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Product Support
If you have purchased a support package and have any questions during the use of Inquisiq™ that are not addressed in this guide, please visit our support site at: http://support.isclearninggroup.com/

Or contact us at:

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Overview
This Inquisiq Installation Guide provides a step-by-step process that ensures rapid deployment with minimal headaches. Once completed you only need to make a few configuration changes to be up and running.

All of our user guides, manuals, sample SCORM packages, and white papers can be found on the Inquisiq™ LMS website at http://www.inquisiqr4.com/resources/documents/

Table of Contents
Before you Begin! .............................................................................................................................................4
Server Requirements ...........................................................................................................................................5
Things to Note When Upgrading from v2.11.0319 or Earlier .......................................................................6
Installation ........................................................................................................................................................7
    Select Destination Folder ...............................................................................................................................7
    Database Server Information .........................................................................................................................8
    Finishing the Installation ...............................................................................................................................8
Configuration ....................................................................................................................................................9
    Database Configuration .................................................................................................................................9
    Enabling CLR (Common Language Runtime) ...............................................................................................10
    Application Configuration .............................................................................................................................11
    Internet Information Services (IIS) Configuration .......................................................................................13
    Mail (SMTP) Service Configuration ........................................................................................................15
    Scheduling the Emailer Script .....................................................................................................................18
Software Activation .........................................................................................................................................21
    How to Activate ...........................................................................................................................................21
    Testing Your Email Configuration .............................................................................................................22
Domain Name Configuration ...........................................................................................................................23
    DNS Configuration .......................................................................................................................................24
Before you Begin!
While every effort has been taken to ensure that the setup process is as easy as possible, a certain level of expertise in database and web server setup and troubleshooting is required. Not all servers are delivered with the same configuration therefore it may be necessary for you to install, enable, configure and/or disable components or services on your server before Inquisiq™ (or any other web application) is able to run.

If you are not proficient in the following concepts and processes for troubleshooting problems that may be related to them, you should consider seeking assistance from qualified personnel before proceeding:

- Windows IIS setup and configuration
- Domain name services (DNS) and network routing
- Microsoft SQL Server database server setup and configuration including security and remote connections.
- SMTP (email) services, authentication, routing and filtering.

Before you begin your installation, be sure that:

- Your application server has IIS configured and is able to execute and serve ASP files.
- Your database server is able to be accessed from your application server via SQL authentication. This may require server and/or client configuration even if your application and database reside on the same server.
- Your mail server is configured to allow the application server to use it to send email by allowing IP-based relaying. This may require configuration even if your application and mail service reside on the same server.

In many cases, you will be able to find solutions to typical configuration issues by searching the ICS Learning Group Knowledgebase at [http://support.icslearninggroup.com](http://support.icslearninggroup.com), however general-knowledge server, network, database, and mail setup and troubleshooting is not covered under ICS Learning Group support contracts. As part of your support contract, ICS Learning Group Support will answer basic installation questions related to this document. Detailed troubleshooting and issue resolution related to Inquisiq™ installation will require you to opt into our remote installation/upgrade service.
Server Requirements
Note that you may install the Inquisiq™ application and your database software on the same or different servers. While not recommended, if you install them on the same server, be sure that the server meets the recommended requirements listed below and the recommended requirements of your database software as well as accounting for the performance needs of any other applications that may be installed.

Minimum Supported:
- Dual Processor @ 2.0 GHz
- 4 GB RAM
- .NET Framework 3.5 Service Pack 1
- Microsoft Windows Server 2008 R2 (Standard Edition or higher)
- Internet Information Services (IIS) 7.x
- Microsoft SQL Server 2008 R2 Service Pack 2 (Workgroup Edition)

Recommended:
- Dual Processor @ 2.0 GHz or higher
- 8 GB RAM
- .NET Framework 3.5 Service Pack 1
- Microsoft Windows Server 2012 R2 (Standard Edition or higher)
- Internet Information Services (IIS) 7.x
- Microsoft SQL Server 2014 (Standard Edition or higher)

⚠️ The Recommended System Requirements are **guidelines only** and will vary depending on your system usage. Higher user concurrency and larger user bases will require more server resources (CPU and RAM) on both the web server and database server.

⚠️ Do not install the Inquisiq software on a Windows Domain Controller or promote an Inquisiq Application Server to a domain controller after installation. Exposing a domain controller to web traffic is not only insecure but is generally considered bad practice.

*ICS Learning Group Support does not cover your installation if it resides on a Windows Domain Controller.*
Things to Note When Upgrading from v2.11.0319 or Earlier

If you are upgrading from Inquisiq R3™ v2.11.0319 or earlier, please follow the instructions below appropriate to your installer version (x86) (32-bit) or x64 (64-bit) before attempting to run the Inquisiq installer. You will need to unregister the Inquisiq Controller DLL before running the installer. This process will only need to be completed for this upgrade; future upgrades will not require this process.

To unregister the Inquisiq Controller DLL when upgrading to Current Release (x86):

1. Stop the Inquisiq site in IIS.
2. From a command prompt, type and execute the following command:

   ```
   C:\Windows\Microsoft.NET\Framework\v2.0.50727\regasm /unregister "D:\Program Files\ICS Learning Group\Inquisiq R3\System\InquisiqR3.dll"
   ```

   **NOTE:** If the installation directory is different from what is shown above, adjust the path to the DLL accordingly.

3. Reboot the server.

To unregister the Inquisiq Controller DLL when upgrading to Current Release (x64):

1. Stop the Inquisiq site in IIS.
2. From a command prompt, type and execute the following commands:

   ```
   C:\Windows\Microsoft.NET\Framework64\v2.0.50727\regasm /unregister "D:\Program Files (x86)\ICS Learning Group\Inquisiq R3\System\InquisiqR3.dll"
   ```

   ```
   C:\Windows\Microsoft.NET\Framework\v2.0.50727\regasm /unregister "D:\Program Files (x86)\ICS Learning Group\Inquisiq R3\System\InquisiqR3.dll"
   ```

   **NOTE:** If the installation directory is different from what’s shown above, adjust the path to the DLL accordingly.

3. Reboot the server.
Installation
The Inquisiq installer does not support remote application installation; therefore you must be working directly on the application server or be connected to it through Windows Remote Desktop. To begin, double-click the Inquisiq LMS installer and follow the on-screen instructions.

Be sure that you are logged into the application server using the local Administrator login (not simply a user in the Administrators Group) when you run the Inquisiq installer.

If you are upgrading, files that you have manually modified since the last time you ran the installer will not be overwritten by the installer as the Microsoft MSI rules consider these “user-data” files. If you have manually edited any code files you should delete them prior to running the installer so that it will install the newer version of those files.

Select Destination Folder
Select the installation location. You may change this location by clicking the Change... button, however it is not recommended. The installer will create the appropriate System and Web folders in the location specified here.

Important Note! If you are upgrading from Inquisiq EX do not select the same destination folder that your Inquisiq EX installation is installed to. Allow the Inquisiq installer to install to a new destination folder and use the Inquisiq EX to R3/R4 Converter (available separately) to convert individual accounts. Note that to use the converter, your Inquisiq EX and Inquisiq databases must be located within the same SQL instance. If you are installing Inquisiq to a different database server you may temporarily move it to the Inquisiq EX database server for conversion.
Database Server Information
Enter your database server information and login credentials. The login you use must be granted the sysadmin role as it needs to be able to create the database and related functions, procedures and agent jobs.

Note that if the database name you enter in Name of database catalog does not exist, it will be created during the installation.

**Important Note!** If you are upgrading from Inquisiq EX do not select the same database that your Inquisiq EX installation is using. Specify a new database for the Inquisiq installer to create.

Finishing the Installation
When you are ready, click the Install button and the setup program will install the Inquisiq application and database.
**Configuration**

The screenshots below illustrate configuration settings on a server using Windows 2003, IIS 6, and SQL Server 2005 and may appear differently on a server using later versions of Windows Server, IIS, and SQL Server. However, the parameters and values remain the same.

**Database Configuration**

During the setup, a database user is created for the Inquisiq application to use to connect to the database. For security reasons, this user has been created with a randomly generated password and disabled by default. This section will outline enabling this user as well as resetting the password.

Log into your SQL Server and expand the Security / Logins node in the Object Explorer. Right-click the **inquisiq** user and select **Properties**.

![Object Explorer](image)

In the **Login Properties** window, enter and confirm the new password for the login.
Click **Status** on the left side menu then select **Enabled**.

Click **OK**. The database user is now enabled and ready to be used.

**Enabling CLR (Common Language Runtime)**
The Common Language Runtime (CLR) must be enabled on your SQL Server in order to use the Grouping Rules functionality of Inquisiq. The Installer does not automatically enable this option so that you may control its use; enabling CLR makes it available to all databases on the SQL Server. If you do not enable this option, the Grouping Rules will not be available within the LMS, however the system will otherwise not be affected.

To enable CLR, you will need to execute the following script on your SQL Server. In order to execute this script, you must use a login that is a member of the sysadmin group or serveradmin group:

```sql
sp_configure 'show advanced options', 1;
GO
RECONFIGURE;
GO
sp_configure 'clr enabled', 1;
GO
RECONFIGURE;
GO
```
Application Configuration
Open the /_lib folder contained within the LMS website’s home directory. You should see the global configuration file _global.default that was installed with the application. This file contains most of the parameters that you will use to configure Inquisiq to your liking.

Important Note! If you are upgrading from a previous version of Inquisiq, be sure to compare the _global.default file from the newly installed version to your existing _global.asp as there may be added parameters for the new version. It is best to simply copy the parameter values from your existing _global.asp into the new _global.default and save it as _global.asp; replacing the existing _global.asp.

Make a copy of this file, rename it _global.asp and open it for editing using a text editing application such as Notepad.

Required Parameters
The following parameters are required and must be set in order for your system to function properly:

- **GC_DOMAIN** – the domain name that the application will be using. The name you enter here must resolve to the IP address of your Inquisiq installation in order for your system to function properly. When an LMS account is created on the system, its account name will be appended to the front of the GC_DOMAIN value to create the full URL of that LMS account. For example, an account with the name “acme” that is created on an Inquisiq system with a GC_DOMAIN value of “inquisiqr4.com” must be accessed at the URL http://acme.inquisiqr4.com. Alternate domain name aliases for LMS accounts can be configured once they have been accessed via their associated URL.

- **GC_LICENSE_NUMBER** – the license number provided to you by ICS Learning Group. This 16 character alpha-numeric string uniquely identifies your Inquisiq license. Each server installation must have its own license number.

- **GC_CONTROL PANEL_PASSWORD** – the password you will use to access the Control Panel. Only the server administrator should have access to this. The server administrator will usually be you, the person that is installing or managing the server and all accounts on it. Individual account holders and end-users should not be given this password or allowed into the Control Panel.

- **GC_DB_SERVER** – the name or IP address of the database server where the LMS database is located.

- **GC_DB_LOGIN** – the username of the database account that the LMS application should use to access the database server. This is the username of the account that you configured earlier and should be the same account (inquisiq) that the installer automatically created.

- **GC_DB_PASSWORD** – the password of the database account that the LMS application should use to access the database server. This is the password that you configured earlier and should be the password for the inquisiq user account.

- **GC_DB_NAME** – the name of the Inquisiq database catalog.
Optional Parameters
The following parameters are optional, but should be set for full functionality of the system:

- **GC_PORT** – the port that the Inquisiq website is using. Unless you have customized your IIS website configuration you should not change this value.
- **GC_SECURE_PORT** – the secure port that the Inquisiq website is using. Unless you have customized your IIS website configuration you should not change this value.
- **GC_APP_IP** – the externally exposed IP address for the web application. This is for information only; it does not affect any functionality. It informs account holders of the IP to use for creating their own DNS records pointing to the application.
- **GC_LICENSEE_NAME** – your name or your company’s name.
- **GC_LICENSEE_EMAIL_ADDRESS** – your company’s email address. Note that this is not for end-users; they will be directed to the account holder for assistance. The only time this address is used is:
  - As the recipient address when testing the email configuration of the system.
  - As the “from” address on emails sent to new account holders.
- **GC_SYSTEM_ADMINISTRATOR_WEBLINK** - The reference that is used for “contact the administrator” links displayed in the interface. Should either be a fully-qualified URL (including http:// or https://) or an email reference (mailto:...).
- **GC_SMTP_SERVER** - The name or IP address of the SMTP server that the application will connect with to send emails.
- **GC_SMTP_PORT** - The port on the SMTP server that the application should connect to.
- **GC_SMTP_USERNAME** - If your SMTP server requires authentication, enter the username that the application should use when connecting.
- **GC_SMTP_PASSWORD** – If your SMTP server requires authentication, enter the password that the application should use when connecting.
- **GC_SYSTEM_EMAIL_ADDRESS** - The “from/reply” email address that will be used when sending emails. To ensure successful deliveries, this address should be with the same domain as the GC_DOMAIN value.

**Important Note!** There are additional optional parameters contained in the _global.default file that are set to default values and are usually not changed. The functionality of these parameters is explained in the _global.default file. However, if you have any questions about the functionality of the parameters, please contact ICS Learning Group Support.
Internet Information Services (IIS) Configuration

Under normal circumstances you should not have to make any configuration changes to the Inquisiq IIS website. Note, however that if no IP addresses are available on your server, the Inquisiq site will be created in the stopped mode and must be manually started once an IP address is available.

Shared IP Addresses

If you intend to use a shared IP address, you will have to enter a host header entry for the GC_DOMAIN as well as each sub-domain (account name) that is created in the LMS. For this reason it is recommended that you use a dedicated IP address for the application.

Adding a Host Header Value

The following steps are required only when using a shared IP address. Open IIS and right-click the Web Sites node and select Properties.

Click the Advanced... button.
To add a new host header, click the **Add...** button. To edit an existing host header, click the **Edit...** button.

Enter the **Host Header** value. Click **OK** to close all property windows.
Mail (SMTP) Service Configuration
This manual assumes that you are using the web server’s IIS SMTP service for delivering email. If you are using a different SMTP server, the same basic principles will apply, however the steps to achieve this result may vary.

Relaying
If you have not specified an SMTP username and password in the global configuration file, then the LMS application will be connecting anonymously to your SMTP server. By default, IIS’s SMTP service does not allow email to be sent through anonymous connections, so we will need to add an exception for relaying.

Open IIS and right-click the Default SMTP Virtual Server and select Properties.

When the new windows opens, click the Access tab. Click the Relay... button.
Ensure that **Only the list below** is selected. Click the **Add...** button.

Select **Single Computer** and enter 127.0.0.1 in the **IP Address** field. Click **OK** to close all property windows.

**Fully Qualified Domain Name**

In order to ensure that the server name included in email headers corresponds to the name of the server, you’ll need to set the Fully-qualified domain name property in the SMTP Configuration. Open IIS and right-click the **Default SMTP Virtual Server** and select **Properties**.

When the new window opens, click the **Delivery** tab. Click the **Advanced...** button.
Enter your GC_DOMAIN name in the **Fully-qualified domain name** field. Click **OK** to close all property windows.

**PTR (Reverse-DNS) Records**
To help ensure that emails generated by the system are accepted by recipient servers, be sure that your web host has created a PTR Record for your IP address. PTR records are also known as Reverse-DNS records and are checked by some mail servers as a way to filter spam. Your web host should create a PTR record for your IP address that resolves to the GC_DOMAIN name that you entered in the global configuration file.

**SPF Records**
To help ensure that emails generated by the system are accepted by recipient servers, you should also create SPF Records for your domain. SPF Records contain a list of servers are allowed to send email for a particular domain. Recipient servers may check the SPF Records of your domain when receiving email to ensure that the server that sent the email is listed and therefore authentic. To create SPF Records, contact the DNS provider for your GC_DOMAIN name.
Scheduling the Emailer Script

The Inquisiq LMS uses a small windows script to send the automated email notifications that you have configured. You will need to schedule this script to run at a regular interval so that it may send emails as events in the system occur.

Click Start, Settings, Control Panel, Scheduled Tasks and Add Scheduled Task to schedule the Emailer script. After the Scheduled Task Wizard window opens, click the Browse... button.

Find the [INSTALL_FOLDER]/Web/_maintenance/EventEmailQueueProcessor/process.vbs file (where [INSTALL_FOLDER] is the destination folder that you selected during the installation process). Select Daily and click Next.

Enter 12:00 AM as the Start time and select Every Day. The Start date should default to the current day. Click Next.
Enter the computer account username and password that should be used to execute the script. The account you select should have permission to execute VBS files. Click **Next**.

Check the **Open advanced properties...** box and click **Finish**.

The advanced properties for this task will automatically open. Click the **Advanced...** button.
Check the **Repeat** task box. You can configure the task very frequently or very infrequently. Every time the task is run, it will collect and send emails for events that have occurred (per the automated email notification settings in your application) since the last time the task ran. The more frequently you schedule the task, the less work it must do each time it runs. It is recommended that you schedule the task to run every 15 minutes.

![Advanced Schedule Options](image)

Enter 23 hours and 59 minutes for the unit duration so that the task will continue to repeat for the duration of each day. Alternatively, if you do not want the server burdened with this task during peak usage, you may adjust this setting along with the Start time setting so that it only runs during off-peak hours. Click **OK** and then click the Settings tab.

Configure the task to stop if it has run for the same interval that you specified earlier. This ensures that if there is a problem executing the task, it does not hoard server resources beyond a specified timeframe. Click **OK** to close all property windows.

![Process Editor](image)
Software Activation
The Inquisiq Learning Management System must be activated before you can use it. Activation only takes a few minutes; however you can only get an activation code from ICS Learning Group after it has been installed. Be sure to plan for this when scheduling your installation and rollout.

How to Activate
Using a web browser, navigate to http://[IPADDRESS]/controlpanel where [IPADDRESS] is the IP Address of your application.

Important Note! If your system is using a shared IP address, then it may not be accessible from a web browser by IP. In this case, configure your domain name and DNS records first, then return to this section and activate using your domain name instead of the IP.

Enter the password that you specified for GC_CONTROLpanel_PASSWORD in the form and click Login to open the Control Panel.

You should immediately be taken to the Software Activation page. This page will display your activation information. Once activated, you can access your license information by clicking the License icon in the Control Panel.
Copy the Activation Request value and send it to the Inquisiq Support Team by submitting a ticket on our support site at http://support.icslearninggroup.com/. Indicate whether this activation is for a development (temporary) environment or production environment. Please note that activation codes are unique to your system configuration and you may only operate one production activation per license number.

**Important Note!** Activation Codes are generated and checked using information that is specific to your installation. Changing installation parameters such as the installation location, database location, etc after you have activated may require reactivation with a new code. If this happens, your application will not be accessible until you have entered a new activation code.

The Inquisiq Support Team will send you the code that will activate your system. Development codes are limited-time codes that expire. A production activation code will not have any expiration, however it will no longer work if another server is activated using an activation code that was generated from the same license number.

**Testing Your Email Configuration**
Test your SMTP Configuration by using the test utility that is found in the Control Panel. Log into the Control Panel and click the **Verify Email Setup** icon.

You will see a confirmation alert noting the test process and the relevant SMTP settings that will be used. Click **OK** to proceed with the test and view the results.
If the test fails, please refer to the section above entitled Mail (SMTP) Service Configuration for more information.

**Important Note!** The SMTP Test only verifies that your SMTP service and application settings have been properly configured; it does not ensure that your email will be delivered successfully. Once an email is sent by the SMTP service, successful delivery is dependent on many outside variables including the configuration of the recipient server and your DNS, PTR and SPF records.

**Domain Name Configuration**

Because Inquisiq uses the domain name entered in the browser’s address bar to determine which account in your application should be delivered to the user, you must use properly resolved domain names (either through DNS records or local HOSTS file entries) to access the LMS accounts. If you enter a domain name that properly resolves to your server but cannot be matched to an account in the software, an “Unknown Application” message will be displayed in your web browser.
DNS Configuration
Since any sub-domain in the URL is a potential LMS account; it is recommended that you configure your domain with a “wildcard” host record. With this record any sub-domain name a user enters in their browser address bar will be directed to your server and the LMS will automatically attempt to deliver the account that corresponds to that sub-domain name.

Configure your DNS by creating an A record for your domain name that points to the IP address of your Inquisiq installation, then also create a CNAME record as a wildcard that aliases all sub-domains to your A record name.

For example:

<table>
<thead>
<tr>
<th>Host Name</th>
<th>Record Type</th>
<th>Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>inquisiqr4.com</td>
<td>A</td>
<td>200.201.202.1</td>
</tr>
<tr>
<td>*</td>
<td>CNAME</td>
<td>inquisiqr4.com</td>
</tr>
</tbody>
</table>

With this configuration you do not need to create DNS records for each sub-domain— web browsers will be directed to your server no matter what sub-domain is entered in the address bar. Therefore, ‘anysubdomain.inquisiqr4.com’ will always be directed to this Inquisiq installation.

If you are unable to create a wildcard record, you may manually create DNS records for each account. Be sure that whenever a new LMS account is created, you also create a corresponding CNAME Record; using this configuration, the account will not be accessible until you do so.

For example:

<table>
<thead>
<tr>
<th>Host Name</th>
<th>Record Type</th>
<th>Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>inquisiqr4.com</td>
<td>A</td>
<td>200.201.202.1</td>
</tr>
<tr>
<td>myaccount.inquisiqr4.com</td>
<td>CNAME</td>
<td>inquisiqr4.com</td>
</tr>
<tr>
<td>youraccount.inquisiqr4.com</td>
<td>CNAME</td>
<td>inquisiqr4.com</td>
</tr>
</tbody>
</table>

If you are not using a domain name, but rather a hostname within your corporate network, the above still holds true. Simply replace the domain name value with that of your application server’s full hostname.