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**Liveline Enhanced Attributes Module**

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# Livelink Enhanced Attributes Module

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# Livelihood Enhanced Attributes Module

## 1. Introduction

### 1.1. Purpose of the Document

This document will describe the functional and technical aspects of the “Enhanced Attributes” module developed by Wisteria Information Technologies, LLC.

The module provides enhanced Attribute functionality to the Livelihood Knowledge Management product suite.

### 1.2. Supported Software Platforms

The following software platforms are supported for the Enhanced Attributes Module:

- Livelihood v9.2.0.1
- Windows NT 4.0, Windows 2000 or Solaris Operating Systems
- MS SQL Server 2000 Enterprise or Oracle 8.1.7 (or higher) Relational Databases

### 1.3. Glossary of Terms

The following glossary of terms will be used throughout this document:

- Wisteria                      Wisteria Information Technologies, LLC
- Livelihood                    Open Text Corporation’s Livelihood Product Suite

### 1.4. Document Revision History

<b>Date of Revision</b>	<b>Revised By</b>	<b>Description of Change</b>
February 26, 2004	D. Nalls	Original Creation
March 28, 2004	D. Nalls	Update for Restrict Type and Fill Values
June 24, 2006	D. Nalls	Upgraded to LL 9.2

### 2. Module Overview

#### 2.1. Overview

The “Enhanced Attributes” module extends the out-of-box Livelihood functionality by creating two custom Attribute types: Text Auto Populate and Text Lookup.

The Auto Populate attribute will provide users the ability to automatically populate one or more attribute values based on the value of another attribute within the same Livelihood category. A user will select the value for the first attribute and perform an “Auto Populate” page refresh to dynamically update the values of the other predefined attributes.

The category may contain one or more Auto Populate attributes to create a layered affect for attribute value population. The Auto Populate attribute may also be used to populate values in the Text Lookup attribute drop-down list.

An additional feature of the “Auto Populate” attribute will provide users a “Type and Fill” capability – dynamically filling attribute text values as the user enters text for the attribute value. The attribute values are based on a pre-defined SQL query that is processed when the webLingo page is displayed.

The Text Lookup attribute is similar to the Livelihood out-of-box Text:Popup attribute with the exception that processing a SQL query when the webLingo page is displayed dynamically generates values in the selection drop-down list. The dynamically generated values may be used in combination with static values.

The Text Lookup attribute may also include the Auto Populate feature. When a user selects a value from the values drop down list. Combining the functionality of both attributes will allow a tiered affect for dynamically populating attribute values.

The new attribute types will have all of the standard Livelihood attribute functionality for creating, editing, upgrading or deleting.

## 3. User Interface

### 3.1. Text:Auto Populate Attribute

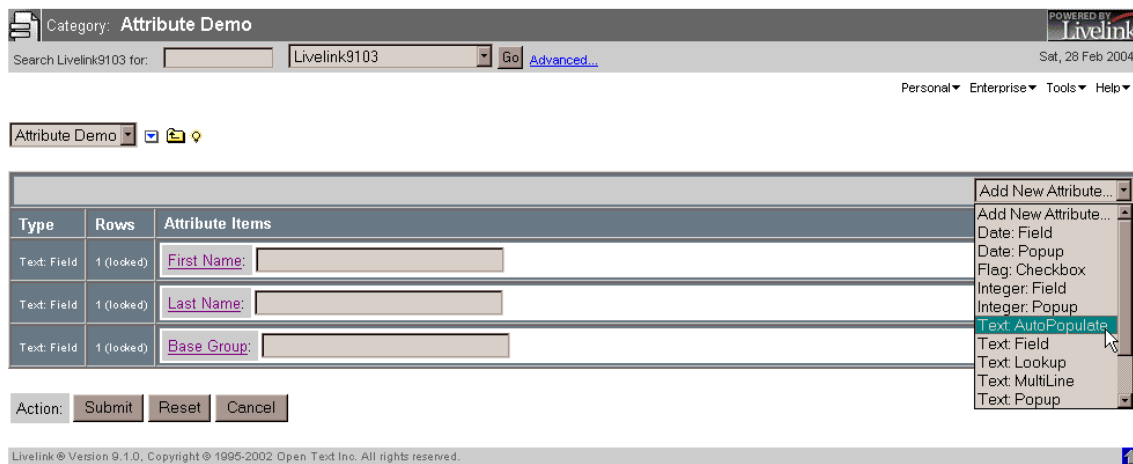
The Auto Populate Attribute is a custom attribute type, which will provide users the capability to dynamically populate attribute values based on the values of other attributes within the same category. The Auto Populate attribute is based on the “Text:Field” attribute datatype.

When editing a Livelink Category, the “Text:Auto Populate” attribute will be displayed in the “Add New Attribute...” menu drop-down list and will be created and edited as any other Livelink Attribute.

The Text:Auto Populate Attribute has a “Type and Fill” feature, which will dynamically populate the attribute input field as a user begins to type a value in the form entry field. The type and fill functionality is based on a pre-defined query entered while editing the attribute in the category definition.

#### 3.1.1. Create and Define a Text:Auto Populate Attribute

**Figure 3.1.1-1** – Select “Text:Auto Populate” from the Category “Add New Item...” Menu



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Figure 3.1.1-2 – Enter a SQL Query for “Type and Fill” feature

POWERED BY Livelihood

Search Livelihood9103 for:  Livelihood9103  [Advanced...](#) Sat, 28 Feb 2004

Personal Enterprise Tools Help

Type: Text: AutoPopulate

Name: Login

Rows: Locked   
Max.# 1  
Default # 1

Order: After <None>

Show in Search:

Required:

Database Query for "Type and Fill": SELECT name FROM kuaf WHERE type=0 and deleted=0

New Update Attribute: <None> Value as:  
SELECT <column> FROM <table> WHERE <column> = <None> Value

Length: 32  
Display Length: 32

Action:

Livelihood © Version 9.1.0, Copyright © 1995-2002 Open Text Inc. All rights reserved.

Figure 3.1.1-4 – Select “Restrict Values” checkbox to restrict user input to values only within the search criteria

POWERED BY Livelihood

Search Livelihood9103 for:  Livelihood9103  [Advanced...](#) Sun, 28 Mar 2004

Personal Enterprise Tools Help

Type: Text: AutoPopulate

Name: Login

Rows: Locked   
Max.# 1  
Default # 1

Order: After <None>

Show in Search:

Required:

Database Query for "Type and Fill": SELECT name FROM kuaf WHERE type=0 and deleted=0

Restrict Values for "Type and Fill":

Auto Populate Attribute: **First Name:** select firstname from kuaf where name= <Login> Value

Auto Populate Attribute: **Last Name:** select lastname from kuaf where name= <Login> Value

Auto Populate Attribute: **Base Group:** select b.name from kuaf a, kuaf b where a.groupid=b.id and a.name= <Login> Value

New Update Attribute: <None> Value as:  
SELECT <column> FROM <table> WHERE <column> = <None> Value

Length: 32  
Display Length: 32

Action:

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Figure 3.1.1-5 – Enter Attributes and SQL Queries for “Auto Populate” feature

The screenshot shows the 'Edit Attribute for: Attribute Demo' window. The attribute name is 'Login' and its type is 'Text: AutoPopulate'. The 'Rows' section is configured with 'Locked' checked, 'Max. #' set to 1, and 'Default #' set to 1. The 'Order' is set to 'After <None>'. 'Show in Search' is checked, and 'Required' is unchecked. The 'Database Query for "Type and Fill"' is: `SELECT name FROM kuaf WHERE type=0 and deleted=0`. Below this, there are three 'Auto Populate Attribute' entries: 'First Name: select firstname from kuaf where name= <Login> Value', 'Last Name: select lastname from kuaf where name= <Login> Value', and 'New Update Attribute: Base Group Value as: SELECT b.name FROM kuaf a, kuaf b WHERE bupid=b.id and a.name = Login Value'. The 'Length' and 'Display Length' are both set to 32. The 'Action' buttons are 'OK', 'Reset', 'Cancel', and 'Remove'. The footer shows 'Livelihood © Version 9.1.0, Copyright © 1995-2002 Open Text Inc. All rights reserved.'

### 3.1.2. Applying the Text:Auto Populate Attribute

The following images will demonstrate a simple application of the Auto Populate Attribute.

The “Type and Fill” query will be processed and the results stored when the webLingo page is displayed. As the user begins to type in a “Login” name, the “Type and Fill” feature will dynamically populate the first alphabetically matched value into the form field. The user may select the first value entered or continue typing. As the user continues to type, the “Type and Fill” feature will continue to populate next possible values from the query results. If the attribute definition has defined the “Type and Fill” to have “Restricted Values”, then the user will not be permitted to enter a value that is not in the search string results; otherwise, the user may continue to type a new, unique value.

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**Figure 3.1.2-1** – Attribute value is dynamically populated as user enters text

The screenshot shows the Livelink Enhanced Attributes Module interface. At the top, there is a header with "Categories Info for: My Folder" and a search bar for "Livelink9103". The date is "Sat, 28 Feb 2004". Below the header, there is a navigation bar with tabs for "General", "Audit", "Categories", "Presentation", and "References". The main content area is titled "Attribute Demo" and contains a form with the following fields: "Login:" (with the value "dlee" and a blue checkmark icon), "First Name:", "Last Name:", and "Base Group:". Below the form are buttons for "Action:" including "Submit", "Apply", "Reset", "Remove", and "Cancel". The footer contains the text "Livelink © Version 9.1.0, Copyright © 1995-2002 Open Text Inc. All rights reserved." and a small icon.

**Figure 3.1.2-2** – Attribute value is dynamically changed as user continues to enter text

The screenshot shows the Livelink Enhanced Attributes Module interface, similar to Figure 3.1.2-1. The "Login:" field now contains the value "dnalls" and has a blue checkmark icon next to it. The "First Name:" field is now populated with "dn" and has a blue checkmark icon next to it. The "Last Name:" and "Base Group:" fields are still empty. The rest of the interface, including the navigation tabs and action buttons, remains the same. The footer contains the text "Livelink © Version 9.1.0, Copyright © 1995-2002 Open Text Inc. All rights reserved." and a small icon.

When the Auto Populate attribute value has been completed, the user will click the checkmark image to refresh the page with updated attribute values for all attributes that have been defined and configured on the attribute definition page. The user may hover the mouse over the checkmark image to view a listing of all attributes that will be automatically populated.

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**Figure 3.1.2-3** – User Clicks on the “Populate Attributes” checkmark image to auto populate other attribute values

The screenshot shows the 'Attribute Demo' form in the Livelihood Enhanced Attributes Module. The form is titled 'My Folder' and contains the following fields: Login (dnalls), First Name, Last Name, and Base Group. A blue checkmark icon is visible next to the Login field, indicating that the user has clicked on it to auto-populate other attribute values. The form also includes a 'Action' section with buttons for Submit, Apply, Reset, Remove, and Cancel. The page footer displays 'Livelihood © Version 9.1.0, Copyright © 1995-2002 Open Text Inc. All rights reserved.' and the date 'Sat, 28 Feb 2004'.

**Figure 3.1.2-4** – Page refreshes with updated attribute values

The screenshot shows the 'Attribute Demo' form in the Livelihood Enhanced Attributes Module after a page refresh. The form is titled 'My Folder' and contains the following fields: Login (dnalls), First Name (Donna), Last Name (Nalls), and Base Group (Wisteria-IT). A blue checkmark icon is visible next to the Login field, indicating that the user has clicked on it to auto-populate other attribute values. The form also includes a 'Action' section with buttons for Submit, Apply, Reset, Remove, and Cancel. The page footer displays 'Livelihood © Version 9.1.0, Copyright © 1995-2002 Open Text Inc. All rights reserved.' and the date 'Sat, 28 Feb 2004'.

**Figure 3.1.2-5** – At any time, the user may hover the mouse over the checkmark image to display a list of attributes that will be automatically populated

The screenshot shows the 'Attribute Demo' form in the Livelihood Enhanced Attributes Module. The form is titled 'My Folder' and contains the following fields: Login (dnalls), First Name (Donna), Last Name (Nalls), and Base Group (Wisteria-IT). A blue checkmark icon is visible next to the Login field, and a tooltip is displayed over it, indicating that the user has hovered over the checkmark image to display a list of attributes that will be automatically populated. The tooltip text reads: 'Update Attribute Values for: FIRST NAME, LAST NAME, BASE GROUP'. The form also includes a 'Action' section with buttons for Submit, Apply, Reset, Remove, and Cancel. The page footer displays 'Livelihood © Version 9.1.0, Copyright © 1995-2002 Open Text Inc. All rights reserved.' and the date 'Sat, 28 Feb 2004'.

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## 3.2. Text:Lookup Attribute

The Text Lookup Attribute is a custom attribute type, which will dynamically populate the select values based on a query that is processed when the webLingo page is displayed.

### 3.2.1. Create and Define a Text:Lookup Attribute

Figure 3.2.1-1 – Select “Text:Lookup” from the category “Add New Item...” Menu

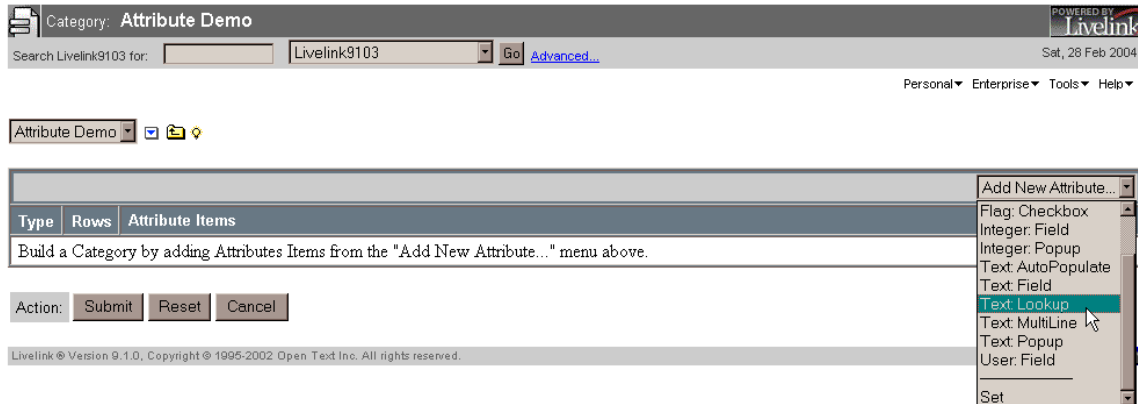
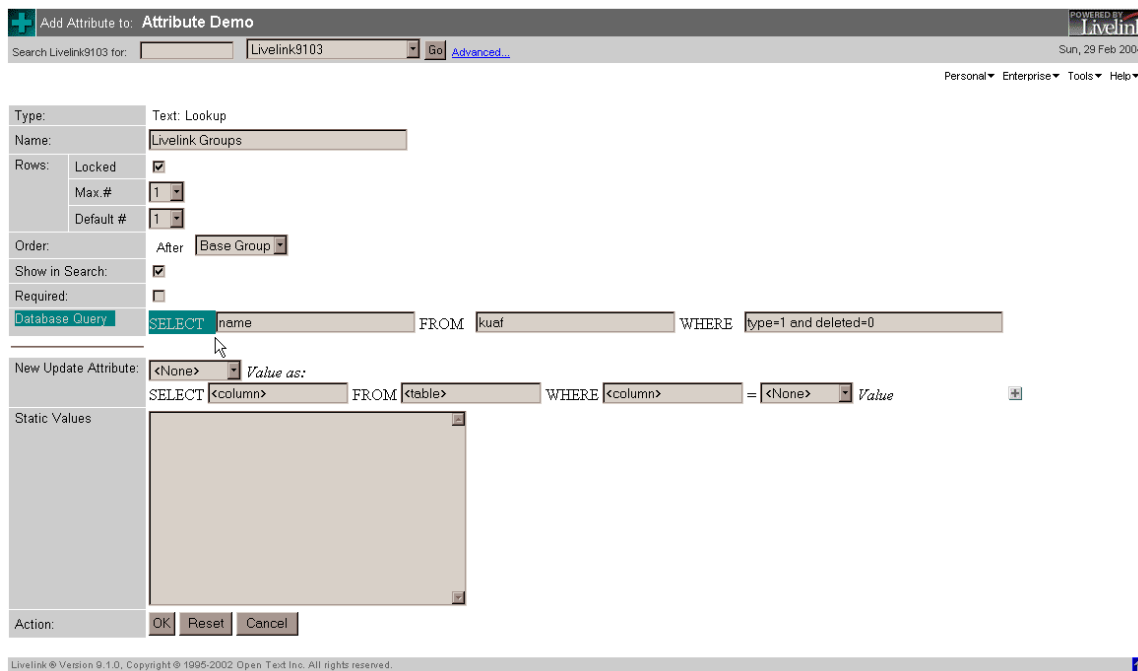


Figure 3.2.1-2 – Enter Query for select values population



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Figure 3.2.1-3 – The user may also include static attribute values

Search Livelink9103 for:  Livelink9103  [Advanced...](#) Sun, 29 Feb 2004

Personal ▾ Enterprise ▾ Tools ▾ Help ▾

Type: Text: Lookup  
Name: Livelink Groups

Rows: Locked   
Max # 1 ▾  
Default # 1 ▾

Order: After Base Group ▾

Show in Search:   
Required:

Database Query: SELECT name FROM kuaf WHERE type=1 and deleted=0 and name like 'demo'

New Update Attribute: <None> Value as:  
SELECT <column> FROM <table> WHERE <column> = <None> Value

Static Values: DefaultGroup

Action:

Livelink © Version 9.1.0, Copyright © 1995-2002 Open Text Inc. All rights reserved.

Figure 3.2.1-4 – Display values will be a combination of static and dynamic values

Category: Attribute Demo Sun, 29 Feb 2004

Search Livelink9103 for:  Livelink9103  [Advanced...](#) Personal ▾ Enterprise ▾ Tools ▾ Help ▾

Attribute Demo

Type	Rows	Attribute Items
Text: AutoPopulate	1 (locked)	Login: <input type="text"/>
Text: Field	1 (locked)	First Name: <input type="text"/>
Text: Field	1 (locked)	Last Name: <input type="text"/>
Text: Field	1 (locked)	Base Group: <input type="text"/>
Text: Lookup	1 (locked)	Livelink Groups: <input type="text"/>

Action:

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### 3.2.2. Applying the Text:Lookup Attribute

The following images will demonstrate a simple application of the Lookup Attribute.

The drop-down menu will be populated with a combination of the pre-defined static values and the dynamic values returned from the SQL query processed when the page is displayed. The static values will remain the same, however, the dynamic values may

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vary each time the page is displayed, based on changes in the database tables that are queried.

**Figure 3.2.2-1** – User will select from the drop-down menu list where values have been generated by a combination of static and dynamic values

The screenshot shows the 'Attribute Demo' interface. At the top, there is a search bar for 'Livelihood9103' and a 'Go' button. Below the search bar, there is a table with columns 'Type', 'Rows', and 'Attribute Items'. The table contains five rows of attribute items, each with a 'Type' and 'Rows' column. The 'Attribute Items' column contains text input fields for 'Login', 'First Name', 'Last Name', 'Base Group', and 'Livelihood Groups'. The 'Livelihood Groups' field has a dropdown menu open, showing options: '<None>', '<None>', 'DefaultGroup', 'demo group 1', and 'demo group 2'. Below the table, there are 'Action' buttons: 'Submit', 'Reset', and 'Cancel'. At the bottom, there is a footer with the text 'Livelihood © Version 9.1.0, Copyright © 1995-2002 Open Text Inc. All rights reserved.'

Type	Rows	Attribute Items
Text: AutoPopulate	1 (locked)	Login: <input type="text"/>
Text: Field	1 (locked)	First Name: <input type="text"/>
Text: Field	1 (locked)	Last Name: <input type="text"/>
Text: Field	1 (locked)	Base Group: <input type="text"/>
Text: Lookup	1 (locked)	Livelihood Groups: <input type="text"/>

Action:

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### 3.2.3. Adding Auto Populate Feature to Text Lookup Attribute

Add the Auto Populate feature to the Lookup attribute by applying the update attributes with SQL queries on the attribute definition page.

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Figure 3.2.3-1 – Add the Attributes and SQL Queries for Auto Populate feature

The screenshot shows the configuration interface for an attribute named 'Livelihood Groups'. The 'Type' is set to 'Text: Lookup'. The 'Name' is 'Livelihood Groups'. The 'Rows' section is configured with 'Locked' checked, 'Max #' set to 1, and 'Default #' set to 1. The 'Order' is set to 'After Base Group'. 'Show in Search' is checked, and 'Required' is unchecked. The 'Database Query' is: `SELECT name FROM kuaf WHERE type=1 and deleted=0 and name like 'demo'`. The 'New Update Attribute' section shows 'Group Leader' as the 'Value as:' with the query: `SELECT b.firstname || ' ' || b.lastname FROM kuaf a, kuaf b WHERE a.leaderid = b.id and a. = Livelihood Groups Value`. The 'Static Values' section contains a text area with 'DefaultGroup'. The 'Action' buttons are 'OK', 'Reset', 'Cancel', and 'Remove'. The footer indicates 'Livelihood © Version 9.1.0, Copyright © 1995-2002 Open Text Inc. All rights reserved.'

### 3.2.4. Applying Text Lookup Attribute with Auto Populate Feature

Figure 3.2.4-1 – After selecting a value from the drop-down list click on the checkmark image to update the attributes and refresh the page

The screenshot shows the configuration page for 'Attribute Demo' with the 'Presentation' tab selected. The 'My Folder' dropdown is set to 'My Folder'. The 'Attribute Demo' section shows the following configuration: 'Login' is 'dnalls', 'First Name' is 'Donna', 'Last Name' is 'Nalls', 'Base Group' is 'Wisteria-IT', 'Livelihood Groups' is 'demo group 1', and 'Group Leader' is empty. A checkmark icon is visible next to the 'Livelihood Groups' dropdown. The 'Action' buttons are 'Submit', 'Apply', 'Reset', 'Remove', and 'Cancel'. The footer indicates 'Livelihood © Version 9.1.0, Copyright © 1995-2002 Open Text Inc. All rights reserved.'

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Figure 3.2.4-2 – Page is refreshed with updated attribute values

The screenshot displays the Livelink Enhanced Attributes Module interface. At the top, there is a navigation bar with 'Categories Info for: My Folder' and a search bar for 'Livelink9103'. Below this is a breadcrumb trail 'My Folder' and a set of tabs: 'General', 'Audit', 'Categories', 'Presentation', and 'References'. The main content area is titled 'Attribute Demo' and contains a form with the following fields:

- Login: dnalls ✓
- First Name: Donna
- Last Name: Nalls
- Base Group: Wisteria-IT
- Livelink Groups: demo group 1 ✓
- Group Leader: Lisa Price

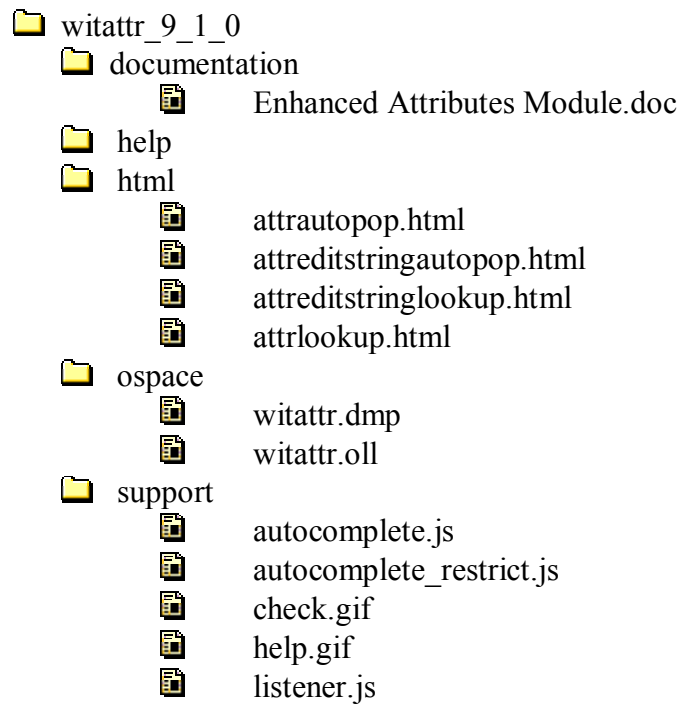
At the bottom of the form, there is an 'Action:' section with buttons for 'Submit', 'Apply', 'Reset', 'Remove', and 'Cancel'. The footer of the page contains the text 'Livelink © Version 9.1.0, Copyright © 1995-2002 Open Text Inc. All rights reserved.' and a small icon.

When using the Auto Populate feature with more than one attribute in a category, the values updated on each page refresh will apply only to the attribute for which the apply checkmark is selected. All other attribute values will remain the same.

### 4. Code Deliverables

#### 4.1. Module Files

A standard Livelihood Module folder will be installed in the Livelihood system. The module files are:



### 5. Module Administration

#### 5.1. Installing the “Enhanced Attributes” Module

The witattr\_9\_1\_0 Livelihood module will be installed using the standard Livelihood module installation procedures.

1. Stop the Livelihood Services
2. Copy the witattr\_9\_1\_0 module folder into the <Livelihood Home>/staging directory.  
Note: If you are installing on a Unix Operating System, do the following
  - Remove the Carriage Return control characters from the witattr.ini file by opening the file in a text editor and modifying each line or run the dos2unix command.
  - Navigate to the “ospace” directory and remove the “.oll” file extension of the witattr.oll file: `mv witattr.oll witattr`
3. Restart the Livelihood Services
4. Using a web browser, log into Livelihood as the “Admin” user and navigate to the Livelihood Administration page (?func=admin.index). Type in the Livelihood Administration password, if prompted
5. Under the “Module Administration” heading, select “Install Modules”
6. Under the “Installable Modules” section, at the bottom of the page, click in the checkbox next to “Enhanced Attributes” module
7. Select the “Install” button
8. When prompted, Stop and Restart the Livelihood Service
9. Click on the “Continue” hyperlink
10. Verify that the “Enhanced Attributes” module is now listed in the “Installed Modules” section

#### 5.2. Uninstalling the “Enhanced Attributes” Module

The witattr\_9\_1\_0 Livelihood module will be installed using the standard Livelihood module uninstall process.

1. Using a web browser, log into Livelihood as the “Admin” user and navigate to the Livelihood Administration page (?func=admin.index). Type in the Livelihood Administration password, if prompted.
2. Under the “Module Administration” heading, select “Uninstall Modules”
3. Click the “Uninstall” button next to the “Attribute Enhancements” module.
4. Click “OK” when prompted for confirmation.
5. When prompted, Stop and Restart the Livelihood Service
6. Click on the “Continue” hyperlink
7. Verify that the “Enhanced Attributes” module is no longer listed on this page

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8. You may now remove the witattr\_9\_1\_0 files from the <Livelihood Home>/staging directory or they may remain in the staging directory for re-installation at a later time

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