %>"></a>
      <a href="javascript:void(0)" title="<%= getLocalizedLabel(session,
"uwc-calclient-toolbar-tooltip-NewEvent", "New Event") %>" class="ToolLbl"
onClick="openWinAutoHeight('<jato:text name="NewEventUrl"
escape="false"/>','eventWin','scrollbars=yes,resizable=yes,width=700');
return false;"><%= getLocalizedLabel(session,
"uwc-calclient-toolbar-NewEvent", "New Event") %></a></td>
Printable
<!-- Show Printable f and only if the parent view is not invitations -->
<jato:content name="ShowPrintable">
```

Code Example 3-2 Customizing the toolbar icon order *(Continued)*

```
<div class="Toolbar">
    <td class="ToolbarItem" nowrap><a href="javascript: void(0)"
onClick="openWinAutoHeight('<jato:text name="PrintUrl"
escape="false"/>','print','menubar=yes,scrollbars=yes,resizable=yes,width=7
00,height=650'); return false;" accesskey="p" class="ToolLbl"
onMouseOver="over('printable')" onMouseOut="out('printable')"><img
name="printable" src="<%= getLocalizedLabel(session, "skinModel",
"uwc-common-PrintableImage", "../uwc/images/LrlPrintable_1_wo.gif") %>"
width="24" height="24" align="absmiddle" border="0" title="<%=
getLocalizedLabel(session, "uwc-calclient-toolbar-tooltip-Printable",
"Display a Printable Page") %>" alt="<%= getLocalizedLabel(session,
"uwc-calclient-toolbar-tooltip-Printable", "Display a Printable Page")
%>"></a>
      <a href="javascript:void(0)" onClick="openWinAutoHeight('<jato:text
name="PrintUrl"
escape="false"/>','print','menubar=yes,scrollbars=yes,resizable=yes,width=7
00,height=650'); return false;" title="<%= getLocalizedLabel(session,
"uwc-calclient-toolbar-tooltip-Printable", "Display a Printable Page") %>"
class="ToolLbl"><%= getLocalizedLabel(session,
"uwc-calclient-toolbar-Printable", "Printable") %></a></td>

</jato:content>
Check Availability
    <td class="ToolbarItem" nowrap><a href="javascript: void(0)"
accesskey="a" onMouseOver="over('checkAvail')"
onMouseOut="out('checkAvail')" onClick="openWinAutoHeight('<jato:text
name="AvailabilityUrl"
escape="false"/>','availability','scrollbars=yes,resizable=yes,width=800');
return false;"><img name="checkAvail" src="<%= getLocalizedLabel(session,
"skinModel", "uwc-calclient-CheckAvailabilityImage",
"../uwc/images/LrlCheckAvail_1_wo.gif") %>" width="24" height="24"
align="absmiddle" border="0" title="<%= getLocalizedLabel(session,
"uwc-calclient-toolbar-tooltip-CheckAvailability", "Check Availability")
%>" alt="<%= getLocalizedLabel(session,
"uwc-calclient-toolbar-tooltip-CheckAvailability", "Check Availability")
%>"></a>
      <a href="javascript: void(0)" title="<%= getLocalizedLabel(session,
"uwc-calclient-toolbar-tooltip-CheckAvailability", "Check Availability")
%>" class="ToolLbl" onClick="openWinAutoHeight('<jato:text
name="AvailabilityUrl"
escape="false"/>','availability','scrollbars=yes,resizable=yes,width=800');
return false;"><%= getLocalizedLabel(session,
"uwc-calclient-toolbar-CheckAvailability", "Check Availability")
%></a></td>
Import/Export
```

Code Example 3-2 Customizing the toolbar icon order *(Continued)*

```
<div class="Toolbar">
    <td class="ToolbarItem" nowrap><a href="javascript: void(0)"
accesskey="i" onMouseOver="over('importExport')"
onMouseOut="out('importExport')" onClick="openWinAutoHeight('<jato:text
name="ImportExportUrl"
escape="false"/>','importexport','scrollbars=yes,resizable=yes,width=700');
return false;"><img name="importExport" src="<%= getLocalizedLabel(session,
"skinModel", "uwc-common-ImportExportImage",
"../uwc/images/LrlImpExp_1_wo.gif") %>" width="24" height="24"
align="absmiddle" border="0" title="<%= getLocalizedLabel(session,
"uwc-calclient-toolbar-tooltip-ImportExport", "Import and Export Calendar")
%>" alt="<%= getLocalizedLabel(session,
"uwc-calclient-toolbar-tooltip-ImportExport", "Import and Export Calendar")
%>"></a>
      <a href="javascript: void(0)" title="<%= getLocalizedLabel(session,
"uwc-calclient-toolbar-tooltip-ImportExport", "Import and Export Calendar")
%>" class="ToolLbl" onClick="openWinAutoHeight('<jato:text
name="ImportExportUrl"
escape="false"/>','importexport','scrollbars=yes,resizable=yes,width=700');
return false;"><%= getLocalizedLabel(session,
"uwc-calclient-toolbar-ImportExport", "Import/Export") %></a>
    </td>
Search for Calendar
<!-- Show SearchCalendar if and only if the parent view is not manage
calendars -->
<jato:content name="ShowSearchCalendars">

    <td class="ToolbarItem" nowrap><a href="javascript: void(0)"
accesskey="s" onMouseOver="over('search')" onMouseOut="out('search')"
onClick="openSearchForCalendarsPopup(); return false;"><img name="search"
src="<%= getLocalizedLabel(session, "skinModel", "uwc-common-SearchImage",
"../uwc/images/LrlSearch_1_wo.gif") %>" width="24" height="24"
align="absmiddle" border="0" title="<%= getLocalizedLabel(session,
"uwc-calclient-toolbar-tooltip-SearchCalendar", "Search for Calendar") %>"
alt="<%= getLocalizedLabel(session,
"uwc-calclient-toolbar-tooltip-SearchCalendar", "Search for Calendar")
%>"></a>
      <a href="javascript: void(0)" title="<%= getLocalizedLabel(session,
"uwc-calclient-toolbar-tooltip-SearchCalendar", "Search for Calendar") %>"
class="ToolLbl" onClick="openSearchForCalendarsPopup(); return false;"><%=
getLocalizedLabel(session, "uwc-calclient-toolbar-SearchCalendar", "Search
for Calendar") %></a></td>

</jato:content>
/tr>
</table>
</div>
```

Customizing Toolbars

To customize toolbars in Calendar you need to modify the `.jsp` file located at *<calclient-dir>*`/CalToolBarPagelet.jsp`.

You can customize toolbars for all the main calendar views such as the following.

- Day view
- Week view
- Month view
- Year view
- Events manager
- Invitations view
- Tasks view
- Manage calendar view

Table 3-1 shows the list of customizable toolbars in Communications Express.

Table 3-1 Customizing Toolbars

Image	Property name	Value
Forward	`uwc-calclient-Forward-Arrow-image`	`forward.gif`
Backward	`uwc-calclient-Back-Arrow-image`	`backward.gif`
Select all	`uwc-calclient-Select-All-image`	`check_all.gif`
Unselect all	`uwc-calclient-Deselect-All-image`	`uncheck_all.gif`
Sort down non selected image	`uwc-common-Sort-Down-NonSelected-image`	`sort_down_nonsel_che.gif`
Sort down selected image	`uwc-common-Sort-Down-Selected-image`	`sort_down_sel.gif`
Sort up non selected image	`uwc-common-Sort-Up-NonSelected-image`	`sort_up_nonsel.gif`
Sort up selected image	`uwc-common-Sort-Up-Selected-image`	`sort_up_sel.gif`

Customizing the Toolbar Images

The property key names that define the location of the toolbar images are mentioned in Table 3-2

Table 3-2 Customizing the Calendar Toolbar Icons

Icon	Property Name	Value
New Event icon.	uwc-calclient-NewEventImage	LrlNewEvent_1_wo.gif,
New Task Icon	uwc-calclient-NewTaskImage	LrlNewTask_1_wo.gif
Check Availability Icon	uwc-calclient-CheckAvailabilityImage	LrlCheckAvail_1_wo.gif
Search Calendar Icon	uwc-calclient-SearchImage	LrlSearch_1_wo.gif
Printable Icon	uwc-calclient-PrintableImage	LrlPrintable_1_wo.gif
Import/Export Icon	uwc-calclient-ImportExportImage	LrlImpExp_1_wo.gif)

Customizing Task Related Informative Icons

The property key names that define the location of the toolbar images are mentioned in Table 3-3

You can customize task related informative icons or images such as the ones used for recurring, reminding, and public tasks.

Table 3-3 Customizing Task Related Informative Icons

Icon	Property Name	Value
Notify Image	uwc-calclient-calclient-NotifyImage,	LrlNotify_1.gif
Recurring Image	uwc-calclient-RecurringImage	LrlRecur_1.gif
Public Image	uwc-calclient-PublicImage	LrlPrvPub_1.gif

Customizing the Error Icon for Full Page Errors

Table 3-4 shows the customizable error icons for Full Page Errors

Table 3-4 Customizing Error Icon for Full Page Errors

Icon	Property Name	Value
Error Icon	uwc-calclient-Error-Message-icon	Error_Large.gif

Customizing Icons in Pop ups

Code Example 3-5 shows the customizable icons located in uwc/calclient/SearchCalendarData.jsp.

Table 3-5 Customizing Icons in Pop ups

Icon	Property Name	Value
select_all	uwc-calclient-Select-All-image	check_all.gif
unselect_all	uwc-calclient-Deselect-All-image	uncheck_all.gif
subscribed icon	uwc-calclient-Subscribed-image	LrlSub_1.gif

Customizing Search for Events

The File name including path is *<calclient-dir>*/CalSearchBarPagelet.jsp.

- Communications Express allows you to customize Search for events label.

This is applicable for the following views

- Day view
- Week view
- Month view
- Year view
- Events manager.

- You can change the text that appears besides the search events text box.
- You can also customize the overall layout.

Customizing the Text That Appears Besides the Search Events Text Box

To change the introductory text that is displayed adjacent to the search events text box, change the code in the resource bundle of `i18n.properties`.

Code Example 3-3 shows the code before modifying the resource bundle

Code Example 3-3 Code before modifying the resource bundle

```
uwc-calclient-toolbar-SearchForEvents=Search for Events:
```

Code Example 3-4 shows the code after modifying the resource bundle.

Code Example 3-4 Code after modifying the resource bundle

```
uwc-calclient-toolbar-SearchForEvents=<Customized Text>
```

Customizing Views

These examples show how to modify views

- Customizing Tasks Search View
- Customizing the Column Order in Tasks Printable View
- Customizing Tasks Error View
- Customizing Events view
- Customizing Tasks View

Customizing Tasks Search View

- The `.jsp` file name including path that pertains to tasks search view is *<calclient-dir>*`/tasksSearch.jsp`

- The common components present in `tasksSearch.jsp` are: Banner, Application bar, calendar tool bar.
- In the tasksSearch.jsp you can customize
- The overall layout and look and feel.
- Icons or images such as `select_all`, `unselect_all`, `sort_up`, `sort_down`, `sort_selected_up`, `sort_selected_down gifs`.
- Task related informative icons or images such as `recurring gif`, `reminding gif`, `public task gifs`.
- The table column ordering.
- The edit task and view task popup window sizes and styles.

Customizing the Column Order in Tasks Printable View

The file pertaining to customizing the column order in tasks is *<calclient-dir>*`/tasksPrint.jsp`

The common components present are Banner and Application bar.

You can customize the table column ordering.

The `tasksPrint.jsp` is located at *<calclient-dir>*`/tasksPrint.jsp`

Code Example 3-5 shows the code used to customize Tasks print view in a table with the columns in the order - 'Priority', 'Title', 'Due Date', 'Status', 'Type'

:

Code Example 3-5 Default code that displays the table column order

```
            <th class="TblThCl1" scope="col" nowrap><strong><%=
getLocalizedLabel(session, "uwc-calclient-tasks-Priority", "Priority")
%></strong>
            </th>
            <th width="35%" scope="col" nowrap><strong><%=
getLocalizedLabel(session, "uwc-calclient-tasks-Title", "Title")
%></strong></th>
            <th scope="col" nowrap><strong><%= getLocalizedLabel(session,
"uwc-calclient-tasks-DueDate", "Due Date") %></strong></th>
            <th scope="col" nowrap><strong><%= getLocalizedLabel(session,
"uwc-calclient-tasks-Status", "Status") %></strong></th>
```

Code Example 3-5 Default code that displays the table column order

```
            <th scope="col" nowrap><strong><%= getLocalizedLabel(session,
"uwc-calclient-tasks-Type", "Type") %></strong></th>
          </tr>

  <jato:content name="ZeroTasks">
          <tr>
              <td class="TblTdCl1Lst" colspan="6"><%=
getLocalizedLabel(session, "uwc-calclient-tasks-NoTasksToDisplay-message",
"This view does not have any tasks to display. Choose another filter or
search for tasks.") %></td>
          </tr>
  </jato:content>
  <jato:content name="NonZeroTasks">
      <jato:tiledView name="TasksTiledView"
type="com.sun.uwc.calclient.TasksTileView">
          <jato:hidden name="TaskCalID"/>
          <jato:hidden name="TaskUID"/>
          <jato:hidden name="TaskRID"/>
          <tr>
            <td <jato:content name="FirstColumnStyle"/>
align="center"><jato:text name="Priority" escape="false"/></td>
        <jato:content name="IsConfidential">
            <td <jato:content name="TitleColumnStyle"/>><%=
getLocalizedLabel(session, "i18nModel", "uwc-calclient-view-Busy", "Busy")
%></td>
        </jato:content>
        <jato:content name="IsNotConfidential">
            <td <jato:content name="NormalColumnStyle"/>><strong><jato:text
name="Title"/></strong><br>
              <jato:content name="HasAlarm">
                <img src="<%= getLocalizedLabel(session, "skinModel",
"uwc-calclient-NotifyImage", "../uwc/images/LrlNotify_1.gif") %>"
width="12" height="12" border="0" hspace="2" align="absmiddle" alt="<%=
getLocalizedLabel(session, "uwc-calclient-tasks-Notify", "Notify") %>"
title="<%= getLocalizedLabel(session, "uwc-calclient-tasks-Notify",
"Notify") %>">
              </jato:content>
              <jato:content name="IsRecurring">
                <img src="<%= getLocalizedLabel(session, "skinModel",
"uwc-calclient-RecurringImage", "../uwc/images/LrlRecur_1.gif") %>"
width="12" height="12" border="0" align="absmiddle" hspace="2" title="<%=
getLocalizedLabel(session, "uwc-calclient-tasks-Recurring", "Recurring")
%>" alt="<%= getLocalizedLabel(session, "uwc-calclient-tasks-Recurring",
"Recurring") %>">
              </jato:content>
              <jato:content name="IsPublic">
```

Code Example 3-5 Default code that displays the table column order

```
                <img src="<%= getLocalizedLabel(session, "skinModel",
"uwc-calclient-PublicImage", "../uwc/images/LrlPrvPub_1.gif") %>"
width="12" height="12" border="0" hspace="2" title="<%=
getLocalizedLabel(session, "uwc-calclient-tasks-Public", "Public") %>"
alt="<%= getLocalizedLabel(session, "uwc-calclient-tasks-Public", "Public")
%>">
              </jato:content>
              <jato:content name="IsExternal">
                <br>
                [<jato:text name="OwnerName"/> (<jato:text
name="CalendarName"/>)]
              </jato:content>
            </td>
        </jato:content>
            <td <jato:content name="NormalColumnStyle"/>><jato:text
name="DueDate"/> <jato:text name="DueTime"/></td>
            <td <jato:content name="NormalColumnStyle"/>><jato:text
name="PercentStatusAsText" escape="false"/></td>
            <td <jato:content name="NormalColumnStyle"/>><jato:text
name="Category" escape="false"/></td>
          </tr>
      </jato:tiledView>
  </jato:content>
```

Code Example 3-6 shows the code required to change the table column ordering so that it displays in the order title, due date, status, priority and type

Code Example 3-6 Changed table column ordering

```
          <tr>
            <th class="TblThCl1" scope="col" nowrap><strong><%=
getLocalizedLabel(session, "uwc-calclient-tasks-Priority", "Title")
%></strong>
            </th>
            <th width="35%" scope="col" nowrap><strong><%=
getLocalizedLabel(session, "uwc-calclient-tasks-Title", "Due Date")
%></strong></th>
            <th scope="col" nowrap><strong><%= getLocalizedLabel(session,
"uwc-calclient-tasks-Status", "Status") %></strong></th>
            <th scope="col" nowrap><strong><%= getLocalizedLabel(session,
"uwc-calclient-tasks-DueDate", "Priority") %></strong></th>
            <th scope="col" nowrap><strong><%= getLocalizedLabel(session,
"uwc-calclient-tasks-Type", "Type") %></strong></th>
          </tr>

  <jato:content name="ZeroTasks">
          <tr>
```

Code Example 3-6 Changed table column ordering

```
          <tr>
              <td class="TblTdCl1Lst" colspan="6"><%=
getLocalizedLabel(session, "uwc-calclient-tasks-NoTasksToDisplay-message",
"This view does not have any tasks to display. Choose another filter or
search for tasks.") %></td>
          </tr>
  </jato:content>
  <jato:content name="NonZeroTasks">
      <jato:tiledView name="TasksTiledView"
type="com.sun.uwc.calclient.TasksTileView">
          <jato:hidden name="TaskCalID"/>
          <jato:hidden name="TaskUID"/>
          <jato:hidden name="TaskRID"/>
          <tr>
        <jato:content name="IsConfidential">
            <td <jato:content name="TitleColumnStyle"/>><%=
getLocalizedLabel(session, "i18nModel", "uwc-calclient-view-Busy", "Busy")
%></td>
        </jato:content>
        <jato:content name="IsNotConfidential">
            <td <jato:content name="FirstColumnStyle"/>
align="center"><strong><jato:text name="Title"/></strong><br>
              <jato:content name="HasAlarm">
                <img src="<%= getLocalizedLabel(session, "skinModel",
"uwc-calclient-NotifyImage", "../uwc/images/LrlNotify_1.gif") %>"
width="12" height="12" border="0" hspace="2" align="absmiddle" alt="<%=
getLocalizedLabel(session, "uwc-calclient-tasks-Notify", "Notify") %>"
title="<%= getLocalizedLabel(session, "uwc-calclient-tasks-Notify",
"Notify") %>">
              </jato:content>
              <jato:content name="IsRecurring">
                <img src="<%= getLocalizedLabel(session, "skinModel",
"uwc-calclient-RecurringImage", "../uwc/images/LrlRecur_1.gif") %>"
width="12" height="12" border="0" align="absmiddle" hspace="2" title="<%=
getLocalizedLabel(session, "uwc-calclient-tasks-Recurring", "Recurring")
%>" alt="<%= getLocalizedLabel(session, "uwc-calclient-tasks-Recurring",
"Recurring") %>">
              </jato:content>
              <jato:content name="IsPublic">
                <img src="<%= getLocalizedLabel(session, "skinModel",
"uwc-calclient-PublicImage", "../uwc/images/LrlPrvPub_1.gif") %>"
width="12" height="12" border="0" hspace="2" title="<%=
getLocalizedLabel(session, "uwc-calclient-tasks-Public", "Public") %>"
alt="<%= getLocalizedLabel(session, "uwc-calclient-tasks-Public", "Public")
%>">
              </jato:content>
              <jato:content name="IsExternal">
                <br>
                [<jato:text name="OwnerName"/> (<jato:text
name="CalendarName"/>)]
              </jato:content>
```

Code Example 3-6 Changed table column ordering

```
            <tr>
              </td>
           </jato:content>
               <td <jato:content name="NormalColumnStyle"/>><jato:text
name="DueDate"/> <jato:text name="DueTime"/></td>
               <td <jato:content name="NormalColumnStyle"/>><jato:text
name="PercentStatusAsText" escape="false"/></td>
               <td <jato:content name="NormalColumnStyle"/>><jato:text
name="Priority" escape="false"/></td>
               <td <jato:content name="NormalColumnStyle"/>><jato:text
name="Category" escape="false"/></td>
             </tr>
         </jato:tiledView>
```

Customizing Tasks Error View

To modify the tasks error view, you need to edit the file *<calclient-dir>*/tasksError.jsp

Customizing Events view

- To modify the events view, edit the following .jsp file.

<calclient-dir>/EventsManager.jsp

- To modify the search events view, edit the following .jsp file.

<calclient-dir>/eventsSearch.jsp

- To modify the anonymous events view, edit the following .jsp file.

<calclient-dir>/EventsManagerAnon.jsp

- To modify the anonymous search events view, edit the following .jsp file.

<calclient-dir>/eventsSearchAnon.jsp

- To modify the anonymous Error view, edit the following .jsp file.

<calclient-dir>/eventsanonError.jsp

To modify the printable images view, edit the following image. You can change the image and then replace the changed image in the root folder.

uwc-common-PrintableImage=../uwc/images/LrlPrintable_1_wo.gif

Customizing Tasks View

To modify the tasks view, you need to modify the file *<calclient-dir>*/tasks.jsp.

Customizing Pop ups

Table 3-6 shows the pop up names and the relevant .jsp files to be modified for customization.

Table 3-6 Customizing Pop ups

Pop up Name	jsp files to be modified
New and Edit Event Pop up	*<calclient-dir>*/EditEvent.jsp
	<calclient-dir>/EditEventData.jsp
	<calclient-dir>/DeleteEventConfirmRepeatSelection.jsp
	<calclient-dir>/SaveEventConfirmRepeatSelection.jsp
	<js-dir>/EditEventButtons.jsp
	<js-dir>/NewEventButtons.jsp
View Calendar Pop up	*<calclient-dir>*/ViewCalendar.jsp
	<calclient-dir>/ViewCalendarData.jsp
	<calclient-dir>/ViewCalendarButtons.jsp
New and Edit Calendar Group Pop up	*<calclient-dir>*/EditCalGroup.jsp
	<calclient-dir>/EditCalGroupData.jsp
	<js-dir>/EditCalGroupButtons.jsp
	<js-dir>/NewCalGroupButtons.jsp
Subscribe to Calendars Pop up and Search for Calendars Pop up	*<calclient-dir>*/SearchCalendar.jsp
	<calclient-dir>/SearchCalendarData.jsp
	<calclient-dir>/SearchCalendarInitial.jsp
	<js-dir>/SearchCalendarButtons.jsp
	<js-dir>/SearchNViewCalendarButtons.jsp

Customizing Full Page Error

To modify the Error page, you need to edit the file *<common-dir>*/FullPageError.jsp

You can customize the error page for calendar views such as

- Day view
- Week view
- Month view
- Year view
- Events manager
- Invitations view
- Tasks view
- Manager calendar view.

Customizing the Layout for Full Page Errors

Full page error appears for variety of reasons. This page displays the following information:

- Full Page Error Summary
- Full Page Error Sub-Title
- Full Page Error Description
  - FullPageErrorSummary refers to Full Page Error Summary
  - FullPageErrorSubTitle refers to Full Page Error Sub-Title
  - FullPageErrorDescription refers to Full Page Error Description

These keys are replaced with the actual information provided by the server depending on the type or cause of error.

To customize the information that is displayed for each of these keys:

Edit the i18n.properties file, look for the following property names and change the value of the property as follows:

<per-view-key>-FullPageError-*<ReasonForError>*-summary=*<Summary to be displayed>*

<*per-view-key*>-FullPageError-<*ReasonForError*>-subtitle=<*Sub Title to be displayed*>

<*per-view-key*>-FullPageError-<*ReasonForError*>-description=<*Description to be displayed*>

For example,

<*calclient-dir*>-error-dayviewview-FullPageError-CalendarNotAvailable-summary=Calendar Not Available

<*calclient-dir*>-error-dayviewview-FullPageError-CalendarNotAvailable-subtitle=Could Not Display View

<*calclient-dir*>-error-dayview-FullPageError-CalendarNotAvailable-description=The selected calendar was either deleted or does not exist or you do not have permissions to view it. Select another calendar.

Customizing General Features in Mail

This chapter includes information on the customizable features in the Mail component of Communications Express. This chapter has the following sections.

- Defining Your Customization Requirements
- Understanding the File Layout in Mail
- Understanding Basic Interfaces in Mail

Defining Your Customization Requirements

Before you customize mail for Communications Express, you need to decide your customization goals. There are several common customization senarios.

- Customizing the Skin to Modify Global Look and Feel
- Customizing Text
- Customizing Mail by Domain
- Customizing Mail Icons
- Adding Extra Features

Customizing the Skin to Modify Global Look and Feel

To customize the skin, you need to understand the structure of the underlying Casading Style Sheet (CSS). The Skin color, font style, or font size can be globally changed in the CSS file.

Customizing Text

Since the mail client supports internationalization, most of the text used in mail are referenced through a special array named `i18n`. The strings are saved in `xx/i18n.js`, where `xx` is the locale name for the specific language. To replace the text with a desired text, you need to look up the string from `xx/i18n.js` and modify it. The default encoding for all files is UTF-8, and you need to make sure that you use the right one, especially when the text contains non-Latin charaters.

Customizing Mail by Domain

Mail supports customization specific for each domain . A user who belongs to a specific domain will be directed to a different view (skin) on signing in. Refer the chapter Chapter 9, “Customizing Communications Express for a Specific Domain,” for more information on customizing mail by domain.

Customizing Mail Icons

All Image files are stored in `imx/ directory.` You can look up the image file name from html files and replace the URL with the required one.

Adding Extra Features

For functionalites that are not supported by the current mail component, you can create a new function using the `listFrameHTML()` function in the corresponding `_lr_fs.html`. You can also add new functions to be called by *listFrameHTML()*. The new content will then be inserted in the mail application. If the feature to be added involves more technical aspects that are not documented here, contact Sun Professional Service for assistance.

Understanding the File Layout in Mail

In mail, the static files are HTML and JavaScript files. These files have `.html` and `.js` extensions. These files are transmitted to the browser and used to retrieve dynamic contents from the server using a proprietary HTTP protocol. The mail server provides user interfaces for the stand-alone Messenger Express and the integrated mail component of Communication Express. The JavaScript files are shared by both these interfaces, and in general provide functionalities for the application.

Files that end with `_fs_lr.html` are used exclusively in the integrated mail component of the Communication Express. This section provides a basic overview on the various files used in the integrated mail component of Communication Express.

The CSS files that are used in mail are:

- `mail_css_ie5win.css`
- `mail_css_ns6up.css`
- `master-style.css`
- `master-style_ie5up.css`
- `master-style_ns4sol.css`
- `master-style_ns4win.css`
- `master-style_ns6up.css`

Table 4-1 shows the different JavaScript files that are used in Mail.

Table 4-1 JavaScript files that are used in Mail

JavaScript file Name	Application
`browser.js`	Detects the browser to select which `.css` file should be used
`mailui.js`	Maintains the common UI codes shared by messaging listing and Search message result listing
`setdomain.js`	Checks for Domain security
`main.js`	Maintains the Initialization and globally shared functions
`util.js`	Utility functions

The frame work related files are,

- `en/frame.html`
- `en/mail.html`, which is the first file loaded by the browser.

The Mail page is configured to display the Mail page. It creates a number of frames, including several invisible frames. These invisible frames are used to pull the dynamic contents as JavaScript objects from the server. Once downloaded, the hidden frame can invoke the specific callback function in `frameset HTML (_lr_fs.html)` to render the updated dynamic contents.

The Mail component can be perceived as a dynamic client-side HTML engine. There are not many standard HTML statements in `_lr_fs.html` files. It is the `ListFrameHTML()` function in _lr_fs.html files which is responsible for the HTML output. This action takes place when `ListFrameHTML`() accesses the JavaScript objects from the hidden frames such as *cfgFrame, msgFrame, and mboxFrame* to generate the dynamic HTML page.

Understanding Basic Interfaces in Mail

This section provides information on the various Mail screens in Communications Express, including:

- Inbox screen
- Message screen
- Folders screen
- Composition window
- Message Search window

Inbox Screen

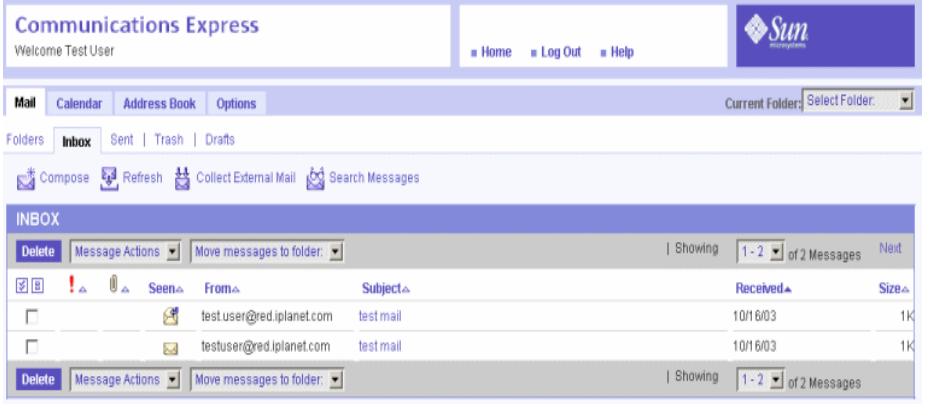
The Inbox screen, shown in Figure 4-1, enables you to view all messages and its basic features— for example, subject, from, received and size. The Inbox screen gets new messages and enables you to search for or delete old messages, as well as move messages into other folders

Figure 4-1 Communications Express Inbox Screen

Message Screen

The Message screen, shown in Figure 4-2, displays the message selected from the Inbox screen. The Message screen gives the option of replying to the sender, forwarding the message, moving the message to a different folder, or deleting the message. The Message screen also enables navigation to the next or previous message.

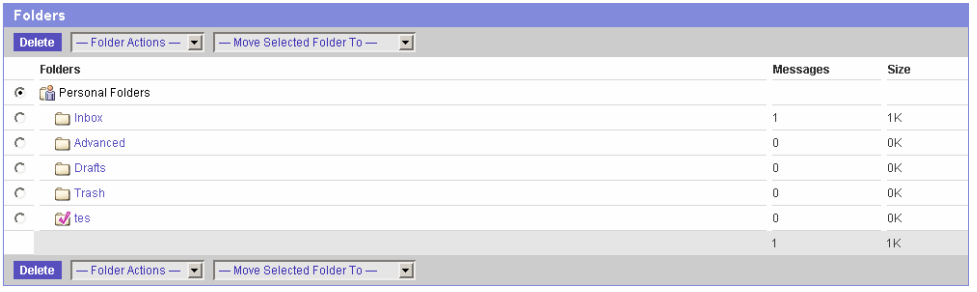
Figure 4-2 Communications Express Message Screen



Folders Screen

The Folders screen, shown in Figure 4-3_displays all folders that can be accessed. The Folders screen lists the number of messages contained and the size of each folder. The Folders screen also enables creating new folders, renaming or deleting old ones, subscribing or unsubscribing shared folder, sharing folder, moving a folder within another folder, updating the inbox, and composing new messages. Like the Inbox screen, the Folders screen also enables collection of external mails.

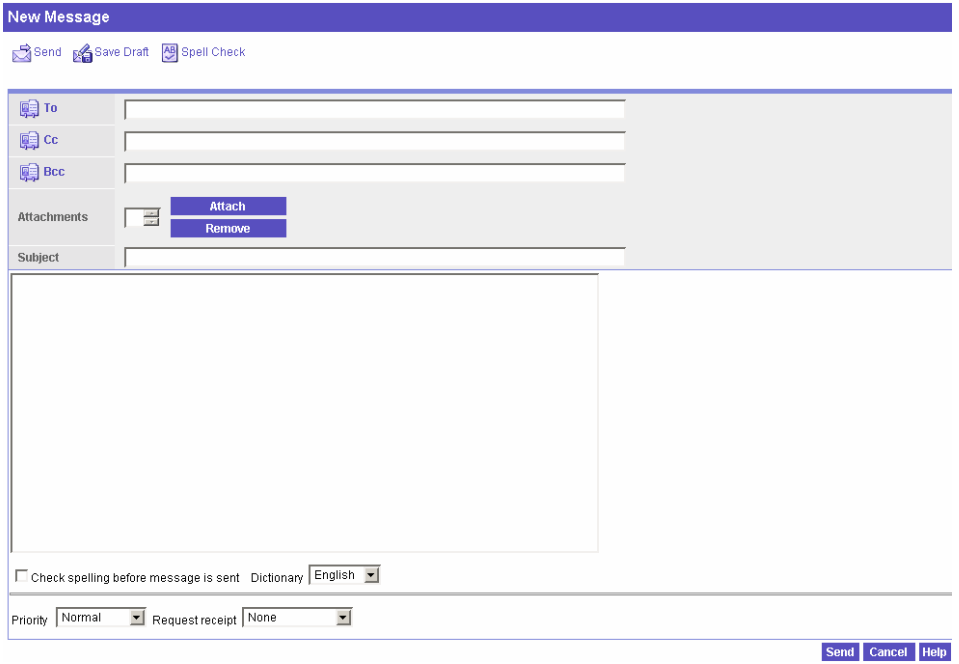
Figure 4-3 Folders Screen



Composition Window

The Composition window, shown in Figure 4-4, is used primarily to compose a new message. You can also use the window to save a draft or attach a file to the message, look up a recipient in the address book, access the help file, and cancel the composition altogether. Mail recipients can be added in “To”, “Cc”, or “Bcc” fields. You can edit the message in Text or HTML format if you are using Internet Explorer and this feature is not supported in Netscape Navigator. In the Composition window you can also check the spelling. The Composition window also enables you to set the mail priority or request for a return receipt.

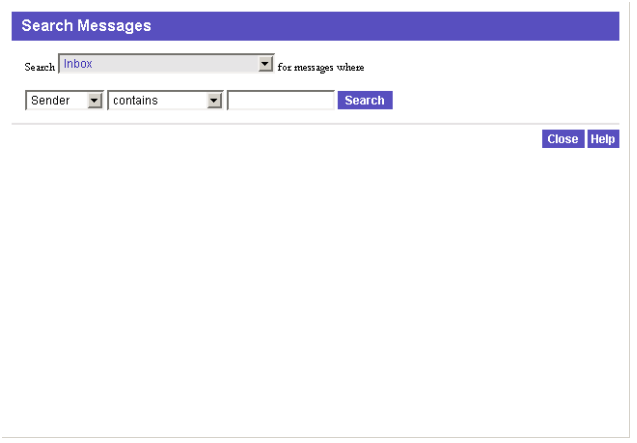
Figure 4-4 Communications Express Composition Window



Message Search Window

The Communications Express Message Search window, shown in Figure 4-5, is primarily used to search messages by entering sender's name, subject, body text, or recipient's name. You can also delete the messages from the search list.

Figure 4-5 Message Search Window



Customizing User Interface Features in Mail

This chapter describes how to customize user interface features of the Mail component in Communications Express.

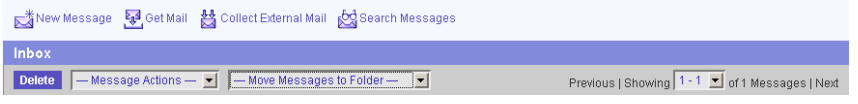
This chapter contains the following sections:

- Customizing the Mailbox Tool Bar
- Customizing Message Listing
- Customizing the Message Display Window
- Customizing the Message Composition Window
- Aligning the User Interface from Right to Left(For Arabic only)

Customizing the Mailbox Tool Bar

This section describes how to modify the mailbox tool bar shown in Figure 5-1.

Figure 5-1 Communications Express Mailbox Tool Bar



You can modify the following on the mailbox tool bar:

- Change the layout of the mailbox tool bar relative to the rest of the page
- Rearrange the order of tools

- Change the tools text

Customizing the Mailbox Tool Bar

To modify the mailbox tool bar, edit the appropriate files as follows:

- To customize the layout within the tool bar and the associated graphics, edit the *getToolbar()* function in the `mbox_fs_lr.html` file.
- To customize the text associated with the graphics in the Tool Bar, edit the `i18n[ ]` values for get mail, compose, search, new search, file selected message, delete, undelete, and expunge in the `lang/i18n.js` file

The functions assigned by *getToolbar()* in `mbox_fs_lr.html` that handle the tool clicks are:

- Get Mail: *main.refreshMbox()*
- Compose: *main.compose("new")*
- Search: *srch()*

Example—Mailbox Tool Bar Modifications

The code example shown in Figure 5-2 displays "Search" as the first tool and changes the text of "Get Mail" tool to "Get Messages."

Figure 5-2 Example Mailbox Tool Bar Modifications

Code Example 5-1 shows the necessary edits to be made in the file `mbox_fs_lr.html`.

Code Example 5-1 Altered Tool Bar Layout (mbox_fs_lr.html)

```
function getToolbar() {
  if (!main.loaded) return '';
return nWMtoolbar(i18n['mbox search'], 'srch()',
           'search','imx/LrlSearchMsg_wo_1.gif','imx/LrlSearchMsg_1.gif') +
         nWMtoolbar(i18n['compose'], 'main.compose(\'new\')',
           'compose', 'imx/LrlNewMsg_wo_1.gif', 'imx/LrlNewMsg_1.gif') +
         nWMtoolbar(i18n['get mail'], 'main.check_mail = 1;
main.displaySpecialMbox(\'Inbox\')',
           'getmail', 'imx/LrlGetMail_wo_1.gif','imx/LrlGetMail_1.gif')+
         nWMtoolbar(i18n["collect long"], 'main.collect()',
           'collect', 'imx/LrlColExtMail_wo_1.gif',
'imx/LrlColExtMail_1.gif')+
}
```

Code Example 5-2 shows the necessary changes to be made in file en/i18n.js (text)

Code Example 5-2 Altering Tool Bar Text (en/i18n.js)

```
i18n['get mail'] = 'Get Messages'
```

Customizing Message Listing

This section describes how to modify the Message List window shown in Figure 5-3.

Figure 5-3 Communications Express Message List Window

You can modify the following in the Message List window:

- By default change the sorting order
- Change the text of the default column heading
- Change the text on Collect External Mail button

To Modify the Message List Window

To modify the Message List window, edit the appropriate files as follows:

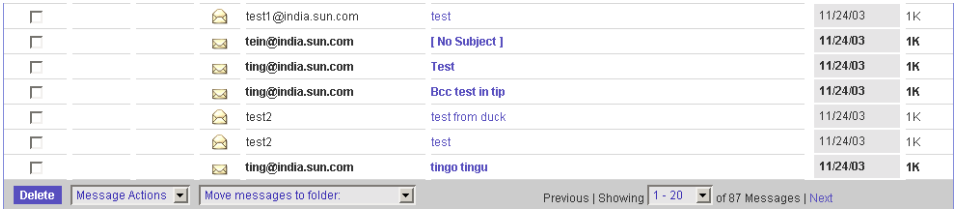
- To customize how the message list appears, edit the `ListFrameHTML()` function in the `mbox_fs_lr.html` file.
- To change the text of default column heading, edit the `i18n[]` values for search results, date, from, to, size, and subject in the `lang/i18n.js` file.
- To change the text on the “Collect External Mail” button, edit *i18n[’collect long]* in the `lang/i18n.js` file.

Functionally, the *listFrameHTML()* function links the “Collect External Mail” hyperlink to *collect()* in `main.js`. An example of such a linking is shown in - Message List Window Modifications

Example - Message Listing Modifications

The example shown in Figure 5-4 displays the most recently received mails first, and changes the text on “Collect External Mail” button to “Get Messages From Another Server”.

Figure 5-4 Example Message List Window Modifications



Code Example 5-3 shows the necessary changes to be made in file `en/i18n.js`.

Code Example 5-3 Altering List Window Text (`en/i18n.js`)

```
// POP3 Collection
....
i18n['collect long'] = 'Get Messages From Another Server'
```

Customizing the Message Display Window

This section describes how to modify the Message Display window shown in Figure 5-5.

Figure 5-5 Communications Express Message Display Window

You can modify the following in the Message Display window:

- Change the message display
- Alter the layout of the window
- Change the text of the fields
- Display user-defined header fields

To Modify the Message Display Window

To modify the Message Display window, edit the appropriate files as follows:

- To customize how the message appears, edit the *listFrameHTML(doc)* function in the `msg_fs_lr.html` file.
- To customize the default text, edit the `i18n[]` values under Message Headers and Message in the `lang/i18n.js` file.

Modify the Message Display Window to Display User Defined Header Fields

This section describes how to add and display user-defined header fields in the Message Display window.

To Display User Defined Header Fields

Edit the `listFrameHTML(doc)` function in the `msg_fs_lr.html` file.

Example—Customizing the Message Display Window to Display User Defined Header Fields

This example shows how to display the user defined field *X-document-id* in the Message Display Window.

Code Example 5-4 shows the edits made to the function `listFrameHTML()` in the `msg_fs_lr.html` file.

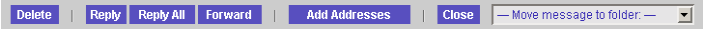
Code Example 5-4 Changes made to the `msg_fs_lr.html` file

```
function listFrameHTML(doc) {
....
var hdrstr = getHeaderStr(main.msgFrame.hdr[0], 'X-document-id')
if(hdrstr != '') {
s += <tr><td nowrap align=right valign=top width=5%' + main.base_line + '
bgcolor=' + main.chrome2 + '>' + main.font() + html('X-document-id') + nbsp
+ '</td>\n<td ' + main.cellBgString + '>' + extra + main.font() + hdrstr +
'</td></tr>\n'
}
....
}
```

Customizing the Message Tool Bar

This section describes how to customize the message tool bar

Figure 5-6 Communications Express Message Tool Bar



You can modify the following in the message tool bar:

- Change the layout of the toolbar relative to the rest of the page
- Alter the layout within the tool bar
- Change the text associated with the graphics

To Modify the Message Tool Bar

To modify the message tool bar, edit the appropriate files as follows:

- To customize the layout within the tool bar, edit the `actionBar()` function in the `msg_fs_lr.html` file.
- To customize the texts associated with the graphics in the Tool Bar, edit the `i18n[]` values for compose, reply, reply all, forward, delete, undelete, previous, and next in the `lang/i18n.js` file.

Code Example 5-5 shows the necessary changes to be made in the file `en/i18n.js`.

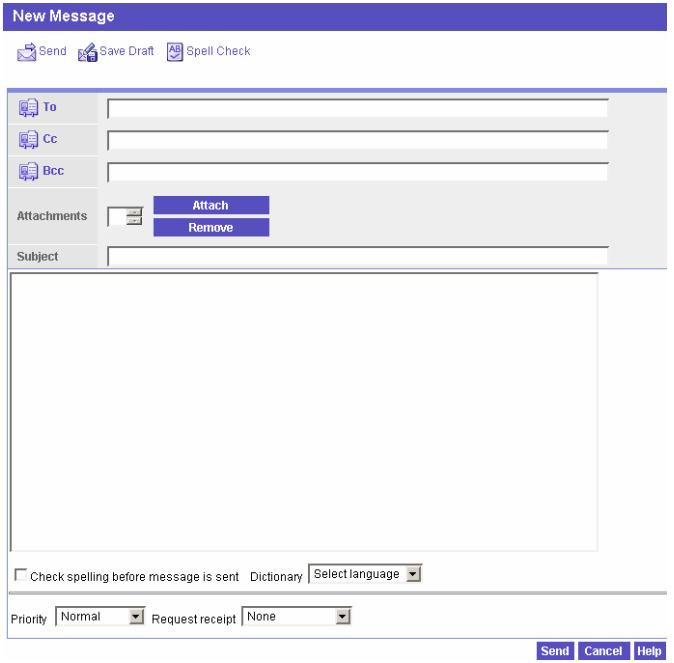
Code Example 5-5 Altering Message Tool Bar Text (`en/i18n.js`)

```
// Tool Bars
....
i18n['previous'] = 'Prev'
```

Customizing the Message Composition Window

This section describes how to modify the Message Composition window

Figure 5-7 Communications Express Message Composition Window



You can modify the following in the Message Composition window:

- Change the location of the tools in the window
- Alter text associated with the tools
- Enable and disable emoticons
- Create your own dictionary

To Modify the Message Composition Window

To modify the Message Composition window, edit the appropriate files as follows:

To customize the window, edit the `compFrameHTML()` function in the `comp_fs_lr.html` file.

- To customize the text, edit the values under `Message Composition` and `Tool Bars` in the `lang/i18n.js` file.

- To enable and disable the emoticons, edit the variable *iconHREF* in the `main.js` file. By default, the emoticon files are located in `msg_svr_base/html/imx` directory.

Functionally, `compFrameHTML()` in `comp_fs_lr.html` assembles the code and assigns the functions to the graphics by calling `WMtoolbar()` in `main.js` which also handles colors and text-only versions. The `compFrameHTML()` function in `comp_fs_lr.html` generates the “To”, “Cc”, and “Bcc” control area by calling `i18n_compose_controls()` in `lang/i18n.js`.

Code Example 5-6 shows the necessary changes to be made in the file `en/i18n.js` for changing the text “Recipients” to “Send to”.

Code Example 5-6 Altering Composition Window Text(`en/i18n.js`)

```
// Message Composition
....
i18n['recipient'] = 'Send To'
```

The emoticons appear on the screen if the Text / HTML option is set to HTML. By default the Text / HTML option is set to Text format.

Code Example 5-7 shows how to edit the `main.js` file to enable emoticons.

Code Example 5-7 Altering Composition Window to Enable Emoticons

```
var iconHREF = 'msg_svr_base/imx/'
```

Code Example 5-8 shows how to edit `main.js` file to disable emoticons.

Code Example 5-8 Altering Composition Window to Disable Emoticons

```
var iconHREF = ''
```

Aligning the User Interface from Right to Left(For Arabic only)

By default, the Menu tabs are aligned from left to right. If you have selected Arabic as the preferred language, then you need to customize Communications Express to align the Menu tabs from right to left.

To Align the User Interface From Right to Left

- To align the User Interface from right to left you need to remove a line from the `ar/i18n.js` file.

Code Example 5-9 shows the line that needs to be added to the `ar/i18n.js` file.

Code Example 5-9 Aligning the User Interface from right to left

```
....
i18n['dir'] = 'ltr'
....
```

Chapter 6

Customizing Advanced Features in Mail

This chapter describes how to perform advanced customizations. It also provides HTML files, their location, and details on features that are fully customizable for Communications Express user interface.

This chapter contains the following sections:

- Understanding Advanced Customization
- List of files to use for customizing UI in Mail
- Understanding Shared Folders
- Customizing the Default LDAP Attributes for Users

Understanding Advanced Customization

In addition to the features mentioned in Chapter 5, “Customizing User Interface Features in Mail”, many other features are fully customizable. However, to take advantage of these features, an in-depth knowledge of JavaScript is required. You might also face migration problems when attempting to reconfigure JavaScript files.

NOTE	This chapter does not provide code samples for advanced customizations. Also, an advanced knowledge of JavaScript and HTML is assumed.

List of files to use for customizing UI in Mail

Table 6-1 lists the UI related FrameSet files of Communications Express user interface that are fully customizable.

Table 6-1 Communications Express User Interface Customizable Features

Features	Files
Adds attachment for upload (popup window)	`attach_fs_lr.html`
Collects pop email (popup window)	`collect_fs_lr.html`
New message composition	`comp_fs_lr.html`
Folder viewing and management	`fldr_fs_lr.html`
Message listing for a selected folder	`mbox_fs_lr.html`
Message viewing	`msg_fs_lr.html`
Receipt notification (popup window)	`receipt_fs_lr.html`
Search message (popup window)	`searchmsg_fs_lr.html`
Sets folder sharing permission (popup window)	`setpermission_fs_lr.html`
Search Results	`srchresults_fs_lr.html`
Subscribe to	`subscribe_fs_lr.html`

Attachments

You can modify the following attachments options in mail.

- Browse button
- Attach, Cancel, Help buttons

HTML File Mapping

The HTML file that controls the attachment related features is `attach_fs_lr.html`.

Collect Mail from Another Server

You can modify the following labels that appear when collecting mail from another server:

- POP server name (text field)
- POP user ID (text field)
- Password (text field)
- Delete messages from server (select button)
- Save to folder (list box)
- Collect, Cancel, and Help (button)

HTML File Mapping

The HTML file that controls the mail collection feature is `collect_fs_lr.html`.

Message Composition

The message composition feature enables basic mail functions. You can modify the following message composition options:

- Compose new message
- Reply to the sender
- Reply to all recipients of the message including the sender
- Forward message to others
- Move message to folder
- Delete message
- Navigate through messages using Prev or Next icon.

HTML File Mapping

The HTML file that controls the message composition feature is `msg_fs_lr.html`.

Mailbox Management Tab

The mailbox management tab enables access to a mailbox. You can modify the following mailbox management tab options:

- Get new message
- Compose new message

- Search for message
- Move message to selected folder
- Delete message
- Undelete message
- Select message
- Select all messages
- Collect external messages

HTML File Mapping

The HTML file that controls the mailbox management tab feature is `mbox_fs_lr.html`.

HTML File Mapping

The HTML file that controls the options tab features is `opts_fs_lr.html`.

Return Receipt

The return receipt feature enables the management of return receipts.

HTML File Mapping

The file that controls the return receipt feature is `receipt_fs_lr.html`.

Understanding Shared Folders

A shared folder is a folder in which you can store messages that can be accessed by other users. Communications Express manages access to the shared folders by granting others access to the shared folders.

Sharing folders is a two-step process that involves sharing and subscribing:

1. A user shares a folder, specifying who has permissions to the folder.
2. The users who were given permissions to that folder then subscribe to it.

For more information on Shared Folders, see *Sun Java System Communications Express Online Help*, that can be accessed by clicking the Help on Sun Java System Communications Express.

Customizing the Default LDAP Attributes for Users

The Communications Express Server loads a default set of LDAP attributes for a user at the start of a session. These attributes are provided in

Figure 6-1 Customizable LDAP attributes

```
cn
givenName
mail
mailAlternateAddress
mailAutoReplyMode
mailAutoReplySubject
mailAutoReplyText
mailAutoReplyTextInternal
mailAutoReplyTimeout
mailDeliveryOption
mailForwardingAddress
mailQuota,mailMsgQuota
preferredLanguage
sn
uid
vacationEndDate
vacationStartDate
```

For more information on the attributes required or allowed by LDAP object classes for Communications Express, see Chapter 3 Attributes in the *Sun One Messaging and Collaboration Schema Reference Manual* at:

`http://docs.sun.com/db/prod/s1msgsrv#hic`

You might want to obtain other customized LDAP attributes from the server. For example, an ISP might have a custom LDAP attribute assigned to all users called `myuserclass`. This attribute could denote different types of users that access services, including Communications Express. Possible values for this attribute are “regular” and “vip.”

NOTE Before adding custom attributes to the directory, ensure that the directory schema supports these new attributes. The global set of schema for Directory Server can be found in the entry named `cn=schema`.

For more information on extending directory schema, see *Sun ONE Directory Server Deployment Guide* at:

http://docs.sun.com/db/prod/s1dirsrv#hic

After extending the directory schema, you can add the new attribute to a User or a group entry. To add custom attribute to as User entry you need to modify the entry in `servletsconf` section using the `ldapmodify` command. For more information on `ldapmodify` command, see *Sun ONE Directory Server Configuration, Command, and File Reference* at:

http://docs.sun.com/db/prod/s1dirsrv#hic

Depending on the type of user (that is, the value of the *myuserclass LDAP* attribute), different advertisements are presented to the user when they log into Communications Express (Communications Express is customized to display banner advertisement). If the customized client has access to the *myuserclass LDAP* attribute, the type of user can be determined and the relevant banner advertisement for that user type is displayed.

To obtain other customized LDAP attributes from the server, use *configutil* to modify the *service.http.extrauserldapattrs* configuration parameter. The attributes are read-only by default. If the user wants to modify an attribute using the Communications Express code, the attribute needs to be marked read-write by appending the suffix.

The following example assumes the user wants to display banner advertisements depending on the class of the user and that the client program allows the user to edit a link to a home page:

Code Example 6-1 Display of banner advertisements depending on the user class

```
configutil -l -o service.http.extrauserldapattrs -v “myuserclass,homepage:w
“
```

Chapter 7

Customizing General Features in Address Book

The Address Book contains many customizable and localizable items that can be changed to create a different look and feel. These customizable items include icons, style sheets, and labels. You can change the position of certain items and also customize captions, headings, button labels, alert and inline messages.

The rendering of Address Book UI is handled by XML/XSL files that contain XSL tags, static HTML and JavaScripts. The XSL and JavaScript code are used to display dynamic data and perform actions or form handlings. The XSL code in most of the pages is structured into templates which helps make a page modular for various components. All these files are located under the <*uwcinstall*>/`WEB-INF/ui/html/abs directory`. This chapter contains information on customizing the following in Address Book.

- Customizing Address Book Icons and Labels
- Customizing Style Sheets
- Customizing the Main Search Page
- Customizing New/Edit Contact Window
- Customizing New Group or Edit Group Window
- Customizing Printable Window
- Customizing the Import/Export Address Book Window

Customizing Address Book Icons and Labels

Customizing Icons

All the icons that are used for display in Address Book are defined under two files namely,

- `search-images.xsl` - This file contains most of the icon references that are used in the search result table.
- `commonimages.xsl` - This file contains common icon file references.

All Address Book related images are located under <*uwcinstall*>`/absimx`. `Search-images.xsl` and `commonimages.xsl` refer to images in this directory. To customize, you can add or replace the required images in this directory and then change the corresponding references in these files.

These are two examples on how you can modify the icons.

Example 1 - To change the icon for Printable as displayed in the toolbar of main page, you need to do the following.

Old Icon: Printable (File name: - `LrlPrintable_1_wo.gif`)

New Icon: New Printable (File name - `ico_print.gif`)

In `commonimages.xsl`, the reference is defined as,

<xsl:variable name="print_page.gif" select="'../absimx/LrlPrintable_1_wo.gif'"/>

To change the icon file reference,

Add `ico_print.gif` file into <*uwcinstall*>`/absimx`.

Change the reference in `xsl:variable` tag for `print_page.gif` from `'../absimx/LrlPrintable_1_wo.gif'` to `'../absimx/ico_print.gif '`.

Example 2 - To add a banner image called `AddressBook_banner.gif` you need to do the following.

- Add `AddresBook_banner.gif` file into <*uwcinstall*>`/absimx`.
- Add a reference for the image in `commonimages.xsl` by adding the following code.

<xsl:variable name="AddressBook_banner.gif"
select="'../absimx/AddressBook_banner.gif'"/>
Then add the image in the required position in the `desired .xsl` file as

**

Customizing Labels

All captions and displayable static items that are displayed in the Address Book can be customized. All the labels are defined in the `dictionary-<lang>.xml` file which is located under *<uwcinstall>*`/WEB-INF/ui/html/abs` directory. This XML file contains definitions in the following form

<word key="_Message">`Message Actual Text`*</word>*

The key is specified in the `XSL` file which is used to obtain the value of the *<word>* XML node. This value is eventually displayed during the rendering of `XSL` into `HTML`. In the XSL file, the key is specified in the *<xsl:text>* tag.

To customize a particular caption or a static label, change the text corresponding to desired key. To add new text,

- Add new *<word>* tag with the appropriate key and the prefix '_'
- Add the *<xsl:text>* tag with the key as the tag value in the XSL file.

The following example changes the label for 'New Contact' link on the Main page toolbar to 'Add Contact'. In the example ‘en’ is assumed to be the language in which the label is displayed.

In search.xsl, the label is coded as following:

Code Example 7-1 Customization of the label

```
<a class="ToolLbl" href="javascript:void(0)">
   <xsl:attribute name="onClick">
<xsl:text>javascript:openWinAutoHeight('addcontact-main.xml?bookid=</xsl:te
xt>
<xsl:value-of select="$selectedBook/entry/@entryID"/>
        <xsl:text>', 'NewContact',
'scrollbars=yes,resizable=yes,width=700');</xsl:text>
  </xsl:attribute>
  <xsl:text>_New Contact</xsl:text>       -----> Label Definition
</a>
```

Code Example 7-2 shows the code before modifying the default definition in `dictionary-en-xml`

Code Example 7-2 Code before Modification of the Default Definition in Dictionary `-en-xml`

```
<word key="_View Calendar...">View Calendar...</word>
```

Table 7-3 shows the code before modifying the default definition in dictionary `-en-xml`

Code Example 7-3 Customized Default Definition in Dictionary `-en-xml`

```
<word key="_View Calendar...">View Schedule...</word>
```

Customizing Style Sheets

In Address Book, style sheets play a significant role in the manner in which the UI is rendered in terms of look and feel as many items that are displayed in Address Book are associated with style sheets. Hence, the look and feel of Address Book pages and pop ups can be customized by modifying these style sheets.

These style sheets are defined in a CSS file which is included using the <*link*> HTML tag in the HTML <*head*> section of XSL files. These are referenced by assigning a 'class' attribute of HTML tags.

Code Example 7-4 shows the class attribute using HTML tags.

Code Example 7-4 Class attribute of HTML tags

```
<td class="TdActTdLst">......</td>
```

Code Example 7-5 shows the class attribute using XSL tags.

Code Example 7-5 Class attribute of XSL tags

```
<xsl:variable name="css-class" select="'TdActTdLst'"/>
....
<td>
   <xsl:attribute name="class">
      <xsl:value-of select="$css-class"/>
  </xsl:attribute>
...
</td>
```

The Address Book has two separate CSS files for IE and Netscape. These files exist under <*uwcinstall*>/absimx and are named as,

- ab_css_ie5win.css for IE
- ab_css_ns6up.css for Netscape

What can be Customized in Style Sheets

- You can change the definition of an existing style sheet. In this case, you need not change the class attribute reference.
- You can add new style sheet definitions and change the class attribute reference for the desired HTML tag in XSL files.

1. Example of changing the definitions of an existing style sheet:

The definition of a primary button display is 'Btn1' which has the following definition in the CSS file.

Code Example 7-6 shows the code before changing the definition of a primary button display 'Btnl'

Code Example 7-6 Before changing the definition of a primary button display 'Btnl'

```
.Btn1 {background:#594fbf;color:#FFF;font-weight:bold;padding:2px
0px;margin:0px 0px 1px 0px;border:0px none #000; }
```

Code Example 7-7 shows how the class is used in the XSL file for the 'Close' button.

Code Example 7-7 Class used in the XSL file for the 'Close' button

```
<input class="Btn1" id="close" onblur="if (this.disabled==0)
this.className='Btn1'" onmouseover="if (this.disabled==0)
this.className='Btn1Hov'" onfocus="if (this.disabled==0)
this.className='Btn1Hov'" onclick="parent.close()" tabIndex="1"
onmouseout="if (this.disabled==0) this.className='Btn1'" type="button"
name="close" value="Close">
```

Code Example 7-8 shows the code after changing the definition of a primary button display.

Code Example 7-8 After changing the definition of a primary button display 'Btnl'

```
.Btn1 {background:#fffff;color:#000;font-weight:bold;padding:2px 0px;margin:0px 1px 1px 0px;border:0px none
#000; }
```

2. Example of adding new style sheet definitions and change the class attribute reference for the desired HTML tag in XSL files.

You may add a different class definition altogether in the CSS file. In this case, the newly defined class needs to be assigned to the XSL file.

```
.EMPBtn { font-family: Arial, Helvetica, sans-serif; text-decoration
none; font-weight:bold; color: #594fbf; }
```

In XSL file, the corresponding change would be

Code Example 7-9 After changing class attribute reference for the desired HTML tag

```
<input class="EMPBtn" id="close"onblur="if(this.disabled==0)
this className='Btnl'"onmouseover="if)this.disabled==0)
this.className='Btn1Hov'"onfocus="if(this.disabled==0)
this.className='Btn1Hov'"onclick="parent.close()"tabIndex"1" onmouseout="if
(this.disabled==0)
this.className='Btnl'"type="button"name="close"value="Close">
```

Customizing the Main Search Page

The search page can be divided into following sections

- Tabs
- Toolbar Pane
- Search Pane
- Action Row
- Search Result Table
- Quick Add Pane

Each of these sections are defined in templates which exist either under search.xsl or search-template.xsl. The search-template.xsl file contains commonly used templates shared by the Main Search Page, Search Address Book popup and Add Addresses popup.

These sections can be reorganized by modifying their respective positions. Table 7-1 shows the commonly used templates for `search-template.xsl` and `search.xsl`

Table 7-1 Commonly used templates in search-template.xsl and search.xsl

Sections	Template Name	File
Tabs	search-template-bookbar	search-template.xsl
Toolbar	search-template-toolbar	search.xsl
Search Pane	search-template-searchbar	search-template.xsl
Action Row	search-template-actionbar	search.xsl
Search Result Table	search-template-searchresult	search-template.xsl
Quick Add	quick-add	search.xsl

Search Result Table

This templates that refer to Search Result Table are,

- **`commonattributes-list.xsl.`** The templates defined in this file are used in the display of header captions in result table in a particular layout.
- **`entries-list.xsl.`** The templates defined in this file are used to display the actual data such as email, displayname, web address etc and so on in a particular format.

To customize the Search Main Page, Search Address Book popup, Add Addresses and Printable views, you need to change the layout information in these templates.

Customizing New/Edit Contact Window

The files pertaining to the new contact or edit contact window are,

- New contact - `addcontact.xsl`
- Edit contact - `editcontact.xsl`

Common code shared among new and edit window can be accessed from contact - `common-editcontact.xsl`

Table 7-2 shows the templates that are defined for the sections in New Contact or Edit Contact Window

Table 7-2 Templates applicable for New / Edit Contact Window

Sections	Template Name	File
Skip Links	-	addcontact.xsl and editcontact.xsl
Name and Company	nameAndCompany	common-editcontact.xsl
Phone	phone	common-editcontact.xsl
Email	email	common-editcontact.xsl
Addresses	address	common-editcontact.xsl
IM Nicknames	IM	common-editcontact.xsl
Web Addresses	onlineInfos	common-editcontact.xsl
Notes	notes	common-editcontact.xsl

You can customize the window by changing labels or reordering the listed sections in any desired order.

In `addcontact.xsl` the *'edit-abperson'* template calls the templates.

Code Example 7-10 shows the code that displays Address before Online information.

Code Example 7-10 Code that displays Address displayed before online information

```
<xsl:call-template name="address">
        <xsl:with-param name="abperson" select="$abperson"/>
      </xsl:call-template>
```

Code Example 7-10 Code that displays Address displayed before online information

```
<xsl:call-template name="address">
      <xsl:call-template name="onlineInfos">
        <xsl:with-param name="abperson" select="$abperson"/>
      </xsl:call-template>
```

Code Example 7-11 shows how to display Online information before Address.

Code Example 7-11 Code that displays Online information before Address

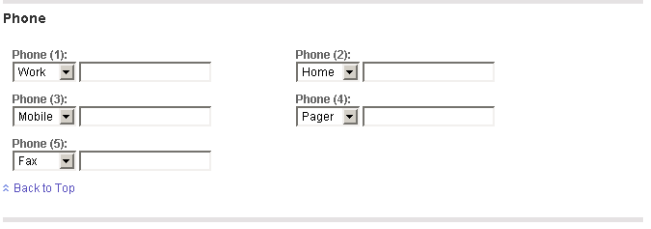
```
<xsl:call-template name="onlineInfos">
       <xsl:with-param name="abperson" select="$abperson"/>
</xsl:call-template>

<xsl:call-template name="address">
       <xsl:with-param name="abperson" select="$abperson"/>
</xsl:call-template>
```

Customizing Phone

Address Book allows you to set five types of phones which are defined in `phoneEmailAndIM`. The five definitions of 'phone' template are called and the priority value is passed to them when the values are displayed in the drop-down list. You can change their respective priority orders.

Figure 7-1 Customizing Phone



Code Example 7-12 shows the default code where Work is displayed as priority 1 and home is displayed as priority 2.

Code Example 7-12 Default code wherein Work phone is displayed as priority 1 and home phone as priority 2

```
    <option value="work">
        <xsl:choose>
            <xsl:when test="$abperson">
              <xsl:choose>
                <xsl:when test="$abperson/phone[@priority = $priority]">
                 <xsl:if test="$abperson/phone[@priority = $priority]/@type
= 'work'">
                   <xsl:attribute name="selected"/>
                  </xsl:if>
                </xsl:when>
                <xsl:otherwise>
                  <xsl:if test="$priority = '1'">
                   <xsl:attribute name="selected"/>
                  </xsl:if>
                </xsl:otherwise>
              </xsl:choose>
            </xsl:when>
            <xsl:otherwise>
              <xsl:if test="$priority = '1'">
               <xsl:attribute name="selected"/>
              </xsl:if>
            </xsl:otherwise>
          </xsl:choose>
          <xsl:text>_Work</xsl:text>
       </option>
       <option value="home">
         <xsl:choose>
            <xsl:when test="$abperson">
              <xsl:choose>
                <xsl:when test="$abperson/phone[@priority = $priority]">
                 <xsl:if test="$abperson/phone[@priority = $priority]/@type
= 'home'">
                   <xsl:attribute name="selected"/>
                  </xsl:if>
                </xsl:when>
                <xsl:otherwise>
                  <xsl:if test="$priority = '2'">
                   <xsl:attribute name="selected"/>
                  </xsl:if>
                </xsl:otherwise>
              </xsl:choose>
            </xsl:when>
            <xsl:otherwise>
              <xsl:if test="$priority = '2'">
               <xsl:attribute name="selected"/>
              </xsl:if>
            </xsl:otherwise>
          </xsl:choose>
          <xsl:text>_Home</xsl:text>
        </option>
```

Code Example 7-13 shows how to change the code so that it displays Home phone as priority 1 and Work phone as priority 2.

Code Example 7-13 Code that displays Home as priority 1 and Work as priority 2

```
<option value="work">
        <xsl:choose>
            <xsl:when test="$abperson">
              <xsl:choose>
                <xsl:when test="$abperson/phone[@priority = $priority]">
                 <xsl:if test="$abperson/phone[@priority = $priority]/@type
= 'work'">
                   <xsl:attribute name="selected"/>
                  </xsl:if>
                </xsl:when>
                <xsl:otherwise>
                  <xsl:if test="$priority = '2'">
                   <xsl:attribute name="selected"/>
                  </xsl:if>
                </xsl:otherwise>
              </xsl:choose>
            </xsl:when>
            <xsl:otherwise>
              <xsl:if test="$priority = '2'">
               <xsl:attribute name="selected"/>
              </xsl:if>
            </xsl:otherwise>
          </xsl:choose>
          <xsl:text>_Work</xsl:text>
       </option>
       <option value="home">
         <xsl:choose>
            <xsl:when test="$abperson">
              <xsl:choose>
                <xsl:when test="$abperson/phone[@priority = $priority]">
                 <xsl:if test="$abperson/phone[@priority = $priority]/@type
= 'home'">
                   <xsl:attribute name="selected"/>
                  </xsl:if>
                </xsl:when>
                <xsl:otherwise>
                  <xsl:if test="$priority = '1'">
                   <xsl:attribute name="selected"/>
                  </xsl:if>
                </xsl:otherwise>
              </xsl:choose>
            </xsl:when>
            <xsl:otherwise>
              <xsl:if test="$priority = '1'">
               <xsl:attribute name="selected"/>
              </xsl:if>
            </xsl:otherwise>
          </xsl:choose>
      <xsl:text>_Home</xsl:text>
</option>
```

Customizing E-mail

Address Book allows to set three types of E-mail which are defined in `phoneEmailAndIM`. The three definitions of '`email`' templates are called and the priority values are passed to them.You can change their priority orders.

Figure 7-2 Customizing E-mail

Customizing Dates

Address Book allows you to set Birthday and Anniversary dates. These two dates are defined in the '`importantDates`' template. This template passes all relevant information to the '`date`' template.

You may customize the labels, change layout such as size of fields for the dates or their respective positions.

Code Example 7-14 Default code that shows horizontally aligned fields and displays Birthday as the first field and Anniversary as the second

```
<tr>
      <xsl:call-template name="date">
        <xsl:with-param name="abperson" select="$abperson"/>
        <xsl:with-param name="type" select="'birthday'"/>
        <xsl:with-param name="index" select="'1'"/>
        <xsl:with-param name="dateFormat" select="$dateFormat"/>
        <xsl:with-param name="width" select="40"/>
        <xsl:with-param name="fieldName" >
          <xsl:value-of select="$fieldPrefix" />
          <xsl:text>dateOfBirth</xsl:text>
        </xsl:with-param>
        <xsl:with-param name="label">
          <xsl:text>_Birthday</xsl:text>
        </xsl:with-param>
        <xsl:with-param name="tabindex" select="'52'"/>
      </xsl:call-template>

      <xsl:call-template name="date">
        <xsl:with-param name="abperson" select="$abperson"/>
        <xsl:with-param name="type" select="'anniversary'"/>
        <xsl:with-param name="index" select="'2'"/>
        <xsl:with-param name="dateFormat" select="$dateFormat"/>
```

Code Example 7-14 Default code that shows horizontally aligned fields and displays Birthday as the first field and Anniversary as the second

```
<tr>
        <xsl:with-param name="width" select="65"/>
        <xsl:with-param name="fieldName" >
          <xsl:value-of select="$fieldPrefix" />
          <xsl:text>anniversary</xsl:text>
        </xsl:with-param>
        <xsl:with-param name="label">
          <xsl:text>_Anniversary</xsl:text>
        </xsl:with-param>
        <xsl:with-param name="tabindex" select="'55'"/>
      </xsl:call-template>
    </tr>
```

Code Example 7-15 shows how to display the fields in a vertical layout and also rearranges Anniversary as the first date and Birthday as second

Code Example 7-15 Code that displays the field in a vertical layout and also rearranges Anniversary as the first date and Birthday as second

```
  <tr>
      <xsl:call-template name="date">
        <xsl:with-param name="abperson" select="$abperson"/>
        <xsl:with-param name="type" select="'anniversary'"/>
        <xsl:with-param name="index" select="'1'"/>
        <xsl:with-param name="dateFormat" select="$dateFormat"/>
        <xsl:with-param name="width" select="65"/>
        <xsl:with-param name="fieldName" >
          <xsl:value-of select="$fieldPrefix" />
          <xsl:text>anniversary</xsl:text>
        </xsl:with-param>
        <xsl:with-param name="label">
          <xsl:text>_Anniversary</xsl:text>
        </xsl:with-param>
        <xsl:with-param name="tabindex" select="'52'"/>
      </xsl:call-template>
    </tr>
    <tr>
      <xsl:call-template name="date">
        <xsl:with-param name="abperson" select="$abperson"/>
        <xsl:with-param name="type" select="'birthday'"/>
        <xsl:with-param name="index" select="'2'"/>
        <xsl:with-param name="dateFormat" select="$dateFormat"/>
        <xsl:with-param name="width" select="40"/>
        <xsl:with-param name="fieldName" >
          <xsl:value-of select="$fieldPrefix" />
          <xsl:text>dateOfBirth</xsl:text>
        </xsl:with-param>
        <xsl:with-param name="label">
          <xsl:text>_Birthday</xsl:text>
```

Code Example 7-15 Code that displays the field in a vertical layout and also rearranges Anniversary as the first date and Birthday as second

```
  <tr>
        </xsl:with-param>
        <xsl:with-param name="tabindex" select="'55'"/>
      </xsl:call-template>
```

Customizing Web Addresses

Address Book allows you to set four web addresses for work, home, calendar and freebusy. These addresses are defined in the *'onlineInfos'* template. The *'onlineInfos'* template calls the following:

- *'weburl'* that passes the priority for ordered display
- *'calendar'* with *type="calendar*" for calendar url and *type="freebusy*" for *freebusyurl"*.

You may change the order in which these addresses similar to the examples illustrated above.

Customizing IM Nicknames

Address Book allows you to set two IM nicknames. The list of IM services that is supported by Address Book are listed in the drop-down menus. These two IM options are defined in 'phoneEmailAndIM' template which calls the 'im' template passing the relevant information.

- You may change the order of IMs by changing their priorities as illustrated in previous examples.
- You may also change the default selected services. The default services available in the drop down list are 'SunONE' and 'AIM'. The code checks for the passed priority and marks the appropriate option in the drop down as selected. You may shuffle the priority value in the code to select a different service. This code exists in the *'im*' template.

Code Example 7-16 shows the default code that displays SunONE as the default selected service

Code Example 7-16 Default code that displays SunONE as the default service

```
<option value="SunONE">
          <xsl:choose>
           <xsl:when test="$abperson and $abperson/im[@priority=$priority]">
              <xsl:if test="$abperson/im[@priority=$priority]/@service =
'SunONE'">
```

Code Example 7-16 Default code that displays SunONE as the default service

```
<option value="SunONE">
               <xsl:attribute name="selected"/>
              </xsl:if>
            </xsl:when>
            <xsl:otherwise>
             <xsl:if test="$priority= '1'">     ---- This value is passed by
'phoneEmailAndIM' template to have this option default selected
               <xsl:attribute name="selected"/>
              </xsl:if>
            </xsl:otherwise>
          </xsl:choose>
          <xsl:text>iPlanet</xsl:text>
</option>
.....
 <option value="Yahoo">
          <xsl:choose>
           <xsl:when test="$abperson and $abperson/im[@priority=$priority]">
              <xsl:if test="$abperson/im[@priority=$priority]/@service =
'Yahoo'">
               <xsl:attribute name="selected"/>
              </xsl:if>
            </xsl:when>
            <xsl:otherwise>
              <xsl:if test="$priority = '3'">
               <xsl:attribute name="selected"/>
              </xsl:if>
            </xsl:otherwise>
          </xsl:choose>
          <xsl:text>Yahoo</xsl:text>
</option>
```

Code Example 7-17 shows the modified code that displays Yahoo as the default Service

Code Example 7-17 Modified code that displays Yahoo as the default Service

```
<option value="SunONE">
          <xsl:choose>
           <xsl:when test="$abperson and $abperson/im[@priority=$priority]">
              <xsl:if test="$abperson/im[@priority=$priority]/@service =
'SunONE'">
               <xsl:attribute name="selected"/>
              </xsl:if>
            </xsl:when>
            <xsl:otherwise>
             <xsl:if test="$priority= '3'">     ---- This value is passed by
'phoneEmailAndIM' template to have this option default selected
               <xsl:attribute name="selected"/>
              </xsl:if>
            </xsl:otherwise>
          </xsl:choose>
```

Code Example 7-17 Modified code that displays Yahoo as the default Service

```
<option value="SunONE">
          <xsl:text>iPlanet</xsl:text>
</option>
.....
 <option value="Yahoo">
          <xsl:choose>
           <xsl:when test="$abperson and $abperson/im[@priority=$priority]">
              <xsl:if test="$abperson/im[@priority=$priority]/@service =
'Yahoo'">
               <xsl:attribute name="selected"/>
              </xsl:if>
            </xsl:when>
            <xsl:otherwise>
              <xsl:if test="$priority = '1'">
               <xsl:attribute name="selected"/>
              </xsl:if>
            </xsl:otherwise>
          </xsl:choose>
          <xsl:text>Yahoo</xsl:text>
</option>
```

Customizing View Contact Window

The View contact window displays the sections in the same order as defined in new / edit contact window. You may customize this window by modifying labels, reordering sections, modifying layout, alignment in the page etc. The file to be changed for this window is 'viewcontact.xsl'

Customizing New Group or Edit Group Window

The files pertaining to the New Group or Edit Group window are,

- New Group - addgroup.xsl
- Edit Group - editgroup.xsl

The common code shared among new and edit contact are stored in common-editgroup.xsl

Table 7-3 lists the templates defined for the various sections in New Group or Edit group:

Table 7-3 Templates defined for various sections in the New / Edit group

Sections	Template Name	File
Group Details	groupDetails	common-editgroup.xsl
Group Members	groupMembers	common-editgroup.xsl

You can customize the window by changing labels or reordering the listed sections in a desired format.

Customizing Group Details

The Group Details section displays the following fields.

- display name
- description
- web url
- calendar url

You may reorder the positions of these fields.Besides, you can also add the E-mail address which is supported for a group.

Code Example 7-18 shows the code to be used for adding the E-mail address which is supported for a group.

Code Example 7-18 Code to be used for adding the E-mail address which is supported for a group

```
 <tr>
      <td class="PropLabelAb" width="22%"><span class="Lbl2"><label
for="email"><xsl:text>_Email</xsl:text></label></span></td>
      <td class="PropInput" width="55%">
          <input type="text" size="30" maxlength="30"
name="{$fieldPrefix}piEmail1" id="email" tabindex="2"
onChange="javascipt:this.value=this.value.trim()"
onBlur="javascipt:this.value=this.value.trim()">
            <xsl:attribute name="value">
             <xsl:value-of select="/xslui/iab/bookentry/group/entry/email"/>
             </xsl:attribute>
           </input>
      </td>
      <td width="6%"> </td>
```

Code Example 7-18 Code to be used for adding the E-mail address which is supported for a group

```
 <tr>
      <td width="11%"> </td>
      <td width="6%"> </td>
</tr>
```

Customizing the View Group Window

The View Group window displays the sections in the same order as defined in New Group or Edit Group window. You may customize this window by modifying labels, reordering sections, modifying layout, their alignment in the page etc. The file to be changed for this window is `'viewgroup.xsl'`

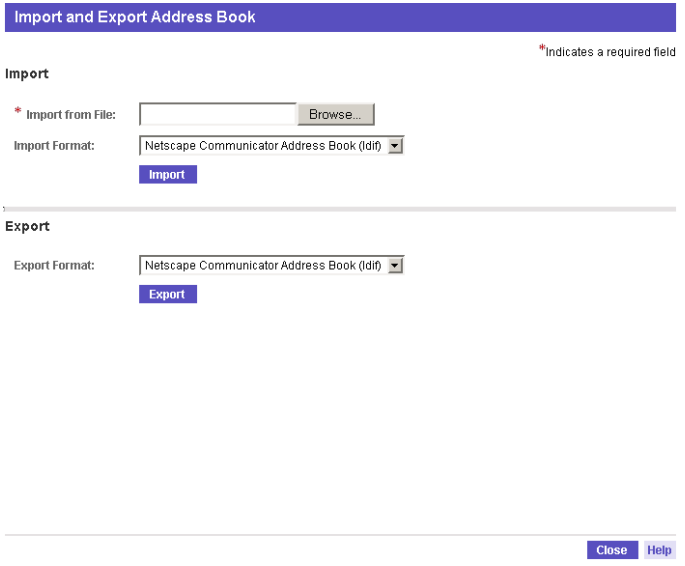
Customizing Printable Window

The file for this window is `'abprnlist.xsl`. The window displays each contact / group in card format. You can customize the page by changing the layout or changing the order of fields and stylesheet items displayed in the page.

Customizing the Import/Export Address Book Window

The file that is used for modifying the import / export window is `importexport.xsl`. The page displays Import and Export sections.

Figure 7-3 Customizing the Import / Export Address Book Window



You can customize the page for

- Labels
- Swapping the Import and Export sections
- Change the format options displayed in drop-downs.
- Layout

For example, let us consider modifying the listed format options. The format options listed are,

- Netscape Communication Address Book (LDIF)
- Microsoft Outlook CSV
- SunONE Address Book CSV
- vCard

Code Example 7-19 shows the code before modifying the options list

Code Example 7-19 Code before modifying the options list

```
<td class="PropInput" width="80%">
 <select name="importformat" tabindex="2">
 <option value="ldif"><xsl:text>_Netscape Ldif</xsl:text></option>
 <option value="csvus"><xsl:text>_Outlook CSV</xsl:text></option>
 <option value="iabs"><xsl:text>_SunONE CSV</xsl:text></option>
 <option value="vcard"><xsl:text>_vCard</xsl:text></option>
 </select>
</td>
```

The options list can be changed to appear in the following order in drop down list.

- SunONE Address Book CSV
- Microsoft Outlook CSV
- Netscape Communication Address Book (LDIF)
- vCard

Code Example 7-20 shows the code after modifying the options list

Code Example 7-20 Code after modifying the options list

```
 <td class="PropInput" width="80%">
 <select name="importformat" tabindex="2">
 <option value="iabs"><xsl:text>_SunONE CSV</xsl:text></option>
 <option value="csvus"><xsl:text>_Outlook CSV</xsl:text></option>
 <option value="ldif"><xsl:text>_Netscape Ldif</xsl:text></option>
 <option value="vcard"><xsl:text>_vCard</xsl:text></option>
 </select>
 </td>
```

Chapter 8

Customizing Options

The common components present in Communications Express are banner, application bar, and the application options tab bar. The Communications Express Options screen, enables access to the subscriber's account summary, personal information, password, settings, appearance, vacation message, and mail filters, all of which can be customized. Communications Express allows you to customize these components and the overall layout and look and feel of the client.

You can modify the following Options:

- Customizing Options tab
- To change the password, use the .jsp file located at uwc/common/UserPreferencesPassword.jsp Customizing Global Options Window

Customizing Options tab

To change the UI of options button, the functions `getToggle()` and `toggleFrameHTML()` need to be modified

The following .jsp files need to be modified for customization:

- To customize the settings for password user preferences, use the .jsp file located at passwuwc/common/UserPreferencesSettings.jsp
- To change the password, use the .jsp file located at uwc/common/UserPreferencesPassword.jsp Customizing Global Options Window

The files pertaining to customizing the global options window are the following.

uwc/common/UserPreferencesPassword.jsp

uwc/common/UserPreferencesSettings.jsp

While changing the password, this code displays an alert message if the user leaves the current password field blank.

Code Example 8-1 shows the code displays an alert message if the user leaves the current password field blank.

Code Example 8-1 Code that throws an alert when the user enters an empty current password

```
Password entered is null or blank"/>");
      return;
```

Code Example 8-2 shows how to customize the Alert message.

Code Example 8-2 Customizing Alert message

```
Edit <install-root>/WEB-INF/domain/<domain-name>/<locale>/i18n.properties
```

Change:

`uwc-common-error-null-current-password=Current Password` entered is null or blank

to

`uwc-common-error-null-current-password=Cannot Accept empty password!`

and change this code.

Code Example 8-3 shows the code after customizing the Alert message

Code Example 8-3 Code Displaying Customized Alert message

```
function handlePasswordChange(typeOfSubmission)
  {
    document.UserPreferencesPasswordMain.submissionType.value =
typeOfSubmission;

var curPass =
document.UserPreferencesPasswordMain.elements["UserPreferencesPassword.Curr
entPassword"].value;
    if((null == curPass) || ("" == curPass)) {
```

Code Example 8-3 Code Displaying Customized Alert message

```
function handlePasswordChange(typeOfSubmission)
      window.alert("<jato:getModelFieldValue
modelClass="com.sun.uwc.common.model.UWCResourceBundleModel"
modelName="i18nModel" lookInSession="true"
name="uwc-common-error-null-current-password" defaultValue="Cannot Accept
empty password!"/>");
      return;
    }
```

Chapter 9

Customizing Communications Express for a Specific Domain

Communications Express allows you to customize all the three components namely Mail, Calendar and Address Book for a specific domain. The sections contained in this chapter are,

- Customizing Calendar for a Specific Domain
- Customizing Mail for a Specific Domain
- Customizing Address Book for a Specific Domain and a Locale

Customizing Calendar for a Specific Domain

Customizing Calendar for a Specific Domain

The default user options that will be used for a first-time user can be configured on a per-domain basis. This means that it can exist under each domain directory. All these option values can be configured in the `uwcdomainconfig.properties` file.

When the user customizes a common component, then the changes will be reflected in all corresponding parent views.

Calendar can be configured and customized at two levels namely,

- Configuring Domain Preferences

- Changing skin under themes at the domain level

a) Configuring Domain Preferences

The default domain preferences for Communications Express are stored in the `uwcdomain.properties` which is located in <*domain-dir*>`/domain` directory. If you need to set separate preferences for each domain, you need to do the following.

1. Create a directory with the name same as the domain name in <*domain-dir*>`/domain` directory
2. Copy `uwcdomain.properties` file from <*domain-dir*>`/domain` directory to the newly created directory and make the required edits.
3. Restart the web server to apply changes

b) Changing the skin under themes at the domain level

1. Create a directory with the name same as the domain name in <*domain-dir*>`/domain` directory.
2. Copy `uwcdomain.properties` file from <*domain-dir*>`/domain` directory to the newly created directory and make the following change `uwc-user-attr-sunUCTheme=<name of the theme>`
3. Restart the web server to apply the changes

Customizing Mail for a Specific Domain

This section describes how to customize the Communications Express client interface for each domain.

To add or change a new domain name, open the `default.html` file

Code Example 9-1 shows the default code before changing or adding a new domain name.

Code Example 9-1 Default code before addition or modification of a new domain name

```
<<select name="server">> <option>
<option value="">&lt;-- Select Here --&gt;</option>
value="example.com">example.com</option>
```

Code Example 9-2 shows the change in code to change the domain `example.com` to `siroe.net`.

Code Example 9-2 Code for Changing Domains from domain example.com to siroe.net

```
 value="example.com">example.com</option>
 <option value="siroe.vsnl.net">siroe.vsnl.net </option>
```

Code Example 9-3 shows how to add domain `siroe.net` along with `example.com`

Code Example 9-3 Adding the domain siroe.net with example.com

```
 value="example.com">example.com</option>
  <option value="siroe.net">siroe.net </option>
```

You can perform the following tasks to customize the client interface:

- Create a directory for mail with the domain name under `msg_svr_base/html` directory.
- Populate this directory with the customized versions of the files from the default directory hierarchy.

  For example, assume that you have a domain called `siroe`. To change the icon for `siroe` domain, add a new icon in the `imx` directory of `siroe.com` and change the reference to it in the `main.js` file. The following is the directory structure for the domain `siroe.com`

Table 9-1 Directory Structure for the Domain siroe.com

`html/...`	// default interface
`html/imx/...`	// default interface
`html/en/...`	// default interface
`html/siroe.com/main.js`	// refers to `imx/bottle.gif`
`html/siroe.com/imc/bottle.gif`	// refers to `imx/bottle.gif`

- After login, the server refers the user agent to pick the `main.html` file that is located in the *domain/lang* directory. The `main.html` file contains the relative references to the rest of the interface. The client requests all the files in the directory to make the interface. If these files exist in the *domain/lang* directory they are displayed, otherwise the default setup files from `html/en/` are displayed.

  If you have many domains and only a few distinct 'brands' then you can use links to make the server point to the correct brand:

Table 9-2 Linking Multiple Domains to few distinct brands

`html/...`	// default interface
`html/sesta.com/...`	// customized interface for brand 1
`html/varrius.com -> sesta.com`	// default interface

Domain From URL

The server listens to all IP addresses and presents a customized interface before the authentication occurs. The server does this by looking at the URL and determines if it contains a known domain and presents the per domain Login screen for the domain.

For example, for the per domain Login screen: `http://webmail.sesta.com/`, the server presents the page from the location: `html/sesta.com/en/default.html`.

In this case a user does not have to suffix *@domain* to the username to login.

Customizing Address Book for a Specific Domain and a Locale

In address book, all UI related source files (xml / xsl) are located under <*uwcinstall*> / `WEB-INF/ui/html/abs` directory by default. To customize the UI for a domain, follow these steps.

1. Create a directory with a domain name, (e.g. siroe.com) under <*uwcinstall*>`/WEB-INF/ui/html`.

2. Copy all files from <*uwcinstall*>/WEB-INF/ui/html/abs to<*uwcinstall*>/WEB-INF/ui/html/<*domain*>.
3. Make the required changes in XSL files as explained in the previous sections.

Although all images are located under <*uwcinstall*>/absimx by default, you may create a directory with a domain name (e.g. <*uwcinstall*/absimx/sireo.com) under it and include the icons that are customizable under the newly created domain directory. Also ensure that the path reference to the newly created directory is updated in <*uwcinstall*>/WEB-INF/ui/html/<domain> search-images.xsl and commonimages.xsl.

Localizing Communications Express

Communications Express Localization

Communications Express allows you to localize Calendar, Address Book and Options as per your requirements.

- Localizing Calendar and Options
- Localizing Mail
- Localizing Address Book

Localizing Calendar and Options

To localize text, you need to change i18n.properties file that is deployed in <*domain-dir*> / domain. The i18n.properties file in <*domain-dir*> / domain is the default file. If the deployment is configured to work with multiple domains and multiple locales, then a directory by that domain name is created under <*domain-dir*> / domain

For example, if there is a domain called `example.com`, perform the following steps.

- Create <*domain-dir*>`/domain/example.com`
- Copy <*domain-dir*>`/domain/i18n.properties` to <*domain-dir*> / `domain/example.com`. This would be the `defaulti18n.properties` for users in `example.com` domain.
- Create directories for each supported locale (en_US, ja, de_FR etc) under that domain, copy i18n.properties to the domain, and change it accordingly

The i18n.properties also has a property called uwc-homepage which can be changed and is reflected in the 'Home' link on Branding page.

Localizing Mail

Communications Express allows you to localize any feature of Mail. Different pages can be created for different languages. When you create language-specific static pages, you need to group them in subdirectories under the main document directory. The code automatically detects the client's language preference and fetches the pages from the appropriate subdirectory.

When you change common sections for static pages, you must make the changes on multiple occasions if modifications are desired across languages (for example, if changes are required to modify JavaScript behavior). Conversely, you can also make language-specific modifications selectively throughout the application.

Specific Locales

Code Example 10-1 lists the specific locales and their abbreviations that are supported by Communications Express services. The default language is English.

Table 10-1 Communications Express Specific Locales

Locale	Abbreviation
English	en
Japanese	ja
Spanish	es
French	fr
German	de
Russian	ru
Arabic	ar

Code Example 10-1 shows the changes to be made to the `ru/i18n.js` file for modifying the charset in the `i18n.resource` file.

Code Example 10-1 Modifying the charset in the i18n Resource File.

```
// I18N Resource file
var i18n = new Array()
var fldr = new Array()
// DO NOT TRANSLATE AS STRINGS-JUST VALUES
i18n['client charset'] = 'iso-8859-5'
i18n['http charset'] = 'iso-8859-5'
i18n['fontface'] = 'PrimaSans BT,Verdana,sans-serif
i18n['fontface1'] = i18n['fontface']
i18n['fontface2'] = 'Times New Roman,Times,serif'
i18n['fontface3'] = 'Courier New,Courier,mono'
i18n['nbsp'] = ' '
```

Communications Express allows you to customize text that is displayed on web pages. This text is both customizable and localizable. The system also allows you to configure text on a per domain basis

To Include Additional Dictionary for Spell Check

1. Get the dictionary file and the affix file for the language you want to add to your dictionary.

   The dictionary file contains language-specific vocabulary and the affix file contains grammar rules for the specific language. For information on dictionary and affix files refer to the site:
   `http://fmg-www.cs.ucla.edu/fmg-members/geoff/ispell-dictionaries.html`

2. Use the `buildhash` utility to create a platform-specific and language-specific hash file from the dictionary and affix files. This hash file is used by the Communications Express spell checker.

To run the buildhash utility, download the ispell source files available at the site: http//www.gnu.org/software/ispell/ispell.html or, use the buildhash utility in the *msg_svr_base*/dict/bin directory. The syntax for the buildhash utility is:

buildhash dictionary_file affix_file *language_name*.hash

The language_name in the *language_name*.hash file is the two-letter language code used by Communications Express (such as: en for English, fr for French).

To determine your language's two-letter code, enter the command:

msg_svr_base/msg-instance/configutil | grep local.supportedlanguages

NOTE The double-byte character set is not supported by Communications Express spell checker.

3. Copy the newly created *language_name*.hash file in the *msg_svr_base*/dict directory and restart the mshttpd service. When the mshttpd service is restarted, the Communications Express spell checker is enabled.

   The following example shows how to create a German hash file (ge.hash) by using the buildhash utility.

4. Creating a German hash file by using the buildhash utility.

```
# cd /usr/Sun/server5/dict/bin
# ./buildhash german.dico german.aff ge.hash
# cp ge.hash ..
# /usr/Sun/server5/msg-budgie/start-msg http
```

, where the file i18n.js controls the text. The i18n.js file also can be localized to fit the language of many regions in the world

Localizing Address Book

To localize address book, the xml file that needs to be modified is the dictionary-<*lang*>.xml file that is located under <*uwcinstalldir*> /WEB-INF/ui/html/abs directory.

Customizing Address Book for a Specific Locale

You can customize the Address Book UI either for a specific locale and not under a specific domain and also for a locale under a specific domain.

Customizing the Address Book UI for a locale and not under a specific domain

1. Create a directory with the locale name(e.g., ja under <*uwcinstall*>/WEB-INF/ui/html/abs
2. Copy all files from <*uwcinstall*>/WEB-INF/ui/html/abs to ..../abs/<locale>
3. Make the required changes in XSL files as explained in .

Customizing the Address Book for a locale under a specific domain

1. Create a directory with <*domain*>/<*locale*> (e.g., siroe.com/ja) under <*uwcinstall*>/WEB-INF/ui/html
2. Copy all files from <*uwcinstall*>/WEB-INF/ui/html/abs to ..../abs/<locale>
3. Make the required changes in XSL files as explained in the previous sections.

Glossary

Refer to the *Java Enterprise System Glossary* (`http://docs.sun.com/doc/816-6873`) for a complete list of terms that are used in this documentation set.