

CardioLog 2010

System Requirements and

Architecture

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System Requirements

To ensure optimal operation, it is recommended to install the CardioLog application and database on dedicated servers.

Make sure that your system meets the following minimum hardware and software requirements:

	Professional Edition	Enterprise Edition
Platform	32-bit	64-bit
Operating System	Windows 2003/2008 Server or Windows 2003 R2/2008 R2 Server Standard Edition (fully patched)	Windows 2003/2008 Server or Windows 2003 R2/2008 R2 Server Standard Edition (fully patched)
Memory*	4 GB	Minimum** - 8GB Recommended - 16 GB
Processors*	2xQUAD	Minimum** - 2xQUAD Recommended - 4xQUAD
SQL Edition	Microsoft SQL Server 2005/2008 Standard Edition (fully patched)	Minimum** - Microsoft SQL Server 2005/2008 Standard Edition (fully patched) Recommended - Microsoft SQL Server 2005/2008 Enterprise Edition (fully patched)
SQL Memory	3 GB	8 GB
SQL Processors	2xQUAD	Minimum** - 2xQUAD Recommended - 4xQUAD
SQL Storage		
System Disk	10 GB	10 GB
Page File Disk	10 GB	10 GB
Database Disk	~150 GB (depending on the monitored environment)	~150 GB (depending on the monitored environment)
Transaction Log Disk	According to the backup policy	According to the backup policy
RAID	Raid 5/10 or similar	Raid 5/10 or similar
Additional Software & Services	<ul style="list-style-type: none"> • Microsoft .Net Framework 2.0 	<ul style="list-style-type: none"> • Microsoft .Net Framework 2.0

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|---|---|
| <ul style="list-style-type: none">• IIS 6.0, IIS 7.0 or IIS 7.5• Microsoft Internet Explorer 6.0 or higher• SQL Server 2005/2008 Command Line Query Utility• SQL Server 2005 Backward Compatibility Components | <ul style="list-style-type: none">• IIS 6.0, IIS 7.0 or IIS 7.5• Microsoft Internet Explorer 6.0 or higher• SQL Server 2005/2008 Command Line Query Utility• SQL Server 2005 Backward Compatibility Components |
|---|---|
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* This refers to hardware allocated for the CardioLog application pool and services (and not for the CardioLog SQL server)

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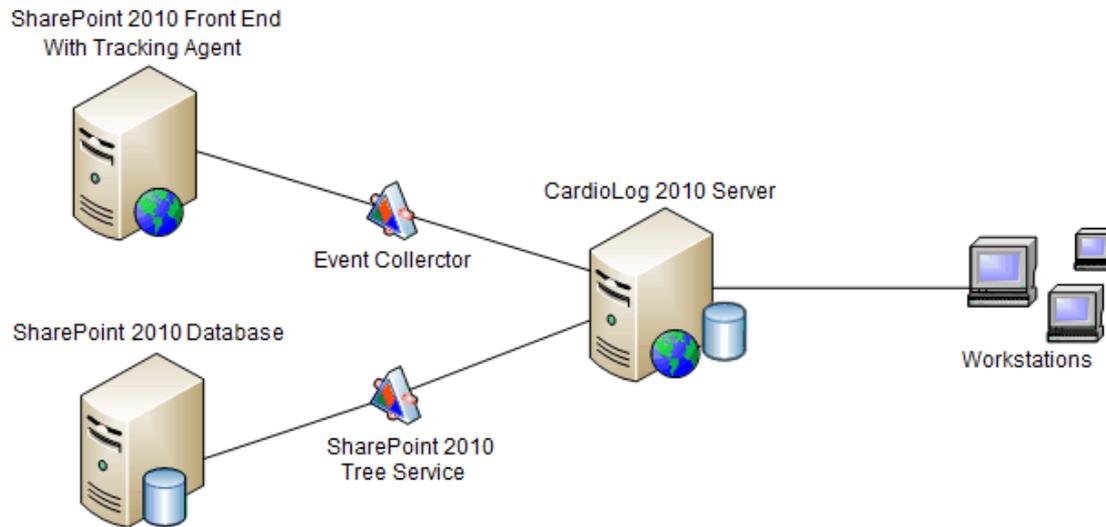
CardioLog 2010 Architecture

The CardioLog 2010 solution includes the following separate components:

UI	A web application for configuring and viewing the web analytic reports. Hosted on the CardioLog 2010 server.
Database	A repository for storing all tracking and reporting data. Hosted on the CardioLog 2010 server.
Portal Tree Service	A web service which provides the structure of the monitored environment. CardioLog 2010 includes several off-the-shelf portal tree services, such as the SharePoint 2010 Tree Service.
Tracking Agent	A JavaScript tag which is included in the portal pages and which captures site usage. CardioLog 2010 includes several off-the-shelf tracking agents, such as the SharePoint 2010 Agent.
Event Collector	A web service which sends tracking data from the tracking agent to the main CardioLog 2010 database.
Offsite Application	A web application which sends tracking data captured by tracking agents in DMZ - to the Offsite database.
Offsite Database	A repository of tracking data in DMZ.
User Categorization Service	A web service which provides custom visitor data.

Sample Configuration

This is a basic CardioLog 2010 configuration for an intranet-based SharePoint 2010 environment:



For performance reasons, it is recommended to separate CardioLog 2010 from the monitored environment and install it on a designated server.

SQL Database Sizing

Hard disk allocation depends on the size of the monitored environment and the level of activity taking place in the portal. Additional factors that should be considered are the backup and clean-up policies and the amount of data accumulated over time. For example, an installation with 270MB of monitored data per day requires a total disk space of about 100GB - for a single year of data.

In practice, the estimated database size depends on the size of the CardioLog 2010 event tables. The following formula depicts the sizing calculation for the database:

$$\mathbf{Sd = (Srd + Sri) \times Nu \times (Ns \times 10 + Ne) \times P}$$

Where:

Sd = estimated size of the database

Srd = average size of data per event (0.806 KB)

Sri = average size of index per event (0.666 KB)

Nu = number of users in the monitored environment

Ns = average number of search operations per day per user (each search operation generates 10 events)

Ne = average number of non-search operations (actions, views, etc.) per day per user (each non-search operation generates 10 events)

P = length of the monitoring period – in days