

# Troubleshooting the CardioLog Services

The CardioLog Diagnostics Service checks the status of the CardioLog Scheduling Service components, and sends error alerts via email. You can access the current status of the services through the navigation pane by clicking on **Administration > System Diagnostics > Diagnostics Dashboard**. By default, all CardioLog Scheduling Service components run daily at 12:00 AM, except Usage Data Processing which runs every hour on the hour, and the CardioLog Diagnostics Service which runs every day at 08:30 AM. For assistance in troubleshooting service errors, please [open a new support ticket](#).

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## CardioLog Services Log Files

Both the CardioLog Scheduling Service and the CardioLog Diagnostics Service write messages to log files. There are two ways to view the log files:

- Locally on the CardioLog server in the service logs file path.
- Remotely via the navigation pane under **Administration > System Diagnostics > System Diagnostics Dashboard**.

Log files can be accessed by a user with a local administrator account on the CardioLog application server and with a CardioLog Administrator role. The CardioLog log files are located in the `[CardioLog Installation Folder]\CardioLogScheduleServices\Logs` folder.

The following log files are created by default:

- **CardioLog Scheduling Service** - CardioLogServices.log
- **CardioLog Diagnostics Service** - CardioLogSystemMonitoringServices.log
- **User and Group Updates** - ADAgent.log
- **Portal Tree Updates** - OMAgent.log
- **Usage Data Processing** - Maintenance.log
- **Report Scheduling** - CardioLogScheduler.log
- **User Categories Updates** - CategoryAgent.log
- **SEO Analysis** - SEO.log
- **Social Updates** - SocialAgent.log
- **Version Maintenance** - VersionMaintenance.log

These files are limited to 8MB each.

In addition, CardioLog creates the following XML files -

- **User and Groups Updates** - ADTree.xml (contains the data about AD users and groups)
- **Portal Tree Updates** - job#.xml (contains the structure of non-SharePoint websites)
- **User Categories Updates** - Categories.xml (contains additional personal user data)

The XML files have no file size limit.

When [extended logging](#) is turned on for troubleshooting purposes, the following log files are created:

- **ADTree** web application (extended logging for Active Directory Updates) - ADXMLTree.log
- **SP20XXTree** web application (extended logging for Portal Tree Updates for SharePoint 2007, 2010 and 2013) - SP20XXTree.log (**XX** - 07 for MOSS 2007, 10 for SharePoint 2010 and 13 for SharePoint 2013)
- **CardioLog Scheduling Service** (extended logging for all service components, including Portal Tree Updates for SharePoint 2013 API method, SharePoint 2016 and SharePoint Online) - CardioLogServiceComponents.log
- **VisitorSegments** web application (extended logging for User Categories Updates) - VisitorSegments.log
- **CardioLog** web application (extended logging for the CardioLog user interface) - CardioLogUI.log

The extended log files have no file size limit. It is recommended to turn off extended logging when it is not needed and archive/delete these log files periodically.

## CardioLog Scheduling Service

Log File - CardioLogServices.log:

---

// Service started successfully

Time : 27/01/2015 08:29:49

Message : Started

---

// Service stopped successfully

Time : 27/01/2015 08:39:27

Message : Stopped

### Possible Faults

1. Starting the service may fail due to a **database connection problem**.

Solution: Verify that the CardioLog Scheduling Service login account can connect to the CardioLog database and is assigned a db\_owner role.

2. The CardioLog Scheduling Service is started but all the jobs fail.

Error in the log file: *"Exception has been thrown by the target of an invocation"*.

Solution: See the [Configuration FAQ](#) for more information.

## CardioLog Diagnostics Service

Log File - CardioLogSystemMonitoringServices.log:

---

// Service started successfully

Time : 27/01/2015 08:29:49

Message : Started

---

// Service stopped successfully

Time : 27/01/2015 08:39:27

Message : Stopped

### Possible Faults

1. Starting the service can fail when **SMTP is not configured**.

Error in the log file:

*"Error: CardioLog Diagnostics Service failed to start. (Exception: SMTP mail server is not configured)"*.

Solution: See [Report Scheduling](#) to configure SMTP settings.

2. Sending email alerts can fail due to a **SMTP connection problem**.

Error in the log file:

*"Error: Failed to send an email alert to the system administrator. (Exception: System.ApplicationException: Send Mail Exception: Failed to connect to SMTP mail server at CardioLog.API.Util.SendMail(String SMTPMailServer, String SMTPUser, String SMTPPassword, String from, String to, String subject, String body, MessageType type) at CardioLog.Services.CardioLogMonitoringServices.OnStart(String[] args)"*

Solution: Verify that the CardioLog Scheduling Service login account has all details completed and can connect to the SMTP server.

## Users and Groups Updates

Log File - ADAgent.log:

---

// Loading users and groups from Active Directory

Time : 6/19/2008 12:00:07 AM

Message : Loading directory: corp.company.com

Message : Loading from web service: http://[CardioLog server name:port]/ADTree/default.aspx

---

// Loading users and groups into the CardioLog database

Time : 6/19/2008 12:25:38 AM

Message : Loading xml to db...

Time : 6/19/2008 12:25:42 AM

Message : Loading xml to db: Success

---

// Comparing both repositories and updating CardioLog database

Time : 6/19/2008 12:25:50 AM

Message : Refreshing users and groups...

---

Time : 6/19/2008 12:25:50 AM

Message : Refreshing users and groups: Success

---

// Updating service last run time in CardioLog database

Time : 6/19/2008 12:28:02 AM

Message : Updating last run global setting

---

// Service finished successfully

Time : 6/19/2008 12:28:02 AM

Message : Done

## Possible Faults

Loading from Active Directory can fail due to:

### 1. Missing parameters

Error in the log file:

*"Error: Parameter Active Directory connection string is missing"*

Solution: See the [Active Directory Updates](#) service for more information.

### 2. Invalid parameters

Error in the log file:

*"Error: Exception: There is no such object on the server."*

*"Error: A referral was returned from the server."*

Solution: Verify that the Active Directory connection string is in a FQDN (Fully Qualified Domain Name) format (eg. corp.company.com). If you have defined specific organizational units to load from, verify that they exist in the expected location.

### 3. Insufficient permissions to read from Active Directory

Error in the log file:

*"Error: Exception: Logon failure: unknown user name or bad password."*

Solution: Verify that the CardioLog Scheduling Service login account has read access to Active Directory. If you have supplied credentials, verify that they are valid and correct. If the CardioLog Scheduling Service login account is in the same domain, there is no need to supply credentials.

#### 4. Network errors

Errors in the log file:

*"Error: Exception: The operation has timed out"*

Solution: Temporary network load, usually the next Active Directory Updates run will succeed.

*"Exception: The server is not operational."*

Solution: Make sure the FQDN (Fully Qualified Domain Name) name you defined exists in the DNS. You also need to make sure that TCP port 389 is open to the domain controller, as your traffic might be getting blocked by the firewall.

#### 5. Database connection problem.

Solution: Verify:

- The CardioLog Scheduling Service login account can connect to the CardioLog database and is assigned a db\_owner role.
- Your system has enough resources according to [system requirements](#).
- There is sufficient free space in the CardioLog database transaction log file and in the TEMP database transaction file.

**Note:** For more details turn on [extended logging](#) for the ADTree web application and view the log file - ADXMLTree.log

## Portal Tree Updates

### Log File - OMAgent.log

---

// Loading a SharePoint 2010 farm tree

Time : 11/26/2008 12:18:25 AM

Message : Loading from: http://[CardioLog server name:port]/SP2010Tree/default.aspx?docVersions=true&output=file&logFilePath=C:\Program Files\Intlock\CardioLog\CardioLogScheduleServices\Logs\SP2010Tree.xml

---

// Loading a custom website site map

Time : 11/26/2008 12:35:34 AM

Message : Loading from: http://[CardioLog server name:port]/WebsiteTree/default.aspx

---

Time : 11/26/2008 12:46:42 AM

Message : Get Tree: Success

---

// Loading trees XML structure (OMTree.xml) into a temporary table (tab\_sharepoint\_tree\_load) in the CardioLog database

Time : 11/26/2008 12:46:42 AM

Message : Loading Xml to DB...

---

Time : 26/11/2008 02:32:48

Message : Load Xml to DB: Success

---

// Checking for duplicate URLs in tree in CardioLog database (the URL is the unique identifier for tree objects)

Time : 26/11/2008 02:32:48

Message : No Duplicate Urls.

---

// Shrinking SQL log file

Time : 26/11/2008 02:32:48

Message : Shrinking SQL Log File...

---

Time : 26/11/2008 02:32:48

Message : Shrink Log File: Success

---

// Updating the old tree (located in the tab\_sharepoint\_tree table) after comparing it with the new tree (located in the tab\_sharepoint\_tree\_load table) in CardioLog database

Time : 26/11/2008 02:32:48

Message : Refreshing OM Tree...

---

Time : 26/11/2008 04:13:28

Message : Refresh OM Tree: Success

---

// Updating inventory count for tree item types

Time : 26/11/2008 04:13:28

Message : Counting Inventory

---

// Fixing lost events (events that are not associated with tree items)

Time : 26/11/2008 04:13:32

Message : Mapping lost URLs to SharePoint IDs (from 9/11/2007 1:26:35 PM)

---

Time : 26/11/2008 04:13:38

Message : Map lost URLs to SPID: Success

---

Time : 26/11/2008 04:13:43

Message : Fixing lost events and cached data (from 9/11/2007 1:26:35 PM)...

---

Time : 26/11/2008 04:14:56

Message : Fix lost events: Success

---

// Checking if tree structure is valid (lost branch - a tree item with no parent item)

Time : 26/11/2008 04:14:56

Message : Finding lost branches

---

Time : 26/11/2008 04:15:19

Message : No lost branches found.

---

// Delete Analysis Center html tree cache

Time : 26/11/2008 04:15:26

Message : Clean CardioLog tree cache

---

// Service finished successfully

Time : 26/11/2008 04:15:26

Message : Updating service account name in global settings.

---

Time : 26/11/2008 04:15:26

Message : Updating last run global settings.

---

Time : 26/11/2008 04:15:26

Message : OMAgent run complete.

## Possible Faults

Loading the tree structure from the tree adaptor can fail due to:

### 1. Insufficient permissions to the SharePoint databases

Errors in the log file:

- "Error: Cannot open database "SharePoint\_Config" requested by the login. The login failed. Login failed for user **[login user account]**. SQL Server: **[SQL server name]**, SQL Database: SharePoint\_Config"
- "Error: Cannot open database "**[Content database name]**" requested by the login. The login failed. Login failed for user **[login user account]**. SQL Server: **[SQL server name]**, SQL Database: **[Content database name]**"
- "Error: The SELECT permission was denied on the object 'UserInfo', database '**[Content database name]**', schema 'dbo'. SQL Server:**[SQL server name]**, SQL Database: **[Content database name]**"

Solution: Verify that the CardioLog Scheduling Service login account has read access to all SharePoint configuration and content databases, and read access to the SharePoint TEMPLATE path: \\**[SharePoint WFE server name]**\C\$\Program Files\Common Files\Microsoft Shared\web server extensions\**[XX]**\TEMPLATE (12 - for MOSS 2007, 14 - for SharePoint 2010, 15 - for SharePoint 2013)

### 2. Insufficient resources

Error in the log file:

- "Error : Exception: There is insufficient system memory to run this query."
- "Error : Exception: Exception of type 'System.OutOfMemoryException' was thrown."

Solution: Verify that your system has enough resources according to [system requirements](#).

### 3. Network errors

Error in the log file:

"Error: 401 Not authorized"

Solution: Verify that the CardioLog user account has access to the tree adaptor and sufficient read permissions on the server where the site tree is located.

### 4. Database connection problem

Verify that:

- The CardioLog Scheduling Service login account can connect to the CardioLog database and is assigned a db\_owner role.
- Your system has enough resources according to [system requirements](#).
- There is sufficient free space in the CardioLog database transaction log file and in the TEMP database transaction file.

**Note:** For more details turn on [extended logging](#) for the SP20**XX**Tree web application and view the log file -SP20**XX**Tree.log (**XX** - 07 for MOSS 2007, 10 for SharePoint 2010, 13 for SharePoint 2013)

## Usage Data Processing

Log File - Maintenance.log:

---

// Executing the usage data processing procedure (stp\_eventlog\_migrate), including the black list filters (what data not to collect), against the CardioLog database

Time : 29/01/2009 13:01:00

Message : Starting

---

Time : 29/01/2009 13:01:00

Message : Creating temp duration events...

---

// Archiving history events and verifying events and WFEs quota (according to product edition license)

Time : 29/01/2009 13:01:00

Message : Archiving events...

---

Time : 29/01/2009 13:01:03

Message : Archiving successful.

---

Time : 29/01/2009 13:01:03

Message : Verifying page views monthly quota...

---

Time : 29/01/2009 13:01:03

Message : Verifying WFEs quota...

---

Time : 29/01/2009 13:01:03

Message : Migrating temp events...

---

Time : 29/01/2009 13:01:03

Message : Updating referrer summary...

---

Time : 29/01/2009 13:01:03

Message : Updating geo data...

---

Time : 29/01/2009 13:01:03

Message : Refreshing CardioLog Agent Cache...

---

// Updating service last run time in CardioLog database

Time : 29/01/2009 13:01:03

Message : Updating last run global setting

---

// Service finished successfully

Time : 29/01/2009 13:01:04

Message : Finished

### **Possible Faults**

Processing the usage data can fail due to **database connection problem**.

Solution: Verify

- The CardioLog Scheduling Service login account can connect to the CardioLog database and is assigned a db\_owner role.
- Your system has enough resources according to [system requirements](#).
- There is sufficient free space in the CardioLog database transaction log file and in the TEMP database transaction file.

### **Report Scheduling**

**Log File** - CardioLogScheduler.log:



---

Time : 10/28/2008 4:59:59 AM

Message : Start Scheduler

---

// Deleting cached reports versions (controls data and charts images)

Time : 10/28/2008 4:59:59 AM

Message : Deleting Temp Images

---

Time : 10/28/2008 5:00:03 AM

Message : Deleting Controls Cache

---

// Getting all the reports that should be generated automatically

Time : 10/28/2008 5:00:03 AM

Message : Getting scheduled reports

---

// Generating the reports and sending emails to their distribution lists

Time : 10/28/2008 5:00:12 AM

Message : Report Id: 1a88f32d-fb86-4346-bcfb-005ed2661083 was generated successfully.

---

Time : 10/28/2008 5:00:15 AM

Message : Report Id: bd3496ae-8e08-4df8-b1ab-027b4959d63a was generated successfully.

---

Time : 10/27/2008 6:12:38 AM

Message : Mail sent to: james.wright@intlock.com

---

// Updating service last run time in CardioLog database

Time : 10/27/2008 6:12:38 AM

Message : Updating last run global setting

---

// Service finished successfully

Time : 10/27/2008 6:12:38 AM

Message : End Scheduler

## Possible Faults

The Generation of reports on the CardioLog database can fail due to:

### 1. Insufficient permissions

Solution: Verify that the CardioLog Scheduling Service login account is assigned a db\_owner role on the CardioLog database.

### 2. Internal error caused by a "heavy" report

Errors in the log file:

*"Error : Report Id: 060ad715-cd6e-4e02-9e3a-b94ab3f63d8f failed. Exception: The remote server returned an error: (500) Internal Server Error."*

*"Error : Report Id: 3dc7a74d-3445-450a-ad43-405fd2ad1ce8 failed. Exception: The operation has timed out."*

Solution: see [tips for efficient report creation](#) or [contact us](#).

In order to identify the report causing the problem, run the following query against the CardioLog database:

```
select [name] from tab_virtual_tree
where EntityId='[the report id]'
```

**[the report id]** - the report GUID from the error message in the log file. For instance: 060ad715-cd6e-4e02-9e3a-b94ab3f63d8f

3. Sending emails to report distribution lists can fail due to **SMTP connection problem**.

Solution: Verify that the CardioLog Scheduling Service login account can connect to the SMTP services server.

## User Categories Updates

**Log File - CategoryAgent.log:**

---

```
// Loading user categories data from custom web service (to categories.xml)
```

```
Time : 11/23/2008 12:59:58 AM
```

```
Message : Loading from: http://CategoriesServer/UserCategoriesHR/categories.asmx/GetEmployees
```

---

```
// Loading user categories data from CardioLog database
```

```
Time : 11/23/2008 1:00:31 AM
```

```
Message : Creating category manager
```

---

```
// Comparing both repositories and updating CardioLog database
```

```
Time : 11/23/2008 1:00:32 AM
```

```
Message : Persisting
```

---

```
// Updating service last run time in CardioLog database
```

```
Time : 11/23/2008 1:00:40 AM
```

```
Message : Updating last run global setting
```

---

```
// Service finished successfully
```

```
Time : 11/23/2008 1:00:40 AM
```

```
Message : Persist finished.
```

---

```
// Adding new users to the CardioLog database
```

```
Time : 10/5/2008 12:58:47 AM
```

```
Message : User: 'Intlock\ronh' does not exist in the system - Adding.
```

### Possible Faults

Loading from the User Categories web service can fail due to:

**Timeout** caused by a slow network

Solution: Increase the web service timeout.

The User Categories web service timeout can be configured in the **Web.config** file. Edit the <httpRuntime> element in the <system.web>section.

The Execution Timeout property indicates the maximum number of seconds a request is allowed to attempt to execute before being automatically shut down by ASP.NET. The default timeout is 90 seconds.

**Note:** When using a custom user data web service, contact the web service developer to increase the user categories web service timeout.

```
<system.web>
<httpRuntime executionTimeout="7200" maxRequestLength="200000"/>
</system.web>
```

## 2. Internal web service error

Solution: Verify that you can browse the user data web service URL (specified in the User Categories Updates service parameters) or contact the web service developer when using a custom user data web service.

3. Reading and writing the user data to the CardioLog database can fail due to **insufficient permissions** or **database connection problems**.

Solution: Verify that the CardioLog Scheduling Service login account can connect to the CardioLog database and is assigned a db\_owner role

## SEO Analysis

### Log File - SEO.log:

```
Time : 28/11/2012 00:00:00
Message : Start SEO Analysis

Time : 28/11/2012 00:00:00
Message : Getting scheduled jobs

Time : 28/11/2012 00:00:00
Message : Start crawling 'http://www.intlock.com/'

Time : 28/11/2012 00:02:42
Message : Crawling 'http://www.intlock.com/' finished successfully.

Time : 28/11/2012 00:02:42
Message : Updating last run global setting

Time : 28/11/2012 00:02:42
Message : End SEO Analysis
```

### Possible Faults

Crawling a website can fail due to:

#### 1. Insufficient permissions to browse the website

Solution: Set sufficient permissions for the SEO crawl.

2. Reading and writing the user data to the CardioLog database can fail due to **insufficient permissions database connection problems**.

Solution: Verify that the CardioLog Scheduling Service login account can connect to the CardioLog database and is assigned a db\_owner role.

**Note:** In order to troubleshoot issues during the crawl process, turn on [extended logging](#) for the CardioLog web application, execute the crawl immediately via the CardioLog UI and view the log file - CardioLogUI.log.

## Extended Logging

In order to turn **on** message logging to trace the CardioLog service components, add the "**Verbose,Message**" switch to the "**logType**" key in the component configuration file -

```
<add key="logType" value="Verbose,Message,Warning,Error" />
```

In order to turn **off** message logging for the CardioLog service components, remove the "**Verbose,Message**" switch from the "**logType**" key in the component configuration file -

```
<add key="logType" value="Warning,Error" />
```

#### Configuration Files -

- **ADTree** - Web application (extended logging for Active Directory Updates, creates the ADXmlTree.log file) - [CardioLog Installation Folder]\ADTree\web.config
- **SP20XXTree** - Web application (extended logging for Portal Tree Updates, creates the SP20XXTree.log file) - [CardioLog Installation Folder]\SP20XXTree\web.config (**XX** - 07 for MOSS 2007, 10 for SharePoint 2010, 13 for SharePoint 2013)
- **CardioLog Scheduling Service** (extended logging for all service components, including Portal Tree Updates for SharePoint 2013 API method, SharePoint 2016 and SharePoint Online, creates the CardioLogServiceComponents.log file) - [CardioLog Installation Folder]\CardioLogScheduleServices\CardioLog.Services.exe.config
- **VisitorSegments** - Web application (extended logging for User Categories Updates, creates the VisitorSegments.log file) - [CardioLog Installation Folder]\VisitorSegments\web.config
- **CardioLog** - Web application (extended logging for the CardioLog UI, creates the CardioLogUI.log file) - [CardioLog Installation Folder]\CardioLog\web.config