3M Information Technology
IT Customer Relationship Management Applications

Web Services Toolkit User Guide
Custom Web Lead Capture – Submit Lead
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# Table of Contents:

Overview ........................................................................................................................................... 6
Application Features ......................................................................................................................... 6
Architecture ....................................................................................................................................... 8
Environment ...................................................................................................................................... 10
How to Create a Web Form that Uses the Lead Capture ............................................................... 12
Organization Setup ........................................................................................................................... 12
1. Register your organization to use the Web Lead Capture application .................................... 12
2. Getting a staging environment for your OnDemand system .................................................... 13
3. Make sure Web Services is ready for your OnDemand system ............................................... 13
Create Your Own Lead Capture Web Form from the Example Page .............................................. 15
1. Create an HTML page using the example code ....................................................................... 15
2. Set up the hidden input tags .................................................................................................... 15
3. Set up the input tags for additional Lead information .............................................................. 32
4. Set up the input tags that may or may not be hidden ............................................................... 32
Test your Lead capture web form .................................................................................................... 32
View the application log file to check on your Lead ....................................................................... 32
Check to see if the Lead is in the Siebel CRM OnDemand system .............................................. 32
About the CRM OnDemand Business Object Field Mapping Viewer ........................................... 32
Background ...................................................................................................................................... 32
What is it for? .................................................................................................................................... 32
How does it work? .............................................................................................................................. 32
Explanation of Display Name and Element Name Mapping ............................................................ 32
Display Name Space Substitution Character Feature ..................................................................... 32
How to Use the Field Mapping Viewer ........................................................................................... 32
1. View the field mappings for your organization’s business object .......................................... 32
2. View the display name to element name mappings for your Lead ........................................... 34
3. Identify the Siebel CRM OnDemand field you want to insert ................................................. 36
4. Add an input control to your HTML web form ....................................................................... 36

## Appendix

Web Form Code Example – Display Name Field Mapping ............................................................... 37
Web Form Code Example – Element Name Field Mapping ............................................................ 40
How associating a Lead with an Account works .......................................................................... 42
How associating a Lead with a Campaign works ....................................................................... 42
How the Spam Detective works ..................................................................................................... 42
How to improve client response time ............................................................................................ 44
How Email notification works ....................................................................................................... 45
Quick Links Pages on the WebSphere Application Server Environments .................................... 47
Form Action URLs for the WebSphere Application Server Environments .................................... 47
Troubleshooting & Tips .................................................................................................................. 47
1. Problems inserting Lead from Web Form ............................................................................... 47
2. Errors in the WAS application Log file ................................................................................... 47
3. Lead not showing up in the Siebel OnDemand System ........................................................... 47
4. Excerpt from Application Logfile ........................................................................................... 48
Modification History ......................................................................................................................... 51
Figures:

Figure 1 Standard Submit Lead Application Component Diagram ............................................. 9
Figure 2 3M Environment for WebSphere Servers and Siebel CRM OnDemand ..................... 11
Figure 3 CRMA Web Services Toolkit Quick links Page ............................................................ 32
Figure 4 CRM OnDemand Field Mapping Viewer ..................................................................... 33
Figure 5 Field Mapping for Lead Business Object ..................................................................... 35
Figure 6 Close-up of Lead business object display name field mapping ....................................... 36
Figure 7 Email notification functionality diagram ...................................................................... 45

Tables:

Table 1 Web Lead Capture Setup Request Information ............................................................ 13
Table 2 Quick Links Pages in the WebSphere Application Server Environments ..................... 47
Table 3 Form Action URLs for the WebSphere Application Server Environments ................. 47
Table 4 Modification History ..................................................................................................... 51
OnDemand Web Service Toolkit Utilities
Custom Web Lead Capture

Overview

The Custom Lead Capture application, also known as the Submit Lead application, is basically a web form processor. Information entered on an Internet (3M.com) web page form is posted to a Java Server Pages (JSP) servlet on a 3M J2EE WebSphere Application Server.

Some processing is performed on the information that is posted and then the Submit Lead application inserts the information into the Oracle Siebel CRM OnDemand system using the Oracle Siebel CRM OnDemand Web Services Application Programmers Interface (API).

Application Features

1. Capture Leads from your public Internet site and send them directly into your Siebel CRM OnDemand system.
2. Assign associated Account, Lead ownership and Lead sales person for your Leads, by taking advantage of the Siebel CRM OnDemand Account External Id to Lead -> Account External Id relationship.
3. Have your OnDemand administrator receive email notification if a Lead could not be inserted into your OnDemand system.
4. Have your OnDemand administrator receive email notification if an associated Account cannot be found for a Lead and the associated Account, Lead owner and Lead sales person could not be set.
5. Upon successful insertion of lead into the OnDemand system, redirect the web browser client to a custom confirmation page.
6. Upon failed insertion of lead into the OnDemand system, redirect the web browser client to a custom error page.
7. Close the loop on your Campaign and Leads. In your Campaign, send your potential Leads directly to your 3M.com web form which captures the Lead and sends it to Siebel CRM OnDemand. By including the Campaign Id in your Lead when you submit it to the Siebel CRM OnDemand system, you can keep track of the Leads that are received for Campaigns.
8. Developers can create web forms using either Display Name field mapping, Display Name field mapping with space substitution or Element Name field mapping.
9. Developers can create web forms and enable a Spam Detective feature to help reduce or eliminate form spam.
10. Developers can create web forms and use a “no wait” feature to improve client response time.
Architecture

1. The application is written for the Java 2 Platform, Enterprise Edition (J2EE) and is hosted on 3M application servers running IBM WebSphere Application Server (WAS).
2. Information in a web form is sent to the Submit Lead application using standard HTML form, action, post, functionality.
3. In the HTML form the fully qualified URL for the Submit Lead application is used as the target for posting the information.
4. The form creator includes several required form input tags in their HTML form.
5. The form creator includes the form input tags in their HTML form for the information they want inserted into OnDemand. They will be able to determine what to put in their form by using the Field Mapping for Viewer utility.
6. When submitted the information is sent to the 3M WAS sever where the Submit Lead Application is located
7. A response page is return to the client browser, either a confirmation page or an error page.

Customer Relationship Management Applications
Web Services Toolkit for OnDemand: Custom Web Lead Capture Application

Figure 1 Standard Submit Lead Application Component Diagram
Environment

The Web Services Toolkit, Web Lead Capture (Submit lead) application is deployed on 3M application servers. 3M has both internal (Intranet) and external (Internet/Extranet) WebSphere Application Server environments. This application is deployed on the external application servers because web forms located on the 3M.com Internet site need to use the application.

As shown in the diagram below, the 3M Development and Quality Assurance application servers submit Leads to the Siebel CRM OnDemand, Staging server, and the 3M Staging and Production application servers submit Leads to the Siebel CRM OnDemand, Production server.

The web form creator sends their information to the selected environment using the fully qualified URL for that environment, see table below.

### 3M Environment Lead Capture Development & Deployment

![Diagram of 3M Environment for WebSphere Servers and Siebel CRM OnDemand]

<table>
<thead>
<tr>
<th>Environment</th>
<th>Fully Qualified URL for Submit Lead Application (put in web form action tag, be sure to use post)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Development</td>
<td><a href="http://externaldev5.mmm.com/crmclc/v2_1/jsp/submitlead.jsp">http://externaldev5.mmm.com/crmclc/v2_1/jsp/submitlead.jsp</a></td>
</tr>
<tr>
<td>Quality Assurance</td>
<td><a href="http://externaltest5.3m.com/crmclc/v2_1/jsp/submitlead.jsp">http://externaltest5.3m.com/crmclc/v2_1/jsp/submitlead.jsp</a></td>
</tr>
<tr>
<td>Staging</td>
<td><a href="http://externalstage.3m.com/crmclc/v2_1/jsp/submitlead.jsp">http://externalstage.3m.com/crmclc/v2_1/jsp/submitlead.jsp</a></td>
</tr>
<tr>
<td>Production</td>
<td><a href="http://www3.3m.com/crmclc/v2_1/jsp/submitlead.jsp">http://www3.3m.com/crmclc/v2_1/jsp/submitlead.jsp</a></td>
</tr>
</tbody>
</table>

Modified by: Jeanne Ross (09-Aug-2006)

Figure 2  3M Environment for WebSphere Servers and Siebel CRM OnDemand
How to Create a Web Form that Uses the Lead Capture

This section explains how to create a web page that uses the Web Lead Capture application to send Leads to an Organization’s Seibel CRM OnDemand system.

Organization Setup

There are several things you need to do before you can use the Web Lead Capture application. Once setup, you will be able to use whichever OnDemand fields you choose, including custom fields in your web form.

1. Register your organization to use the Web Lead Capture application

   If your organization has not been set you will need to provide the Web Lead Capture administrator with information about your organization and OnDemand system. Send the information indicated below to the email addresses provided.

<table>
<thead>
<tr>
<th>Web Lead Capture Setup Request Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Send Lotus Notes email request to</td>
</tr>
<tr>
<td>Organization Acronym</td>
</tr>
<tr>
<td>Organization Name</td>
</tr>
<tr>
<td>OnDemand Administrator Email</td>
</tr>
<tr>
<td>OnDemand Username</td>
</tr>
<tr>
<td>OnDemand Password</td>
</tr>
<tr>
<td>Need OnDemand Staging Environment</td>
</tr>
</tbody>
</table>

   Table 1 Web Lead Capture Setup Request Information

2. Getting a staging environment for your OnDemand system

   While working through the development process for your new Web Lead Capture form, you will likely generate many test Leads that will be inserted into your OnDemand system. Oracle will provide an OnDemand staging environment, in addition to your OnDemand production environment, so that you do not have to insert test information into your live OnDemand production system.

   If you do not already have a staging environment, be sure to indicate that you need to have one created when you send your setup request.

3. Make sure Web Services is ready for your OnDemand system

   In order to capture Leads in your OnDemand System using the Submit Lead application the Web services feature must be turned on. To check to see if the feature is turned on do the following:

   a. Log into your OnDemand instance as the Administrator.
   b. Go the Admin Homepage by selecting Admin in the upper corner of your screen.
c. If you do not see the Web Services section at the bottom of the page, on your OnDemand System instance, call Oracle Customer Care and asked them to turn the Web Services feature on. There is no additional cost to enable the feature, but it is not available by default.
Create Your Own Lead Capture Web Form from the Example Page

1. Create an HTML page using the example code

Create an html document and copy the HTML code, from the example in the Appendix, into your document. Since the example uses a fully qualified URL for posting the form, it does not matter where the HTML form is located. It does not need to be on a web server. There are two example forms, the first uses Display Name field mapping and the second uses Element Name mapping.

2. Set up the hidden input tags
   a. Set the hidden input tag for the organization (Required)

   Set your organization on the mmm_organization hidden input tag. This is a required tag which is used by the application to set the login username, password and to figure out to whom email notification should be sent. Use the value you specified when registering your site, in the Organization Acronym above for the value.

   ```html
   <INPUT type=hidden name="mmm_organization" value="xxxx">
   ```

   Where xxxx is the department acronym you specify.

   b. Set the hidden tag for the confirmation page (Required)

   Set your confirmation page URL on the mmm_confirm hidden input tag. This is a required tag which is used by the application to redirect the web browser to a specific web location after a Lead is inserted into OnDemand successfully.

   ```html
   <INPUT type=hidden name="mmm_confirm" value="xxxx">
   ```

   Where xxxx is the custom confirmation page you specify, which must be a fully qualified URL. For the example, use the following URL if you do not have a custom page available.

c. **Set the hidden tag for the error page**

Set your error page URL on the `mmm_error` hidden input tag. This tag is used by the application to redirect the web browser to a specific web location after a failed attempt to insert a Lead into OnDemand.

```
<INPUT type=hidden name="mmm_error" value="xxxx">
```

Where `xxxx` is the custom error page you specify, which must be a fully qualified URL. If you do not set an error page, the following URL will be used for the error page.

```
http://externaldev5.mmm.com/crmclc/v2_1/jsp/confirm_default.jsp
```

d. **Set the hidden tag for the mapping type**

Set your mapping type on the `mmm_mapping_type` hidden input tag. This tag is used by the application to determine whether to use display name or element name mapping for your input fields.

```
<INPUT hidden name="mmm_mapping_type" value="xxxx">
```

Where `xxxx` is either “Display Name” or “Element Name”.

See [Explanation of Display Name and Element Name Mapping](#) for details.

e. **Set the hidden tag for the Spam Detector**

Set up Spam detecting using the `mmm_word_feature` and the `mmm_written_word` hidden input tags. These tags are used by the application to determine whether a Lead is Spam.

```
<script language="JavaScript1.2">
<!-- hide code
document.write('<input type="hidden"
    name="mmm_word_feature" value="On">');
document.write('<input type="hidden"
    name="mmm_written_word" value="InnovationIsTheWord">');
// end hide code -->
</script>
```

Page 10 of 33 (Last Modified: 2/24/2007 12:15 AM)
The application will check the word “InnovationIsTheWord” and if it is not found the page will be assumed to be Spam and not inserted into the system.
See How the Spam Detective works, in the Appendix, for details.

f. Set the hidden tag for the Email Notification

Set up Email notification using the mmm_notification_feature and the Display Names for the fields that may contain email addresses for those to whom email notification is sent.

<input type="hidden" name="mmm_notification_feature" value="On">

When this feature is turned on, the application will use a list of entries specified in the configuration of the specific OnDemand installation instance to attempt to send notification.

The following information must be given to the WSTK4OD:SubmitLead Application Administrator. The information will be used to compose the message.

i. A List of Web Form Input Control names that may include email addresses, which may be:
   ✓ Display Name for Siebel OnDemand fields are used for email notification and are then submitted to Siebel OnDemand as part of the Lead.
   ✓ Simple web form Input Controls that are used for email notification and are not submitted to Siebel OnDemand.

ii. An image name that will be used for the email page header.
   At this time you need to provide the image file to the Application Administrator also.

iii. An Email address from whom the notification originates.
iv. A personal title or caption that is used in combination with the email address.
v. A subject for the email address.
vi. The content message for the email address.

See How Email Notification works, in the Appendix, for details.

g. Set the hidden tag to enable the no wait feature

To enable the no wait feature, set up a hidden input tag named mmm_nowait, with hidden input tag set to “true”. This tag is used by the application to determine whether or not to wait for a response from the server before sending a confirmation to the end user (client browser).
<INPUT type=hidden value="true" name="mmm_nowait">.

See Explanation of How to improve client response time for details.

3. Set up the input tags for additional Lead information

The input tags that follow are used to capture the information that will be sent to Siebel CRM OnDemand in order to create Lead business Objects.

a. Setup the additional, required input tags

In order to insert a Lead into the Siebel CRM OnDemand system, a first name and a last name are required.

When using Display Name mapping use:

```

```

When using Element Name mapping use:

```

```

b. Setup the additional, optional input tags

Add the additional information you want to capture as a Lead. This can be standard Siebel CRM OnDemand fields or custom fields, ones that you created.

For each additional piece of information you want to capture:

i. Create a form input tag in your HTML code and give the input tag a label so that the end user knows what to enter. The type of input tag will vary, but some will likely be basic text box type input.

For this example, we want to capture the Email Address, so the HTML is as follows.

```

```

Email Address: <INPUT>
Provide a name parameter for the input tag so that the Submit Lead application will know which field to insert the input value into.

Look up the field you are interested in and get the name for the input tag by using the CRM OnDemand Business Object Field Mapping Viewer. See the section below that explains the viewer in detail.

In this example we used the viewer to find the Email Address and found the Siebel CRM OnDemand Display Name, “Email” is mapped to the Element Name, “LeadEmail”.

When using Display Name mapping use:

```html
Email Address: <INPUT name="Email">
```

When using Element Name mapping use:

```html
Email Address: <INPUT name="LeadEmail">
```

c. **Setup a Siebel CRM OnDemand field that is of type picklist**

When inserting information into a Siebel CRM OnDemand field that is of type picklist; be sure that the value you are attempting to insert matches one of the values in the list of values for the pick list.

See sample code in the Appendix.

d. **Setup a Siebel CRM OnDemand field that is of type boolean**

When inserting information into a Siebel CRM OnDemand field that is of type boolean (yes/no or true/false), use the value “y” or “n” in the value parameter of the input tag. Notice that the values are in lowercase and that it is case sensitive.

See sample code in the Appendix.

4. **Set up the input tags that may or may not be hidden**

   a. **Set the Account External Unique Id to establish a Lead -> Account association**

      Set an Account External Unique Id on the Account External Unique Id input
tag. This tag is used by the application to associate the Lead with a Siebel CRM OnDemand Account and to assign ownership to the Lead.

When using Display Name mapping use:

```
...<INPUT name="Account External Unique Id" value="xxxxxx">
...
```

When using Element Name mapping use:

```
...<INPUT name="AccountExternalSystemId" value="xxxxxx">
...
```

See [How to associate a Lead with an Account](#), in the Appendix, for details.

b. **Set the Campaign External Unique Id to establish a Lead -> Campaign association**

Set a Campaign External Unique Id on the Campaign External Unique Id input tag. This tag is used by the application to associate the Lead with a Siebel CRM OnDemand Campaign.

When using Display Name mapping use:

```
...<INPUT name="Campaign External Unique Id" value="xxxxxx">
...
```

When using Element Name mapping use:

```
...<INPUT name="CampaignExternalSystemId" value="xxxxxx">
...
```

See [How to associate a Lead with a Campaign](#), in the Appendix, for details.

**Test your Lead capture web form**

1. Once you have added the fields you want to capture to your web form, test the form by inserting Leads into the Siebel CRM OnDemand system.
Web Services Toolkit for OnDemand - User Guide

2. The location to which you are posting the web form, as indicated in the Action parameter of the HTML form tag, is a fully qualified URL, therefore your web form does not need to be on a web server and you can do your testing from your desktop.

3. The URL you are sending your tests to is located on the 3M WAS External Development server. Any Leads that you submit will be inserted into your organization’s Siebel CRM OnDemand Staging server.

4. The fully qualified URL for posting your web form is:  
   http://externaldev5.mmm.com/crmclc/v2_1/jsp/submitlead.jsp

View the application log file to check on your Lead

You can view the application log file on the WebSphere Application server (WAS) to see if your lead was inserted into OnDemand successfully.

1. Go to the Quick Links page for the WAS External Development Environment and select the option for Application Logfile (Development Environment).

2. The link points to a log file on the WAS server. The logfile is a text file and will be opened in the text file editor on your system, which could be Notepad or TextPad. Go to the end of the logfile and check for activity associated with your Lead


Figure 3: CRMA Web Services Toolkit Quick Links Page

3. To see a sample of logfile output, go to the Excerpt from Application Logfile, in the Appendix.
4. There is a Quick Links page for each of the WAS environments, see Quick Links Pages in the WebSphere Application Server Environments, in the Appendix for details. If you are getting errors when you attempt to insert a Lead, see Troubleshooting, in the Appendix.

**Check to see if the Lead is in the Siebel CRM OnDemand system**

Using the username and password for your organization, log onto your organization’s Siebel CRM OnDemand Staging server and verify that the Leads you submitted and the various pieces of information that you submitted are there.

 Siebel CRM OnDemand Staging Server
https://siebel.crmondemand.com/OnDemand/logon.jsp

 Siebel CRM OnDemand Production Server
https://secure.crmondemand.com/OnDemand/logon.jsp

**About the CRM OnDemand Business Object Field Mapping Viewer**

**Background**

In order for your information to be inserted into the Siebel CRM OnDemand system you will need to place the Siebel CRM OnDemand Display Name or Element Name for that field in the name parameter of your html input tag.

When using *Display Name* mapping use:

```
...<INPUT name="First Name">
...
```

When using *Element Name* mapping use:

```
...<INPUT name=LeadFirstName“>
...
```

In the example above, the value entered into the web form by the end user will be associated with the name “First Name” or “LeadFirstName”. So, if an end user enters the value *Joseph* into the web form, the name-value pair, First Name= Joseph will be sent to the Submit Lead application if you are using Display Name mapping LeadFirstName=Joseph, will be sent to the Submit Lead application. if you are using Element Name mapping.
What is it for?
You use the CRM OnDemand Business Object Field Mapping Viewer to lookup the Siebel CRM OnDemand Display Name or Element Name, for a field you want to insert into the system as part of a Lead. Either the Display Name or Element Name is then used in the HTML input tag in the “name=” parameter.

How does it work?
Select the organization and the OnDemand business object you want to view, in this case Lead, and click the button to view the mapping. The display name to element name mapping will be displayed in response. You look for the entry under the Display Name or Element Name column for the Siebel CRM OnDemand field you want to capture and enter that Display Name or Element Name into the HTML name parameter of the input tag in your web form.

Explanation of Display Name and Element Name Mapping
When creating a web form you can use one of two types of field mapping, either Display Name mapping or Element Name mapping. If you do not specify which type of mapping to use, Display Name mapping will be used by default. Field mapping type is specified using an optional HTML hidden form input control.

For explicit Display Name mapping use:

•
•
•

<INPUT hidden name="mmm_mapping_type" value="Display Name">

For Element Name mapping use:

•
•
•

<INPUT hidden name="mmm_mapping_type" value="Element Name">

Display Name

Advantages:
• The Display Name is consistent across the OnDemand Staging and Production environments.
• The Display Name can be more descriptive in your web form code, enabling you to tell more easily the meaning of the fields. This is especially true for custom fields.

Disadvantages:
• The Display Name can contain spaces which can be challenging if you plan to do input validation using JavaScript.
• Lookup to the OnDemand system via Web Services is needed at runtime to determine the mapping of the Display Name to the Element Name.
Note: A single field mapping lookup is needed per form submittal. A separate look up to the OnDemand system via Web Services, for each field mapping, is NOT needed.

**Display Name with Space Character Substitution Feature Enabled**

**Advantages**
- Same as for Display Name, above, with the addition that since Display Name spaces are replaced with a substitution character, the Display Name does not contain spaces.

**Disadvantages:**
- Same as for Display Name, above, with the exception that there are no spaces and therefore no challenge when using JavaScript.

**Element Name**

**Advantages**
- The Element Name does not contain spaces, which is helpful if you plan to do input validation using JavaScript.
- No lookup to the OnDemand system via Web Services is needed at runtime to determine the mapping of the Display Name to the Element Name.

**Disadvantages:**
- The Element Name is not consistent across the OnDemand Staging and Production environments.
- The Display Name can be less descriptive in your web form code, making it more difficult for you to the meaning of the fields. This is especially true for custom fields

**Display Name Space Substitution Character Feature**

Use this feature when you want to have an input control name without spaces and want to use Display Names for field mapping.

Add the following hidden field to your page.

```
<INPUT type=hidden value="x" name="mmm_display_name_space_substitution_character">
```

Where x is the space substitution character you specify.

Use the substitute character in the input control names on your page. Look up and select the Display Name for the input control in the same manner as when using Display Name field mapping. Substitute the character you specified for the spaces in the Display Name.

The mmm_mapping_type hidden field is not required, but if it is used it should specify
“Display Name” mapping.

It is recommended that an underscore character (“_”) is not used as the substitution character.

```
<INPUT type=hidden value="-"
    name="mmm_display_name_space_substitution_character">
<INPUT name="Last-Name">
<INPUT name="Primary-Phone-#">
```

How to Use the Field Mapping Viewer

1. View the field mappings for your organization’s business object

Select your organization, select the type of Business Object you want to view, in this case Lead, and click the Get Field Mapping button. If your organization does not show up on the list of organizations, it may be because you are not registered yet. See the section; Register your organization to use the Web Lead Capture application, above.

Figure 4 CRM OnDemand Field Mapping Viewer
2. View the display name to element name mappings for your Lead

This example shows a listing of the display name to element name field mappings for a Lead Business object.

![Figure 5 Field Mapping for Lead Business Object](image-url)
3. **Identify the Siebel CRM OnDemand field you want to insert**

Locate the Siebel CRM OnDemand field that you want to insert into OnDemand as part of a Lead. Take note of the display name in the left hand column, case is important. This is the value you will put in the name parameter of your input tag in your HTML web form.

![Figure 6 Close-up of Lead business object display name field mapping](image)

4. **Add an input control to your HTML web form**

In this example a drop down type control is added to the web form and the display name identified in the previous step is used as the name for the HTML Select tag. See the code samples for details.

**Note:** If you have difficulty identifying the display name for the field you want to capture, contact your Siebel CRM OnDemand Administrator.

```html
<FORM name="submit_lead" method="post" action="http://url_here.com">
  ...
  <!-- The following INPUT tag is an example of a picklist -->
  <BR>Source:&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&n
```
Appendix

Web Form Code Example – Display Name Field Mapping

```html
<TITLE>Lead Capture Submission Example Page - v 2.1</TITLE>
<H2>Lead Capture Submission Example Page - v 2.1</H2>

<!-- Example submits Lead to the Siebel CRM OnDemand server -->
<!-- by way of the 3M External development WAS server -->
<form name="submit_lead" method="post"
action="http://externaldev5.mmm.com/crmclc/v2_1/jsp/submitlead.jsp">
<!-- INPUT tags beginning with "mmm_" are used by the application, -->
<!-- they are not inserted into OnDemand -->
<!-- REQUIRED: Organization hidden field -->
<input type=hidden name="mmm_organization" value="your_ouganization">
<!-- REQUIRED: Confirm hidden field -->
<input type=hidden name="mmm_confirm" value="http://www.your_site.com/confirm.html">
<!-- Confirm hidden field is -->
<input type=hidden name="mmm_confirm" value="http://www.your_site.com/confirm.html">
<!-- Optional: Mapping type field is -->
<input type=hidden name="mmm_mapping_type" value="Display Name">
<!-- Optional: Campaign Id hidden field -->
<input type=hidden name="Campaign Id" value="1-xxxxxx">
<!-- Account External Unique Id field (could be a hidden field ) -->
<label>Account External Unique Id:</label><input name="Account External Unique Id">
<!-- INPUT tags used to insert Leads into the OnDemand system -->
<!-- Required: First name and last name fields to insert a Lead -->
<label>First Name:</label><input name="First Name">
<label>Last Name:</label><input name="Last Name">
<!-- Optional: Text INPUT tags -->
<label>Primary Phone:</label><input name="Primary Phone ">
<label>Email Address:</label><input name="Email">
<label>Description:</label><input name="Description">
<!-- Optional: The following INPUT tag is an example of a checkbox -->
<input type="checkbox" name="Never Email" value="y">Never Email
</form>
```

Page 23 of 33 (Last Modified: 2/24/2007 12:15 AM)
Web Form Code Example – Element Name Field Mapping

```html
<html><head>
</head><body>
<h2>Lead Capture Submission Example Page - v 2.1</h2>
<form name="submit_lead" method="post" action="http://externaldev5.mmm.com/crmclc/v2_1/jsp/submitlead.jsp">
  <!-- INPUT tags beginning with "mmm_" are used by the application, -->
  <!-- they are not inserted into OnDemand -->
  <!-- REQUIRED: Organization hidden field -->
  <!-- is used to determine which logon information to use -->
  <input type="hidden" name="mmm_organization" value="your_organization">
  <!-- REQUIRED: Confirm hidden field -->
  <!-- is used to redirect to the specified confirmation page -->
  <input type="hidden" name="mmm_confirm" value="http://www.your_site.com/confirm.html">
  <!-- Confirm hidden field is -->
  <!-- is used to redirect to the specified error page -->
  <!-- If not specified the default error page will be used -->
  <input type="hidden" name="mmm_error" value="http://www.your_site.com/confirm.html">
  <!-- Optional: Mapping type field is -->
  <!-- is used to set the field mapping to either Display Name -->
  <!-- or Element Name mapping -->
  <!-- If not specified the default, Display Name mapping will be used -->
  <input type="hidden" name="mmm_mapping_type" value="Element Name">
  <!-- Optional: Campaign Id hidden field -->
  <!-- is used to establish a relationship between Lead and a Campaign -->
  <!-- Caution: A valid Campaign Id number is required -->
  <input type="hidden" name="CampaignExternalSystemId" value="1-xxxxxx">
  <!-- Account External Unique Id field (could be a hidden field) -->
  <!-- is used to establish a relationship between Lead and an Account -->
  <!-- Caution: A valid Account External Unique Id number is required -->
  <input type="hidden" name="AccountExternalSystemId">
  <!-- INPUT tags used to insert Leads into the OnDemand system -->
  <!-- Required: First name and last name fields to insert a Lead -->
  <input name="LeadFirstName">
  <input name="LeadLastName">
  <!-- Optional: Text INPUT tags -->
  <input name="PrimaryPhone">
  <input name="LeadEmail">
  <input name="Description">
  <!-- Optional: PICKLIST -->
  <select name="Source">
    <option value="Advertisement">Advertisement</option>
    <option value="Web Site">Web Site</option>
    <option value="Other">Other</option>
  </select>
  <!-- Optional: The following INPUT tag is an example of a checkbox -->
  <input type="checkbox" name="NeverEmail" value="y" &gt;&nbsp;&nbsp;Never Email

  <!-- Submit and reset buttons -->
  <input type="submit" value="Submit Lead">
  <input type="reset" value="Reset">
</form>
</body></html>
```
How associating a Lead with an Account works

When an Account External Unique Id is sent as a parameter, when a Lead is submitted, the application attempts to associate the Lead being inserted with an existing Siebel CRM OnDemand Account. The application searches for an Account with an External Unique Id that matches the Account External Unique Id that was sent.

If a match is found, the Account External Unique Id is inserted as part of the Lead. When that is done the Associated Account and the Sale Person fields on the Lead are set to point to the matching Account. In this way a relationship between the Lead and an Account can be established. In addition, the owner of the Lead is set to be the same as the owner of the Account.

If a match is not found the Lead is inserted without an associated Account, and the owner of the Lead is not set. An email notification is sent to the Siebel CRM OnDemand Administrator at 3M, based on the organization information. The administrator is notified that a Lead was submitted to the CRM OnDemand system and requires their attention. There is no associated Account and the Sales Person could not be set.

How associating a Lead with a Campaign works

When the Campaign External Unique Id is sent as a parameter, when a Lead is submitted, the application inserts that piece of information as part of the Lead without checking for a match. Because of this it is critical that the Campaign External Unique Id that you provide matches an existing External Unique Id for a Campaign record in your Siebel CRM OnDemand system, otherwise an error will occur.

How the Spam Detective works

The goal of the Spam detector feature is to prevent web form Spam activity from getting into the Siebel CRM OnDemand system.

Just about everyone is familiar with email Spam; but did you know there is another type of Spam that has the goal of sending junk to web page forms? This type of Spam uses agents, spiders and robots to search the Internet for web pages that have web forms. The agents use the web forms on the pages that it finds to submit Spam. The Spamming activity is automated and it is done repeatedly without human interaction.

In our case the web form calls the Submit Lead application. The Submit lead application attempts to insert the Lead into the Siebel CRM OnDemand system. The attempt can result in the information getting inserted into the Siebel CRM OnDemand system or it can result in an error condition.

Web form developers wishing to use the Spam Detective feature add a snippet of JavaScript to their form page. The JavaScript writes two hidden form input fields to the web form on the page. When the web form page is submitted, by the end user, the Submit Lead application is called into action. The application looks for the two hidden fields. The first hidden field indicates whether the Spam Detective feature is turned on or off. The second hidden field contains a code word. If the Spam Detective feature is turned on, the application looks at the second field to see if it contains the right code word. If the code word is found the submission attempt is not expected to be Spam and is inserted into the Siebel CRM OnDemand system. If the code word is not found then the
submission attempt is expected to be Spam it is NOT inserted into the Siebel CRM OnDemand system. Instead the content of the request is recorded in the application log file so that it can be used in analysis. Spam Detection is an ongoing process where we continuously need to adapt to new and creative attacks. We are trying to find better ways to stop or intercept the Spam.

**Back Story:**
We observed that a regular hidden field added to a form on a web page appears to be visible and useable by agents at runtime. So adding a hidden field to a web page form is not sufficient to deter spam attacks. Our theory is that agents do not run in a browser and so do not have support for JavaScript. By using JavaScript to write the hidden fields to the web page, only pages with JavaScript support will be able to see the hidden fields. We hope that means the hidden fields will exist and be visible when the page is run in a browser, but the hidden fields will not exist when the page is run by an agent.

The feature described above has been partially successful, but there are still Spam submissions getting through to OnDemand, and the submissions contain the hidden word, which indicates that the Spam senders can see the JavaScript.

A second test has been added, if the web page has the Spam Detective feature is turned on. The second test checks to see if the first name and last name for the lead are the same and if they the submission is expected to be Spam and is not inserted into the Siebel CRM OnDemand system. The details of the submission are recorded to the application log file.

**How to improve client response time**

By default, the SubmitLead application is setup to wait for a response from the Siebel CRM OnDemand system before returning with a confirmation or error page. If the response time experienced by end users (client browsers) is unacceptable and if you do not need confirmation that the submit operation completed successfully, or that it experienced an error condition, you can use the “no wait” feature to improve response time.

Enable the feature according to the instructions in the Set up hidden input tags section. When the “no wait” feature is enabled the Lead is submitted, the confirmation page is returned immediately to the end user (client browser) and the Lead submission continues on the server.

If an error occurs during an attempt to submit the Lead, an email notification is sent to the instance administrator specified in the application configuration.
How Email notification works

Customer Relationship Management Applications
Web Services Toolkit for OnDemand: Custom Web Lead Capture Application
Email Notification Functionality

**Example: 3M Commercial Care BST Department**

Oracle Siebel CRM
OnDemand Server

Save leads to the CRM Server hosted by Siebel.
The service that is called is available via Web Services.

• List of Display Names for Siebel fields that may contain
  email addresses.
• From email address, subject, content, header image for email
  message.

Configuration Information
Custom information each for each OnDemand instance.

Submit Lead Notifier
SubmitLead.jsp

3M WAS Server
3M Company

The application calls the notifier if the email notification feature is turned on, as indicated by the web page.

End user uses web page form to enter interest, resulting in a lead.
When submitted, the form information is posted to a JSP on 3M server.

3M.com Web Form Page
1. The web page has a hidden field that turns on the notification feature.
2. The web page has Siebel field Display Names, that may contain email addresses that will receive notification.

*Figure 7 Email notification functionality diagram*
Quick Links Pages on the WebSphere Application Server Environments

<table>
<thead>
<tr>
<th>Environment</th>
<th>Link type</th>
<th>URL Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>3M QA</td>
<td>Quick Links</td>
<td><a href="http://externaltest5.3m.com/crmclc/wstk_quick_links.html">http://externaltest5.3m.com/crmclc/wstk_quick_links.html</a></td>
</tr>
<tr>
<td>3M Stage</td>
<td>Quick Links</td>
<td><a href="http://externalstage.3m.com/crmclc/wstk_quick_links.html">http://externalstage.3m.com/crmclc/wstk_quick_links.html</a></td>
</tr>
<tr>
<td>3M Production</td>
<td>Quick Links:</td>
<td><a href="http://www3.3m.com/crmclc/wstk_quick_links.html">http://www3.3m.com/crmclc/wstk_quick_links.html</a></td>
</tr>
</tbody>
</table>

Table 2 Quick Links Pages in the WebSphere Application Server Environments

Form Action URLs for the WebSphere Application Server Environments

<table>
<thead>
<tr>
<th>Environment</th>
<th>Link type</th>
<th>URL Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>3M Development</td>
<td>Form action URL</td>
<td><a href="http://externaldev5.mmm.com/crmclc/v2_1/jsp/submitlead.jsp">http://externaldev5.mmm.com/crmclc/v2_1/jsp/submitlead.jsp</a></td>
</tr>
<tr>
<td>3M QA</td>
<td>Form action URL</td>
<td><a href="http://externaltest5.3m.com/crmclc/v2_1/jsp/submitlead.jsp">http://externaltest5.3m.com/crmclc/v2_1/jsp/submitlead.jsp</a></td>
</tr>
<tr>
<td>3M Stage</td>
<td>Form action URL</td>
<td><a href="http://externalstage.3m.com/crmclc/v2_1/jsp/submitlead.jsp">http://externalstage.3m.com/crmclc/v2_1/jsp/submitlead.jsp</a></td>
</tr>
<tr>
<td>3M Production</td>
<td>Form action URL</td>
<td><a href="http://www3.3m.com/crmclc/v2_1/jsp/submitlead.jsp">http://www3.3m.com/crmclc/v2_1/jsp/submitlead.jsp</a></td>
</tr>
</tbody>
</table>

The following logical reference to the SubmitLead servlet can be used on your web pages so that your form always points to the current version of the application.

<table>
<thead>
<tr>
<th>Environment</th>
<th>Link type</th>
<th>URL Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>3M Development</td>
<td>Form action</td>
<td><a href="http://externaldev5.mmm.com/crmclc/submitLeadToOnDemand">http://externaldev5.mmm.com/crmclc/submitLeadToOnDemand</a></td>
</tr>
<tr>
<td>3M QA</td>
<td>Form action</td>
<td><a href="http://externaltest5.3m.com/crmclc/submitLeadToOnDemand">http://externaltest5.3m.com/crmclc/submitLeadToOnDemand</a></td>
</tr>
<tr>
<td>3M Stage</td>
<td>Form action</td>
<td><a href="http://externalstage.3m.com/crmclc/submitLeadToOnDemand">http://externalstage.3m.com/crmclc/submitLeadToOnDemand</a></td>
</tr>
<tr>
<td>3M Production</td>
<td>Form action</td>
<td><a href="http://www3.3m.com/crmclc/submitLeadToOnDemand">http://www3.3m.com/crmclc/submitLeadToOnDemand</a></td>
</tr>
</tbody>
</table>

Table 3 Form Action URLs for the WebSphere Application Server Environments
Troubleshooting & Tips

Problems inserting Lead from Web Form

Errors in the WAS application Log file

Lead not showing up in the Siebel OnDemand System
Excerpt from Application Logfile

This logfile output is for a successfully inserted Lead.

< file://diamond07/logs/Apps/crmclc/wstk4od.log >

INFO 04 Aug 2006 13:35:42:899 - (wstk4od) Adding Primary Phone #=7-9790 to map.
INFO 04 Aug 2006 13:35:42:899 - (wstk4od) * * * Request is valid, preparing a Lead for submission to OnDemand ...
INFO 04 Aug 2006 13:35:44:071 - (wstk4od) Got a connection for Building Safety Solutions Department, preparing the Lead ...
INFO 04 Aug 2006 13:35:44:071 - (wstk4od) Query entity:
INFO 04 Aug 2006 13:35:44:087 - (wstk4od) Type = Account
externalSystemId = = '5'
INFO 04 Aug 2006 13:35:46:431 - (wstk4od) Entities found with this query criteria: 1
INFO 04 Aug 2006 13:35:46:431 - (wstk4od) Found Entity:
INFO 04 Aug 2006 13:35:46:431 - (wstk4od) ownerId = 1-EM1GCQ
location = FOSTER CITY, CA
Type = Account
accountName = Window Solutions
externalSystemId = 5
INFO 04 Aug 2006 13:36:15:759 - (wstk4od) Putting streetAddress,my street
INFO 04 Aug 2006 13:36:15:759 - (wstk4od) Putting mmm_error,/crmclc/v2_1/jsp/error_default.jsp
INFO 04 Aug 2006 13:36:15:759 - (wstk4od) Putting customPicklist1,Commercial
INFO 04 Aug 2006 13:36:15:759 - (wstk4od) Putting primaryPhone,7-9790
INFO 04 Aug 2006 13:36:15:759 - (wstk4od) Putting mmm_organization,bssd
INFO 04 Aug 2006 13:36:15:759 - (wstk4od) Putting accountExternalSystemId,5
INFO 04 Aug 2006 13:36:15:759 - (wstk4od) Putting country,USA
INFO 04 Aug 2006 13:36:15:759 - (wstk4od) Putting cellularPhone,7-9790
INFO 04 Aug 2006 13:36:15:759 - (wstk4od) Putting leadFirstName,Jeannn
INFO 04 Aug 2006 13:36:15:759 - (wstk4od) Putting leadLastName,Ross
INFO 04 Aug 2006 13:36:15:759 - (wstk4od) Putting stateProvince,AL
INFO 04 Aug 2006 13:36:15:759 - (wstk4od) Putting zipCode,
INFO 04 Aug 2006 13:36:15:759 - (wstk4od) Putting accountExternalSystemId,5
INFO 04 Aug 2006 13:36:15:759 - (wstk4od) Putting country,USA
INFO 04 Aug 2006 13:36:15:759 - (wstk4od) Putting cellularPhone,7-9790
INFO 04 Aug 2006 13:36:15:759 - (wstk4od) Putting leadFirstName,Jeannn
INFO 04 Aug 2006 13:36:15:759 - (wstk4od) Putting leadLastName,Ross
INFO 04 Aug 2006 13:36:15:759 - (wstk4od) Putting stateProvince,AL
INFO 04 Aug 2006 13:36:15:759 - (wstk4od) Putting zipCode,
State=AL, Source=Web Site, Billing Zip/Post Code=, Account External Unique Id=5, Billing Country=USA, Cellular Phone #=7-9790, Lead Source=Where to buy, First Name=Jeanne, Email=jrross4@mmm.com, Description=Test after restart, Owner Id=1-EM1GCQ, Billing City=my city
INFO 04 Aug 2006 13:36:15:759 - (wstk4od) Converted map:
INFO 04 Aug 2006 13:36:15:759 - (wstk4od) {stateProvince=AL, mmm_error=/crmclc/v2_1/jsp/error_default.jsp, ownerId=1-EM1GCQ, accountExternalSystemId=5, mmm_confirm=/crmclc/v2_1/html/confirm_bssd.html, leadEmail=jrross4@mmm.com, mmm_organization=bssd, cellularPhone=7-9790, customPickList2=Where to buy, leadFirstName=Jeanne, zipCode=, customPickList1=Commercial, primaryPhone=7-9790, source=Web Site, streetAddress=my street, country=USA, city=my city, description=Test after restart, leadLastName=Ross} INFO 04 Aug 2006 13:36:15:759 - (wstk4od) Logging off for BSSD ...
INFO 04 Aug 2006 13:36:16:166 - (wstk4od) Creating LeadSubmitter instance for bssd ...
INFO 04 Aug 2006 13:36:16:166 - (wstk4od) Login created for BSSD: Building Safety Solutions Department
INFO 04 Aug 2006 13:36:16:681 - (wstk4od) Submitting Lead for bssd ...
INFO 04 Aug 2006 13:36:20:931 + + + Lead for bssd created, Lead Jeanne Ross, Id 1-N9WZSL linked to account 1-K6WBIC.
## Modification History

<table>
<thead>
<tr>
<th>Location</th>
<th>Date</th>
<th>Modified by</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Page 15</td>
<td>9/8/2006</td>
<td>Jeanne Ross</td>
<td>Changed &quot;share&quot; to &quot;insert&quot;</td>
</tr>
<tr>
<td>Page 21, 22</td>
<td>9/15/2006</td>
<td>Jeanne Ross</td>
<td>Corrected code example errors</td>
</tr>
<tr>
<td>Page 16 and throughout</td>
<td>9/15/2006</td>
<td>Jeanne Ross</td>
<td>Added documentation for field mapping by Element Name mapping enhancement.</td>
</tr>
<tr>
<td>Pages 12, 19-20</td>
<td>9/19/2006</td>
<td>Jeanne Ross</td>
<td>Made correction about case sensitivity</td>
</tr>
<tr>
<td>Pages 4, 9, 22</td>
<td>12/15/2006</td>
<td>Jeanne Ross</td>
<td>Added documentation about Spam Detective</td>
</tr>
<tr>
<td>Pages 7, 8</td>
<td>1/12/2007</td>
<td>Jeanne Ross</td>
<td>Added section about Web services feature enabling</td>
</tr>
<tr>
<td>Page 18</td>
<td>1/19/2007</td>
<td>Jeanne Ross</td>
<td>Added documentation about Display name space substitution feature.</td>
</tr>
<tr>
<td></td>
<td>1/27/2007</td>
<td>Jeanne Ross</td>
<td>Added documentation about email notification.</td>
</tr>
</tbody>
</table>

Table 4 Modification History