Appendix E

Internal Captive Portal

You can customize the default captive portal page through the WebUI, as detailed in Chapter 12, “Captive Portal”. This appendix discusses creating and installing a new internal captive portal page and other customization.

Creating a New Internal Web Page

You can also create your own internal web page. A custom web page must include an authentication form to authenticate a user. The authentication form can include any of the following variables listed in Table 162:

Table 162 *Web Page Authentication Variables*

Variable	Description
user	(Required)
password	(Required)
FQDN	The fully-qualified domain name (this is dependent on the setting of the controller and is supported only in Global Catalog Servers software.

The form can use either the "get" or the "post" methods, but the "post" method is recommended. The form's action must absolutely or relatively reference https://<controller_IP>/auth/index.html/u.

You can construct an authentication form using the following HTML:

```
<FORM method="post" ACTION="/auth/index.html/u">
...
</FORM>
```

A recommended option for the <FORM> element is:

```
autocomplete="off"
```

This option prevents Internet Explorer from caching the form inputs. The form variables are input using any form control method available such as INPUT, SELECT, TEXTAREA and BUTTON. Example HTML code follows.

Username:

Minimal:

```
<INPUT type="text" name="user">
```

Recommended Options:

```
accesskey="u" Sets the keyboard shortcut to 'u'
SIZE="25"Sets the size of the input box to 25
VALUE=""Ensures no default value
```

Password:

Minimal:

```
<INPUT type="password" name="password">
```

Recommended Options:

```
accesskey="p" Sets the keyboard shortcut to 'p'
SIZE="25"Sets the size of the input box to 25
VALUE=""Ensures no default value
```

FQDN:

Minimal:

```
<SELECT name=fqdn>
   <OPTION value="fqdn1" SELECTED>
   <OPTION value="fqdn2">
</SELECT>
```

Recommended Options:

```
None
```

Finally, an HTML also requires an input button:

```
<INPUT type="submit">
```

Basic HTML Example

```
<HTML>
  <HEAD>
  </HEAD>
  <BODY>
    <FORM method="post" autocomplete="off" ACTION="/auth/index.html/u">

    Username:<BR>
    <INPUT type="text" name="user" accesskey="u" SIZE="25" VALUE="">
    <BR>

    Password:<BR>
    <INPUT type="password" name="password" accesskey="p" SIZE="25"
        VALUE="">
    <BR>

    <INPUT type="submit">
    </FORM>
  </BODY>
</HTML>
```

You can find a more advanced example simply by using your browser's "view-source" function while viewing the default captive portal page.

Installing a New Captive Portal Page

You can install the captive portal page by using the Maintenance function of the WebUI.

Log into the WebUI and navigate to **Configuration > Management >Captive Portal > Upload Custom Login Pages**.

This page lets you upload your own files to the controller. There are different page types that you can choose:

- Captive Portal Login (top level): This type uploads the file into the controller and sets the captive portal page to reference the file that you are uploading. Use with caution on a production controller as this takes effect immediately.
- Captive Portal Welcome Page: This type uploads the file that appears after logon and before redirection to the web URL. The display of the welcome page can be disabled or enabled in the captive portal profile.
- Content: The content page type allows you to upload all miscellaneous files that you need to reference from your main captive portal login page. This can be used for images, CSS files, scripts or any other file that you need to reference. These files are uploaded into the same directory as the top level captive portal page and thus all files can be referenced relatively.
- Sygate Remediation Failure: This is available as part of the External Services Interface feature and is outside the scope of this appendix.

Uploaded files can be referenced using:

```
https://<controller_IP>/upload/custom/<CP-Profile-Name>/<file>
```

Displaying Authentication Error Message

This section contains a script that performs the following tasks:

- When the user is redirected to the main captive portal login when there is authentication failure, the redirect URL includes a query parameter "errmsg" which java script can extract and display.
- Store the originally requested URL in a cookie so that once the user has authenticated, they are automatically redirected to its original page. Note that for this feature to work, you need ArubaOS release 2.4.2.0 or later. If you don't want this feature, delete the part of the script shown in red.

```
<script>
{
function createCookie(name,value,days)
{
            if (days)
            {
                        var date = new Date();
                        date.setTime(date.getTime()+(days*24*60*60*1000));
                        var expires = "; expires="+date.toGMTString();
            }
            else var expires = "";
            document.cookie = name+"="+value+expires+"; path=/";
}
  var q = window.location.search;
  var errmsg = null;

  if (q && q.length > 1) {
    q = q.substring(1).split(/[=&]/);
    for (var i = 0; i < q.length - 1; i += 2) {
      if (q[i] == "errmsg") {
        errmsg = unescape(q[i + 1]);
```

```
            break;
        }
         if (q[i] == "host") {
            createCookie('url',unescape(q[i+1]),0)
          }
      }
    }

    if (errmsg && errmsg.length > 0) {
      errmsg = "<div id='errorbox'>\n" + errmsg + "\n</div>\n";
      document.write(errmsg);
    }
  }
  </script>
```

Reverting to the Default Captive Portal

You can reassign the default captive portal site using the "Revert to factory default settings" check box in the "Upload Custom Login Pages" section of the Maintenance tab in the WebUI.

Language Customization

The ability to customize the internal captive portal provides you with a very flexible interface to the Aruba captive portal system. However, other than posting site-specific messages onto the captive portal website, the most common type of customization is likely to be language localization. This section describes a simple method for creating a native language captive portal implementation using the Aruba internal captive portal system.

1. Customize the configurable parts of the captive portal settings to your liking. To do this, navigate to the **Configuration > Management > Captive Portal** > **Customize Login Page** in the WebUI:

   For example, choose a page design, upload a custom logo and/or a custom background. Also include any page text and acceptable use policy that you would like to include. Put this in your target language or else you will need to translate this at a later time.

   Ensure that Guest login is enabled or disabled as necessary by navigating to the **Configuration > Security > Authentication > L3 Authentication > Captive Portal Authentication Profile** page to create or edit the captive portal profile. Select or deselect "Guest Login".
2. Click **Submit** and then click on **View Captive Portal**. Check that your customization and text/html is correct, with the default interface still in English and the character set still autodetects to ISO-8859-1.

   Repeat steps 1 and 2 until you are satisfied with your page.
3. Once you have a page you find acceptable, click on **View Captive Portal** one more time to display your login page. From your browser, choose "View->Source" or its equivalent. Your system will display the HTML source for the captive portal page. Save this source as a file on your local system.
4. Open the file that you saved in Step 3, using a standard text editor, and make the following changes:

   a. Fix the character set. The default <HEAD>...</HEAD> section of the file will appear as:

```
<head>
<title>Portal Login</title>

<link href="default1/styles.css" rel="stylesheet" media="screen" type="text/css" />
<script language="javascript" type="text/javascript">
   function showPolicy() {
        win = window.open("/auth/acceptableusepolicy.html", "policy",
"height=550,width=550,scrollbars=1");
   }
```

```
</script>
</head>
```

In order to control the character set that the browser will use to show the text with, you will need to insert the following line inside the <HEAD>...</HEAD> element:

```
<meta http-equiv="Content-Type" content="text/html; charset=Shift_JIS"/>
```

Replace the "Shift_JIS" part of the above line with the character set that is used by your system. In theory, any character encoding that has been registered with IANA can be used, but you must ensure that any text you enter uses this character set and that your target browsers support the required character set encoding.

b. The final <HEAD>...</HEAD> portion of the document should look similar to this:

```
<head>
<meta http-equiv="Content-Type" content="text/html; charset=Shift_JIS"/>
<title>Portal Login</title>

<link href="default1/styles.css" rel="stylesheet" media="screen" type="text/css"
/>
<script language="javascript" type="text/javascript">
function showPolicy() {
   win = window.open("/auth/acceptableusepolicy.html", "policy",
"height=550,width=550,scrollbars=1");
}
</script>
</head>
```

c. Fix references: If you have used the built-in preferences, you will need to update the reference for the logo image and the CSS style sheet.

To update the CSS reference, search the text for "<link href" and update the reference to include "/auth/" in front of the reference. The original link should look similar to the following:

```
<link href="default1/styles.css" rel="stylesheet" media="screen" type="text/css"
/>
```

This should be replaced with a link like the following:

```
<link href="/auth/default1/styles.css" rel="stylesheet" media="screen"
type="text/css" />
```

The easiest way to update the image reference is to search for "src" using your text editor and updating the reference to include "/auth/" in front of the image file. The original link should look similar to the following:

```
<img src="default1/logo.gif"/>
```

This should be replaced with a link like this:

```
<img src="/auth/default1/logo.gif"/>
```

d. Insert javascript to handle error cases:

When the controller detects an error situation, it will pass the user's page a variable called "errmsg" with a value of what the error is in English. Currently, only "Authentication Failed" is supported as a valid error message.

To localize the authentication failure message, replace the following text (it is just a few lines below the <body> tag):

```
<div id="errorbox" style="display: none;">
</div>
```

with the script below. You will need to translate the "Authentication Failed" error message into your local language and add it into the script below where it states: localized_msg="...":

```
<script>
{
  var q = window.location.search;
  var errmsg = null;
```

```
  if (q && q.length > 1) {
    q = q.substring(1).split(/[=&]/);
    for (var i = 0; i < q.length - 1; i += 2) {
      if (q[i] == "errmsg") {
        errmsg = unescape(q[i + 1]);
        break;
      }
    }
  }

  if (errmsg && errmsg.length > 0) {
    switch(errmsg) {
    case "Authentication Failed":
    localized_msg="Authentication Failed";
    break;
    default:
      localised_msg=errmsg;
      break;
    }
    errmsg = "<div id='errorbox'>\n" + localised_msg + "\n</div>\n";
    document.write(errmsg);
  };
}
</script>
```

e. Translate the web page text. Once you have made the changes as above, you only need to translate the rest of the text that appears on the page. The exact text that appears will depend on the controller settings when you originally viewed the captive portal. You will need to translate all relevant text such as "REGISTERED USER", "USERNAME", "PASSWORD", the value="" part of the INPUT type="submit" button and all other text. Ensure that the character set you use to translate into is the same as you have selected in part i) above.

Feel free to edit the HTML as you go if you are familiar with HTML.

5. After saving the changes made in step 4 above, upload the file to the controller using the **Configuration > Management >Captive Portal > Upload Custom Login Pages** section of the WebUI.

   Choose the captive portal profile from the drop-down menu. Browse your local computer for the file you saved. For Page Type, select “Captive Portal Login”. Ensure that the "Revert to factory default settings" box is NOT checked and click **Apply**. This will upload the file to the controller and set the captive portal profile to use this page as the redirection page.

   In order to check that your site is operating correctly, go back to the "Customize Login Page" and click on "View Captive Portal" to view the page you have uploaded. Check that your browser has automatically detected the character set and that your text is not garbled.

   To make any adjustments to your page, edit your file locally and simply re-upload to the controller in order to view the page again.

6. Finally, it is possible to customize the welcome page on the controller, however for language localization it is recommended to use an "external welcome page" instead. This can be a web site on an external server, or it can be a static page that is uploaded to a controller.

   You set the welcome page in the captive portal authentication profile. This is the page that the user will be redirected to after successful authentication.

   If this is required to be a page on the controller, the user needs to create their own web page (using the charset meta attribute in step 4 above). Upload this page to the designated controller in the same

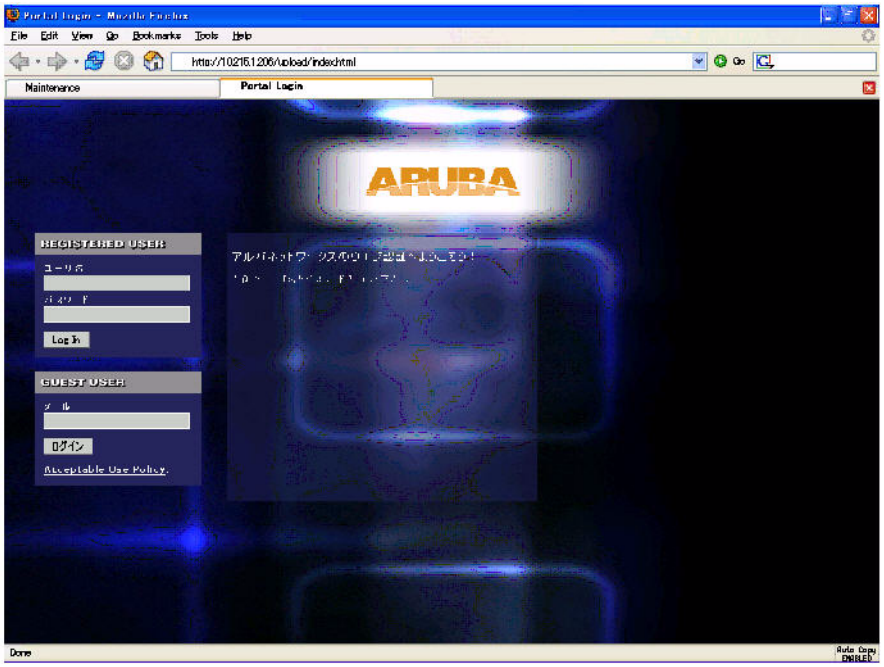
manner as uploading the captive portal login page under "**Configuration > Management >Captive Portal > Upload Custom Login Pages**. For Page Type, select “Captive Portal Welcome Page”.

Any required client side script (CSS) and media files can also be uploaded using the “Content” Page Type, however file space is limited (use the CLI command **show storage** to see available space). Remember to leave ample room for system files.

The "Registered User" and "Guest User" sections of the login page are implemented as graphics files, referenced by the default CSS styles. In order to change these, you will need to create new graphic files, download the CSS file, edit the reference to the graphics files, change the style reference in your index file and then upload all files as "content" to the controller.

A sample of a translated page is displayed in Figure 207.

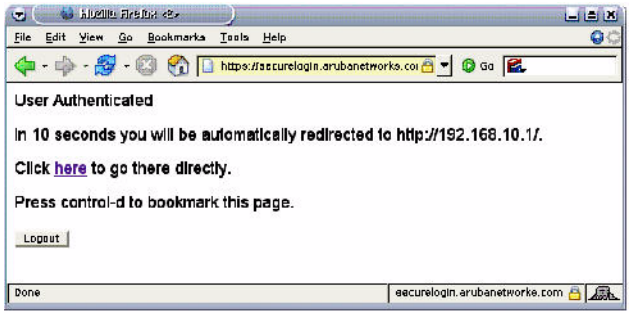
Figure 207 *Sample Translated Page*



Customizing the Welcome Page

Once a user is authenticated by the controller, a Welcome page is launched. The default welcome page depends on your configuration, but will look similar to Figure 208:

Figure 208 *Default Welcome Page*



You can customize this welcome page by building your own HTML page and uploading it to the controller. You upload it to the controller by navigating to **Management > Captive Portal > Upload Login Pages** and select “Captive Portal Welcome Page” from the Page Type drop-down menu. This file is stored in a directory called "/upload/" on the controller using the file's original name.

In order to actually use this file, you will need to configure the welcome page on the controller. To do this use the CLI command: "aaa captive-portal welcome-page /upload/welc.html" where "welc.html" is the name of the file that you uploaded, or you can change the Welcome page in the captive portal authentication profile in the WebUI.

An example that will create the same page as displayed in Figure 208 is shown below. The part in red will redirect the user to the web page you originally setup. For this to work, please follow the procedure described above in this document.

```
:

<html>
<head>
<script>
{

function readCookie(name)
{
            var nameEQ = name + "=";
            var ca = document.cookie.split(';');
            for(var i=0;i < ca.length;i++)
            {
                        var c = ca[i];
                        while (c.charAt(0)==' ') c = c.substring(1,c.length);
                        if (c.indexOf(nameEQ) == 0) return
c.substring(nameEQ.length,c.length);
            }
            return null;
}
var cookieval = readCookie('url');
            if (cookieval.length>0) document.write("<meta http-equiv=\"refresh\"
content=\"2;url=http://"+cookieval+"\""+">");


            }
</script>
</head>
<body bgcolor=white text=000000>
<font face="Verdana, Arial, Helvetica, sans-serif" size=+1>
  <b>User Authenticated </b>

<p>In 2 seconds you will be automatically redirected to your original web page</p>
<p> Press control-d to bookmark this page.</p>

<FORM ACTION="/auth/logout.html">
     <INPUT type="submit" name="logout" value="Logout">
</FORM>
</font>
</body>
</html>
```

Customizing the Pop-Up box

In order to customize the Pop-Up box, you must first customize your Welcome page. Once you have customized your welcome page, then you can configure your custom page to use a pop-up box. The default HTML for the pop-up box is:

```
<html>
<body bgcolor=white text=000000>
<font face="Verdana, Arial, Helvetica, sans-serif" size=+1>
 <b>Logout</b></font>
 <p>
  <a href="/auth/logout.html"> Click to Logout </a>
</body>
```

```
</html>
```

If you wish your users to be able to logout using this pop-up box, then you must include a reference to /auth/logout.html Once a user accesses this URL then the controller will log them out. It is easiest to simply edit the above HTML to suit your users and then upload the resulting file to the controller using the WebUI under **Configuration > Management > Captive Portal > Upload custom pages** and choose "content" as the page type.

Once you have completed your HTML, then you must get the clients to create the pop-up box once they have logged into the controller. This is done by inserting the following code into your welcome page text and re-uploading the welcome page text to your controller.

Common things to change:

- URL: set the URL to be the name of the pop-up HTML file that you created and uploaded. This should be preceded by "/upload/"
- Width: set w to be the required width of the pop-up box
- Height: set h to be the required height of the pop-up box
- Title: set the second parameter in the window.open command to be the title of the pop-up box. Be sure to include the quotes as shown:

```
<script language="JavaScript">
 var url="/upload/popup.html";
 var w=210;
 var h=80;
 var x=window.screen.width - w - 20;
 var y=window.screen.height - h - 60;
 window.open(url, 'logout',
"toolbar=no,location=no,width="+w+",height="+h+",top="+y+",left="+x+",screenX="+x+",
screenY="+y);
</script>
```

Customizing the Logged Out Box

In order to customize the Logged Out box, you must first customize your Welcome page and also your Pop-Up box. To customize the message that occurs after you have logged out then you need to replace the URL that the pop-up box will access in order to log out with your own HTML file.

First you must write the HTML web page that will actually log out the user and will also display page that you wish. An example page is shown below. The key part that must be included is the <iframe>..</iframe> section. This is the part of the HTML that actually does the user logging out. The logout is always performed by the client accessing the /auth/logout.html file on the controller and so it is hidden in the html page here in order to get the client to access this page and for the controller to update its authentication status. If a client does not support the iframe tag, then the text between the <iframe> and the </iframe> is used. This is simply a 0 pixel sized image file that references /auth/logout.html. Either method should allow the client to logout from the controller.

Everything else can be customized.

```
<html>
<body bgcolor=white text=000000>

<iframe src='/auth/logout.html' width=0 height=0 frameborder=0><img src=/auth/
logout.html width=0 height=0></iframe>

<P><font face="Verdana, Arial, Helvetica, sans-serif" size=+1>
You have now logged out.</font></P>
```

```
<form> <input type="button" onclick="window.close()" name="close" value="Close
Window"></form>

</body>
</html>
```

After writing your own HTML, then you need to ensure that your customized pop-up box will access your new logged out file. In the pop-up box example above, you simply replace the "/auth/logout.html" with your own file that you upload to the controller. For example, if your customized logout HTML is stored in a file called "loggedout.html" then your "pop-up.html" file should reference it like this:

```
<html>
<body bgcolor=white text=000000>
<font face="Verdana, Arial, Helvetica, sans-serif" size=+1>
 <b>Logout</b></font>
 <p>
  <a href="/upload/loggedout.html"> Click to Logout </a>
</body>
</html>
```