Tracking Agent Configuration

Contents

Configuring Data Collection for Anonymous Users

CardioLog can identify anonymous users across multiple pages and multiple visits on your site using two methods. CardioLog can log their workstation IP address, or create a unique id and store it in a browser cookie on the user's device.

Using Unique Cookies

Pros - The most accurate method for identifying unique anonymous users, even when the visitor uses a proxy or VPN.
Cons - When a visitor deletes his cookies, the next visit will generate a new unique ID. When cookies are disabled, each visit generates a new unique ID. If a visitor uses multiple browsers, such as Internet Explorer and Firefox, a unique ID will be generated separately for each browser.

Perform the following steps in order to configure data collection for anonymous users, using a unique ID. **Note:** By default, the user name will be a unique ID logged in the format "Anonymous_XXXX"

1. Edit the **[Installation directory]**\CardioLogAgent\web.config file and set the value of the "*SupportAnonymousUsers*" and "*overwriteConnectedUser*" keys to "*true*" like so:

   ```
   <add key="SupportAnonymousUsers" value="true" />
   <add key="overwriteConnectedUser" value="true" />
   ```

2. In the file system, verify that the **[Installation directory]**\CardioLogAgent directory security allows access for anonymous users:
   Right click on the **[Installation directory]**\CardioLogAgent directory, choose **Properties** > **Security** > **Add** > Add the ANONYMOUS LOGON user.
3. In IIS Manager, verify that the CardioLogAgent web application directory security allows Anonymous Access:
   Click the CardioLogAgent web application in IIS, choose **Authentication**, enable Anonymous Authentication and disable Windows Authentication.

   [Installation directory] - by default, the CardioLogAgent folder is located in the CardioLog Installation folder. If the CardioLog Analytics SharePoint feature is installed, the CardioLogAgent folder is located on all SharePoint WFEs (Web Front Ends) under the SharePoint website "*_layouts*" folder.

Using IP Addresses

Pros - Enables individual IP address reporting, and works even when browser cookies are disabled.
Cons - When using a proxy or VPN in order to access the internal network (Intranet portal), the CardioLog tracking agent will not be able to obtain the client workstation IP, and the registered IP will instead be recorded as the proxy IP. In this case the unique users metric is inaccurate.

Follow these steps to configure data collection for anonymous users, using their workstation IP address. **Note:** CardioLog always collects the workstation IP for reporting geographic location.

1. Follow the steps above for configuring data collection for anonymous users, using a unique ID cookie.
2. Edit the *[CardioLog Installation Folder]\EventCollector\web.config* file and set the value of the "*UseIPAddressForAnonymousUserName*" key to "true" like so:

   ```
   <add key="UseIPAddressForAnonymousUserName" value="true" />
   ```

Monitoring Authenticated Users in an Anonymous Environment After They Sign In

CardioLog can identify authenticated users in an anonymous environment by retrieving their user name from SharePoint or using manual configuration.

Retrieving the SharePoint Signed-In User Information

CardioLog can identify authenticated users in an anonymous environment by retrieving the signed in user ID from SharePoint.
Perform the following steps in order to configure the tracking code to retrieve the user ID from SharePoint:
1. Follow the steps above for configuring the tracking agent for anonymous users.
2. Edit the following key in the **[Installation directory]**\CardioLogAgent\web.config file and set the value of the "*UseSPAuth*" key to "*true*" like so:

```
<add key="UseSPAuth" value="true"/>
```

[Installation directory] - By default, the CardioLogAgent folder is located in the CardioLog Installation folder. If the CardioLog Analytics SharePoint feature is installed, the CardioLogAgent folder is located on all SharePoint WFEs under the SharePoint website "*_layouts*" folder.

Retrieving the User ID Using Manual Configuration

CardioLog can identify authenticated users in an anonymous environment by retrieving the user name manually from a unique element value that is hidden in the client side code.
Perform the following steps in order to configure the tracking code to retrieve the user ID from SharePoint:

1. Follow the steps above for configuring the tracking agent for anonymous users.
2. Pass the user's account name through SharePoint's server side code to a hidden element called "userid" in the client side code, like so:

```
<input type="hidden" id="userid" name= "userid" value="DOMAIN\useraccountname">
```

For example, you can retrieve the user name from the _**spUserId** JavaScript global variable in SharePoint.

To verify this variable exists in your SharePoint pages, browse to a SharePoint page and enter *javascript:alert(_spUserId)* in the browser address bar. Verify that you see a popup with a valid ID number.
3. Edit the following key in the **[Installation directory]**\CardioLogAgent\web.config file and set the value of the "*ForceRegexFirst*" key to "*true*" and the "*FixClaimsUserAccountRegex*" key to a blank value like so:

```
<add key="ForceRegexFirst" value="true"/>
<add key="FixClaimsUserAccountRegex" value=""/>
```

[Installation directory] - By default, the CardioLogAgent folder is located in the CardioLog Installation folder. If the CardioLog Analytics SharePoint feature is installed, the CardioLogAgent folder is located on all SharePoint WFEs under the SharePoint website "*_layouts*" folder.

Configuring the Tracking Agent with SSL

The CardioLog tracking agent can be easily configured to work with SSL, to avoid possible authentication prompts, or browser security messages when working with SSL in SharePoint.

Upon activating CardioLog, the Configuration Wizard will be displayed. This wizard will help you configure the Tracking Agent, a tool designed to monitor visitor behavior in SharePoint.

1. In Step 2 of the **Configuration Wizard**, deploy the CardioLog Analytics SharePoint feature.
2. In case you select to automatically add the JavaScript tracking code to SharePoint common JavaScript files or master pages instead:
   a. Configure SSL for the CardioLog web application.

b. Edit the following keys in the Java Script tracking code:

```
cad.src = 'https://[domain name]/CardioLogAgent/getCAData.aspx?r='+Math.random();
ca.src = 'https://[domain name]/CardioLogAgent/ca.aspx?u='+document.location.href;
tt.src = 'https://[domain name]/CardioLogAgent/AgentEmbed.aspx?env=[SharePoint version]';
```

[domain name] - the Fully Qualified Domain Name (FQDN) for the CardioLog web application.
[SharePoint version] - the SharePoint version: MOSS2007, SP2010, SP2013, SP2016 or SPOnline.

The tracking code is located at the end of the file, between these comments: "*//Intlock tracking code start*" and "*//Intlock tracking code end*"

By default, the JavaScript tracking code is embedded within a common JavaScript file on all of your SharePoint WFEs (Web Front Ends), which typically is one of the following locations relevant to your software versions:
For MOSS 2007 only:
C:\Program Files\Common Files\Microsoft Shared\Web Server Extensions\12\TEMPLATE\LAYOUTS\[language code]\core.js

For SharePoint 2010 only:
C:\Program Files\Common Files\Microsoft Shared\Web Server Extensions\14\TEMPLATE\LAYOUTS\[language code]\init.js

For SharePoint 2013 only:
C:\Program Files\Common Files\Microsoft Shared\Web Server Extensions\15\TEMPLATE\LAYOUTS\init.js

For SharePoint 2016 only:
C:\Program Files\Common Files\Microsoft Shared\Web Server Extensions\16\TEMPLATE\LAYOUTS\init.js

Configuring Timeouts for the Tracking Agent

Setting a Timeout for Tracking Usage Data

The tracking agent web application passes on usage information via HTTP/S web requests to the EventCollector web application, which then writes the data into the CardioLog database.

To configure the timeout settings for the Tracking Agent when the EventCollector web application is not available, edit the following keys in ***[Installation directory]\CardioLogAgent\Web.config*** file (time values are in milliseconds):

```
<!-- Timeout in case the EventCollector web application is not available (the default is 10 seconds).->

<add key="requestTimeOut" value="10000" />

<!-- How long to wait before trying again to access the EventCollector web application (the default is one minute).-->
<add key="serverResponseTimeOut" value="60000" />
```

[Installation directory] - By default, the CardioLogAgent folder is located in the CardioLog Installation folder. If the CardioLog Analytics SharePoint feature is installed, the CardioLogAgent folder is located on all SharePoint WFEs under the SharePoint website "*_layouts*" folder.

Setting a Timeout for Content Personalization

Information about visitor segments is downloaded to the client's browser with each page request. The JavaScript code briefly hides the content of the page, adds or modifies page elements, and then re-displays the page according to the relevant visitor segment(s). In order to personalize the page content, the default timeout for loading the visitor segments information is 5 seconds.
To configure the timeout setting in case of a connection error, edit the following key in the JavaScript tracking code (Time value is in milliseconds):

```
var iignoreca = setTimeout(ignoreca, 5000);
```

By default, the Java Script tracking code is embedded within a common Java Script file on your SharePoint WFEs according to the relevant software version you have installed:

For MOSS 2007 only:
C:\Program Files\Common Files\Microsoft Shared\Web Server Extensions\12\TEMPLATE\LAYOUTS\[language code]\core.js

For SharePoint 2010 only:
C:\Program Files\Common Files\Microsoft Shared\Web Server Extensions\14\TEMPLATE\LAYOUTS\[language code]\init.js

For SharePoint 2013 only:
C:\Program Files\Common Files\Microsoft Shared\Web Server Extensions\15\TEMPLATE\LAYOUTS\init.js

For SharePoint 2016 only:
C:\Program Files\Common Files\Microsoft Shared\Web Server Extensions\16\TEMPLATE\LAYOUTS\init.js

If the CardioLog Analytics SharePoint feature is installed, the Java Script tracking code is embedded within a Java Script file on your SharePoint WFEs according to the version you currently have installed:

For MOSS 2007 only:
C:\Program Files\Common Files\Microsoft Shared\Web Server Extensions\12\TEMPLATE\LAYOUTS\CardioLogAgent\CardioLogAgent.js

For SharePoint 2010/SharePoint 2013/SharePoint 2016 only:
C:\Program Files\Common Files\Microsoft Shared\Web Server Extensions\14\TEMPLATE\LAYOUTS\CardioLogAgent\CardioLogAgent.js

Configuring Session Idle Time

Visits sessions are defined as the activity of one visitor within a single browser session. If a user is inactive on your site for 30 minutes or more, any future activity will be attributed to a new session. Users that leave your site and return within 30 minutes will be counted as part of the original session.
To set the maximum idle time after which the session ID is reset, edit the following key in ***[Installation directory]****CardioLogAgent\web.config* file (Time value is in minutes):

> *<add key="SessionTimer" value="30" />*

[Installation directory] - by default, the CardioLogAgent folder is located in the CardioLog Installation folder. If the "CardioLog Analytics" SharePoint feature is installed, the CardioLogAgent folder is located on all SharePoint WFEs under the SharePoint website "_layouts" folder.

Capturing Time On Site for Single-Page Visits

Time on site is calculated by adding up the time a visitor spends on a page, for every page in a session, including the last page in the session.
To learn more see capturing time on site for single-page visits.

Fire Pulse Events Intermittently for Continuous Recording

By default, CardioLog Analytics JavaScript tracking code fires "pulse" events every few seconds, until the visitor leaves the page either by navigating away from it or by closing the browser.
These "pulse" events are then processed by the reporting engine to calculate the overall amount of time a visitor spends on a page in a more accurate way, including single-page and last-page visits.

To configure the pulse event time intervals, edit the following keys in *[CardioLog Installation directory]\EventCollector\web.config* file: (Time values are in milliseconds)

> *<!-- The starting interval (default 3 seconds) - the first ping event will be sent after a visitor spends 3 seconds on the page. -->*
> *<add key="PingInterval" value="3000" />*
>
> *<!-- The time taken from minimum to maximum interval (default 30 seconds) - ping events will be sent every 3 seconds in the first 30 seconds a visitor is on the page. -->*
> *<add key="PingIntervalAscendTime" value="30000" />*
>
> *<!-- The final interval (default 30 seconds) - ping events after a visitor spends 30 seconds on the page will be sent every 30 seconds. -->*
> *<add key="PingIntervalMax" value="30000" />*

Note: Determining the optimal ping configuration to reduce traffic to your CardioLog server, and still get accurate visit duration reports depends on a few factors, but primarily the amount of traffic and common user behavior on the portal should be considered.

- **PingInterval** - We recommend a value of 5 seconds as a reasonable "bounce" value, when considering the time it takes to fully load a designated page.
- **PingIntervalAscendTime** - We recommend a value between 5 and 10 seconds.
- **PingIntervalMax** - If the portal is a work tool for your end users, and they usually spend more than a minute on it, you can change this value to 60 seconds.

Measure Time Between Visits to Different Pages

CardioLog Analytics can calculate time on site by measuring the time between visits to different pages on your site. For example, if a user visits Page A at 4:15 PM. and then Page B at 4:20 PM, the time spent on Page A will be reported as five minutes. A "duration" event will be sent only when the visitor leaves the page and goes to another page, in order to reduce traffic to the CardioLog server.

If a user only visits a single page, it may not be possible to determine the length of time the visitor spent on the site. An action has to occur to trigger the JavaScript tracking code and the most common is a click to navigate to another page.

To measure time on site using duration events, and to disable pulse events, edit the following key in **[Installation directory]***CardioLogAgent\js\A gentEmbed.js* file:

```
/**
 * @property Ping
 * @type {Boolean}
 * @default true
 */
_caConfig.Ping = false;
```

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