



# Systems Requirements for SedonaDashboard and SedonaAnalytics

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## Overview

This document discusses hardware and software requirements for SedonaDashboard and SedonaAnalytics managed reporting products. Topics include:

- General Requirements
- How Should Your Server Be Configured?
- How Many Servers Do You Need?
- Server Virtualization

## General Requirements

The following general hardware and software components are supported by the latest releases of SedonaDashboard and SedonaAnalytics:

### Browsers

- Internet Explorer: 7, 8, 9, 10, 11 (Certified); see note below about earlier versions.
- Microsoft Edge 20
- Firefox, Chrome: all current public versions (Supported).
- Opera, Safari: all current public versions (Supported).

### Hardware

- 1 GHz or higher processor recommended; 400 MHz minimum required.
- 1 GB or higher RAM recommended; 512 MB of RAM minimum required.
- 1 GB of available disk space (with .NET already installed).

### Operating Systems

- Windows Server 2012 R2, 2008, 2003
- Windows 10 (all editions)
- Windows 8 (all editions except RT)
- Windows 7 (all editions)
- 32-bit and 64-bit Windows OS supported

### Web Servers

- Microsoft Internet Information Server (IIS) 7.x, 8.x
  - ASP
  - ASP.net
  - Hostable web core
- Internal DNS Entry



## Other Software

The following component must be installed for SedonaDashboard and SedonaAnalytics:

- Microsoft .NET Framework 4.x

## Data Sources

SedonaDashboard and SedonaAnalytics need access to your SQL server. Both the server hosting the SedonaMaster and the server hosting your company databases (if they are on separate servers).

## Outside of Network Access

SedonaDashboard and SedonaAnalytics can be accessed outside of your network through a Web Interface. The Requirements for this would be:

- Open TCP port 443 (port 80 optional) to the public internet
- Static public IP address tied to DNS entry
- Public DNS entry for SedonaDashboard (example sedonadashboard.yourdomain.com)
- SSL Certificate from a public Certificate provider (example GoDaddy or Verisign) that matches your DNS entry

## Notes

Microsoft Internet Information Server (IIS) must be installed *before* installing SedonaDashboard and SedonaAnalytics. SedonaDashboard and SedonaAnalytics requires .NET Framework 4.x. If not already in place, with your consent, appropriate versions of the .NET Framework are installed when SedonaDashboard and SedonaAnalytics is installed. They are also available for free from the [Microsoft Download Center](#).

Browser updates are being released so rapidly that it's impossible for us to guarantee that all browser versions will work on a day-to-day basis, or that a new browser release won't be incompatible with an older version of SedonaDashboard and SedonaAnalytics.

## How Should Your Server Be Configured?

In a typical scenario with an average data size per report (less 10MB of data per report), you should be able to serve 50-100 concurrent users per multi-core CPU on a production server, assuming a good amount of RAM (2GB+) and a fast hard drive (12K RPM+). Here are three representative configuration levels for the web server.

### **A low-performance hardware configuration:**

1 multi-core CPU, 1-2GB RAM, 12K RPM HD, 32-bit OS

### **A better performance configuration (for more users or more data):**

Quad-Core CPU, 2-4GB+ RAM, 15K RPM HD, 32-bit OS

### **The best performance configuration begins with the previous configuration and adds:**

Additional CPUs (2 or more Quad-Core CPUs), more RAM (8GB+), 64-bit OS, or move to a clustered environment.

## General

Here are a few general "rules of thumb" when considering server configuration options:

- More Data and Data Complexity = More RAM
- More Reports, Larger Reports, Complex Reports = Faster hard disk, more available hard disk space
- More Traffic and Concurrent Visitors = More CPUs/Cores

## How Many Servers Do You Need?

Your production web server hosts your SedonaDashboard and SedonaAnalytics, which run as extensions to the web server. Ideally, this computer should be dedicated to this task alone.

However, other configurations are possible and feasible, including those in which the web server also serves other functions (i.e. is not dedicated to reporting alone) and/or the database server is also on the reporting server computer.

Which configuration should you use? We do not have guidelines based on specific numbers of users or reports to share with you; each deployment situation is different.

Whether you choose to combine functions (web server, SedonaDashboard and SedonaAnalytics, and database server) on one computer is, ultimately, your decision. Numerous factors can affect this decision, including the amount of web server traffic, the number of concurrent database users, the size of the databases, the complexity of the database queries, the frequency of report access, and, not least, cost.

## Server Virtualization

Many organizations are using server virtualization to maximize hardware usage and reduce costs. Server virtualization products allow the assignment of CPU resources to processes. This may take the form of a maximum percentage of combined CPU utilization, or as specific allocation of logical CPUs, to a virtual machine (VM). The server administrator is responsible for making these configuration decisions. In order to ensure good performance in any virtualized server environment, administrators must be careful to allocate appropriate resources to VMs.