

## IQSweb Reference A

### IQSweb System and Security Requirements

The IQSweb application can be installed and configured for a variety of hosting situations based on your organization's preferences. Two basic scenarios are described below that you can select from depending on the number of machines/servers you have, whether you want to expose the application through the internet or keep it inside your intranet and how you have your firewall(s) configured. Pick the scenario that best fits your organizations Information Technology guidelines to see the requirements for security, software and hardware.

#### 1. Installing on a Single Machine

**When the application is hosted locally on a single machine, it has to be behind the firewall on the intranet.** The application must not be opened to the public because the database also resides on the same machine and if the server (machine) and the application are exposed to the public, the security risk for the data is very high.

- **Minimum Software/Hardware Requirements:**

- If using a server
  - Microsoft Windows 2008 Server or newer
    - Processor: 1.0 GHz (x86) or 1.4 GHz (x64); 2.0 GHz or faster recommended
    - Memory: 512 MB RAM; 2 GB RAM or more recommended
    - Hard Drive: 10 GB minimum; 40 GB or greater recommended
  - Internet Information Services (IIS)
  - Microsoft .NET Framework 3.5 SP 1 (for SQL Server 2008-2014), 4.5.2 (for IQSweb application)
  - SQL Server 2008 SP3 or newer (SQL Server Express also supported)
  - Crystal Reports 2013 Runtime
- If not using a server
  - Windows 7 or newer
    - Processor: 1.0 GHz
    - Memory: 1.0 GB RAM (32 bit); 2.0 GB RAM (64 bit)
    - Hard Drive: 16 GB
  - Internet Information Services (IIS)
  - Microsoft .NET Framework 3.5 SP 1 (for SQL Server 2008-2014), 4.5.2 (for IQSweb application)
  - SQL Server 2008 SP3 or newer (SQL Server Express also supported)
  - Crystal Reports 2013 Runtime

2. Installing on Multi-Server (two) environment.

**When the application is hosted in a Multi-Server environment, the application can operate on the intranet or on the internet (opened to public).**

The hosting process is the same for both scenarios with the security requirements being different.

In the Intranet hosting, both the web server machine and the database server machine reside behind the firewall in a secured zone.

With the Internet hosting (application being opened to public over the WWW), the web server machine resides in the DMZ (De-Militarized Zone) which is secured by a firewall and the Port 80 (or 443 if using SSL) of the web server is open for the public requests. In this mode the database server resides behind a firewall in a secured zone and the only traffic allowed to this machine is from the web server over port 1433. All the communication between web server and the database server is using port 1433. It is recommended that all communication be encrypted using SSL (Secure Socket Layer) or IPSec (Internet Protocol Security). The web server hosts the web application along with the Crystal Reports Runtime. The database server hosts the database.

• **Minimum Software/Hardware Requirements:**

- Web Server
  - Microsoft Windows 2008 Server or newer
    - Processor: 1.0 GHz (x86) or 1.4 GHz (x64); 2.0 GHz or faster recommended
    - Memory: 512 MB RAM; 2 GB RAM or more recommended
    - Hard Drive: 10 GB minimum; 40 GB or greater recommended
  - Internet Information Services (IIS)
  - Microsoft .NET Framework 4.5.2 or newer
  - Crystal Reports 2013 Runtime
- Database Server
  - Microsoft Windows 2008 Server or newer
    - Processor: 1.0 GHz (x86) or 1.4 GHz (x64); 2.0 GHz or faster recommended
    - Memory: 512 MB RAM; 2 GB RAM or more recommended
    - Hard Drive: 10 GB minimum; 40 GB or greater recommended
  - Microsoft .NET Framework (3.5 SP1)
  - SQL Server 2008 SP3 or newer (SQL Server Express also supported)