

Custom User Categories Adaptor

CardioLog easily integrates personal user data into reports and provides advanced visitor segmentation capabilities by using existing user directories.

Additional user information, such as department, gender, and other profile data is retrieved by the [User Categories Updates](#) service from [Active Directory attributes](#) or [SharePoint User Profiles](#) by default. The User Categories Updates service can also retrieve the data from a custom source (any human resource management system or even custom databases), using a [designated web service](#) that supplies the user information.

Develop the Custom User Categories Web Service

In order to load additional user information from a web service, specify a web service from which the **User Categories Updates** service will extract the user data. This is done through the CardioLog **Administration** user interface:

1. [Create the custom user information web service](#) for your organization.
2. Verify that the custom user information web service returns a valid XML response, according to the XML schema.
3. Confirm the CardioLog Scheduling Service user account has sufficient permissions to access (request) the web service.
4. In the navigation pane in CardioLog go to **Administration > System Configuration > User Category Management**.
5. Click **Add Categories Source > Custom**.

The screenshot shows the CardioLog Analytics Administration interface. The top navigation bar includes 'CARDIOLOG ANALYTICS' on the left and 'knowledge base | Connected As INTLOCK-QA\Administrator' on the right. A left-hand navigation pane lists various sections: Report Center, Analysis Center, Optimization, Acquisition, Visitor Engagement, Settings, and Administration. Under Administration, there are sub-items: Black List, Custom Widgets, CardioLog Scheduling Service, IIS Log Import, Product License, Roles, System Configuration (highlighted), System Diagnostics, and URL Mappings. The main content area is titled 'Custom Categories Service' and contains a 'Settings' form. The form fields are: Title (text box with 'Custom Categories'), URL (text box with 'http://intlock-qa:29999/cardiolog/categories.xml'), Is Web Service (dropdown menu with 'No' selected), Web Method (text box with 'GetCategories'), and Authentication (text box with 'Windows Integrated' and a 'Set' button). At the bottom of the form, there is a '<< Back to dashboard' link on the left and 'Delete' and 'Save' buttons on the right.

User Category Management: Custom Categories Service

6. Enter a name for the custom user categories source in the **Title** field
7. Enter the custom user categories web service URL in the website **URL** text box (Acceptable file extensions are ".aspx", ".asmx" or ".xml").
8. Select **Yes** for **Is Web Service**
9. If you use an .asmx file in the URL field, enter the custom user categories web service method name in the **Web Method** text box.
10. Click **Set** and enter the web service's user credentials if required.
11. Go to **CardioLog Scheduling Service** under **Administration** in the navigation pane and click **Restart Service** in the upper right hand corner.
12. After the next scheduled **User Categories Updates**, your Active Directory attributes will be made available in the **Visitor Segments** filter of each report, under **User Categories**.

Custom User Categories Web Service Schema

The user information web service should be exposed by a web page which provides an XML string response. Follow this format:

XML Schema

```
<?xml version="1.0" encoding="utf-8" ?>
<xs:schema id="CategoryXmlSchema"
  elementFormDefault="qualified"
  xmlns:mstns="http://tempuri.org/CategoryXmlSchema.xsd"
  xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:element name="tree">
    <xs:complexType>
      <xs:sequence>
        <xs:element name="item" type="UserCategoryXmlNode" minOccurs="0" maxOccurs="unbounded" />
      </xs:sequence>
    </xs:complexType>
  </xs:element>
  <xs:complexType name="UserCategoryXmlNode">
    <xs:sequence>
      <xs:element name="userName" type="xs:string" />
      <xs:element name="categories" minOccurs="0" maxOccurs="1">
        <xs:complexType>
          <xs:sequence>
            <xs:element name="categoryValue" type="categoryNode" minOccurs="0" maxOccurs="unbounded" />
          </xs:sequence>
        </xs:complexType>
      </xs:element>
    </xs:sequence>
  </xs:complexType>
  <xs:complexType name="categoryNode">
    <xs:sequence>
      <xs:element name="categoryName" type="xs:string" minOccurs="1" maxOccurs="1" />
      <xs:element name="categoryValue" type="xs:string" minOccurs="1" maxOccurs="1" />
    </xs:sequence>
  </xs:complexType>
</xs:schema>
```

Field Definitions:

- **username**: the user account name (should match the **accountName** field in the organization structure)
- **categoryName**: the designated category name.
- **categoryValue**: the assigned category value.

Sample Data

```
<tree>
```

```
<item>
<userName>MyCompany\james</userName>
<categories>
<categoryValue>
<categoryName>Region</categoryName>
<categoryValue>West</categoryValue>
</categoryValue>
<categoryValue>
<categoryName>Gender</categoryName>
<categoryValue>Male</categoryValue>
</categoryValue>
</categories>
</item>
<item>
<userName>MyCompany\taylor</userName>
<categories>
<categoryValue>
<categoryName>Region</categoryName>
<categoryValue>North</categoryValue>
</categoryValue>
<categoryValue>
<categoryName>Gender</categoryName>
<categoryValue>Female</categoryValue>
</categoryValue>
</categories>
</item>
</tree>
```