



## Web Client Configuration Guide (for Microsoft IIS Web Server)

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# Contents

## CitectSCADA Web Client

Introduction	1
System architecture	1
Getting Started	3
Setting up your Web Server using Microsoft IIS	5
Selecting an appropriate PC	5
Requirements	5
Installation	6
What's been installed?	7
The IIS virtual directory	8
Security	11
Web Client user account types	11
Setting up security using IIS	13
Client type access rights	13
Configuring client account user groups	14
Preparing the Web Server folder	15
Setting up access rights for client accounts	18
Deleting a user account	19
Testing the Web Server security settings	19
Logging on to the Web Server	20
Preparing a CitectSCADA Project for Deployment	21
Functionality limitations of the Web Client platform	21
Feature limitations	21
Cicode Function Limitations	22
Preparing a project's user files for delivery	23
Running the Web Deployment Preparation tool	24
Configuring a deployment	25
Creating a new deployment	26
Deploying a project from within CitectSCADA	28
Displaying a deployment	30
Editing an existing deployment	31
Updating a deployment to reflect project changes	32
Deleting a deployment	32
Implementing Multiple Language Support	35
How default languages are implemented	35
Using a language different to the current system locale setting	36
Implementing a non-default language	36
Web Client Upgrade Issues	39

Frequently Asked Questions .....	40
Windows 2003 Server-related issues .....	40
General issues .....	41

# CitectSCADA Web Client

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## Introduction

The CitectSCADA Web Client allows you to view a live CitectSCADA project within a Web browser. It provides easy access to CitectSCADA Runtime for LAN-connected users requiring read/write access to current production information.

For example, a senior manager could monitor a facility and access current production information from any computer on the LAN without the need for extensive downloads or software installation.

See Also [System architecture](#)

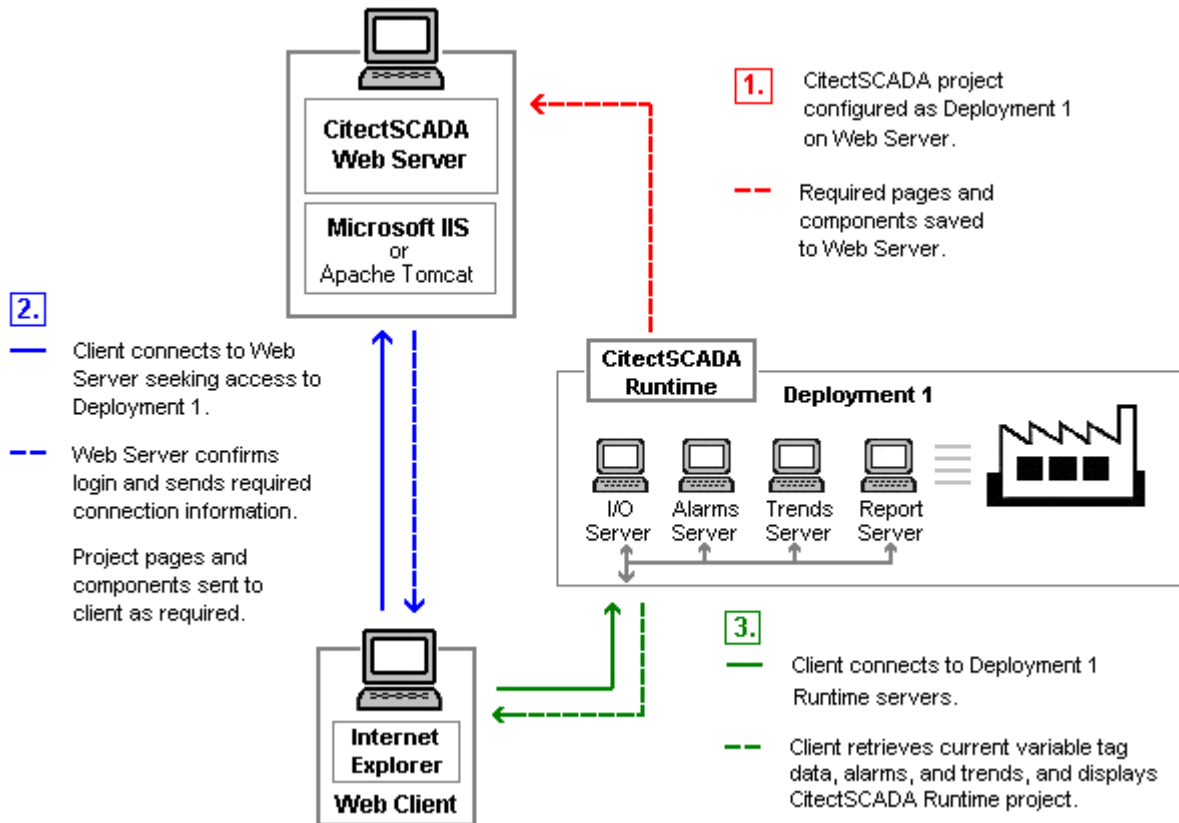
## System architecture

To display a live CitectSCADA project in an Internet browser, you must combine the content of the project pages and the current data these pages present using standard, Web-based communication protocols. To understand the communication architecture for the CitectSCADA Web Client, it's easiest to consider the role each of the following components play in achieving this outcome:

- **CitectSCADA Web Server** - Performs the server-side functionality of the system. As well as facilitating communication, it directs a client to the graphical and functional content of a CitectSCADA project and the location of the runtime servers. This information is stored on the Web Server when a CitectSCADA project is configured as a "deployment". A CitectSCADA Web Server can contain multiple deployments.
- **CitectSCADA Runtime Servers (including the I/O Server, Alarms Server, Trends Server and Report Server)** - Monitor the physical production facility and contain the live variable tag data, alarms and trends that the Web Client will display.
- **Web Client** - provides the platform to merge a deployed project's pages and content with the raw data drawn from the runtime servers. Again, standard Web technologies are required, so the client uses Microsoft Internet Explorer.

The following diagram shows how these components interact.

CitectSCADA Web Client communications architecture.



Once the Web Client has connected to the Runtime servers, steps 2 and 3 become an ongoing process, with the required content being called upon as the user navigates the project pages.

Note that this diagram has the system components set up on different computers purely for the sake of explaining the communications model. In reality, the flexibility of the architecture allows these components to be distributed in any required arrangement; they can even share a common location.

## Getting Started

The CitectSCADA Web Client Help is designed to guide you through the steps required to successfully set up a Web Client system.

To ensure a successful installation, first familiarize yourself with the [System architecture](#), and then work through the following steps in the order provided.

### Notes

- Web Client version 6.1 cannot run a CitectSCADA version 6.0 project deployment, nor can it communicate with the 6.0 version of the CitectSCADA runtime environment. The converse also applies: Web Client version 6.0 cannot run a CitectSCADA version 6.1 project deployment, nor communicate with the CitectSCADA version 6.1 runtime environment. If you've upgraded to version 6.1 of the Web Client, you can still view your legacy deployments (that is, deployments created with version 6.0) by following the procedures described in [Web Client Upgrade Issues](#).
  - This document presumes you intend to use Microsoft's Internet Information Server (IIS) as the platform for your Web Server. You also have the option to use the Apache Tomcat Web Server. If you are unsure about which to use, see the topic *Choosing which Web Server technology to use* in the CitectSCADA online help before you proceed.
- 1 [Setting up your Web Server using Microsoft IIS](#) - covers the hardware and software requirements for the Web Server, and provides instructions for installing and configuring the required software.
  - 2 [Setting up security using IIS](#) - describes how security is implemented on the Web Server and the different types of client accounts used. It also explains how to set up and manage these accounts.
  - 3 [Preparing a CitectSCADA Project for Deployment](#) - explains the adjustments that need to be made to a CitectSCADA project prior to deployment on the Web Server.
  - 4 [Configuring a deployment](#) - describes how to deploy a project on the Web Server, by identifying its source location and associated servers. It also explains how to manage projects once deployed.
  - 5 [Implementing Multiple Language Support](#) - if required, there are several language options you can implement on the Web Server interface.

If you have performed the procedures outlined above and have problems, see [Frequently Asked Questions](#) to help resolve issues you might experience.



## Setting up your Web Server using Microsoft IIS

This topic describes how to prepare your Web Server for communication with LAN-connected clients using Microsoft Internet Information Services (IIS) as the server platform.

### Selecting an appropriate PC

Before deciding on which computer to use as your Web Server, you should consider your system architecture and whether or not the Web Server has appropriate access to the CitectSCADA runtime server(s).

If the CitectSCADA Web Server and CitectSCADA runtime server are set up on different machines, *and it is not possible to establish a trust relationship between them*, the two machines must be on the same domain so that the Web server can access the directory on the CitectSCADA server that's hosting the web deployment files. If, conversely, a trust relationship can be established between the Web Server and the CitectSCADA server, they can be on different domains as long as the Web server has read access to the project folder on the CitectSCADA server.

See Also [Requirements](#)  
[Installation](#)  
[What's been installed?](#)

## Requirements

The computer you decide to use as your Web Server must meet the following hardware and software requirements.

### Hardware requirements

- **Minimum:** Pentium II 500MHz, 256MB RAM, 25MB HD (free)
- **Recommended:** Pentium IV 1GHz, 512MB RAM, 1GB HD (free)

**Note:** Memory requirements depend on how many simultaneous Web Client connections are expected.

### Software requirements

- **Windows** 2000 Pro, XP Pro, 2000 Server, or 2003 Server
- **Microsoft Internet Information Services (IIS)** (Version 5 or later)
- **Microsoft Internet Explorer** (Version 6.0 or later)
- **NTFS file system**

### Note:

- The target drive for the Web Server software must use an NTFS file system, otherwise you won't have full access to the required Windows security settings (that is, the Folder Properties dialog will not have a **Security** tab). If you are currently using a FAT/FAT32 system, ensure you convert the drive to NTFS before installing the Web Server software.

- By default, CitectSCADA uses NetBIOS to facilitate communications over a network. To use the Web Server, you must switch your system over to TCP/IP. For details, see [Using TCP/IP for network communications](#) in the CitectSCADA online help.

See Also [Installation](#)

## Installation

Installing the CitectSCADA Web Server on an IIS-based Internet server involves:

- [Installing CitectSCADA Web Server](#)
- [Installing Internet Information Services \(IIS\)](#)

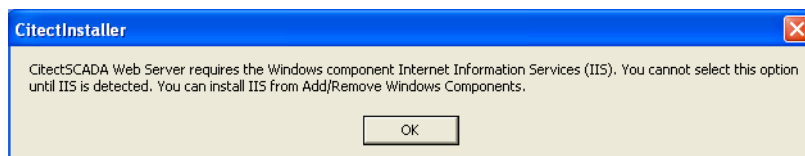
### Installing CitectSCADA Web Server

The Web Server software is installed off the CitectSCADA Installation CD1.

- 1 Launch the CitectSCADA installer (CD1) on the host computer.
- 2 Select **Web Server for IIS** from the installation options panel. (See [Installing Internet Information Services \(IIS\)](#) below if an error message appears.)
- 3 Select the destination folder for the installation. By default, this is C:\Program Files\Citect\CitectSCADA\WebServer.
- 4 The installer allows you to choose a **Complete** or **Custom** installation. Choose **Custom** if you want to install specific components of the Web Server system, for example, just the Web Client component.
- 5 Click **Install** to run the installation.

### Installing Internet Information Services (IIS)

If you select **Web Server for IIS** from the installation options panel, the installer automatically determines if IIS is installed. If this is not the case, the following error message will appear:



If this message appears, you must install IIS as a Windows Component.

- 1 Launch the Windows Control Panel (**Start | Control Panel**).
- 2 Select **Add Or Remove Programs**.
- 3 Select the **Add/Remove Windows Components** option. The Windows Components Wizard appears.
- 4 Locate **Internet Information Services (IIS)** in the list of components, and make sure the box next to it is checked.

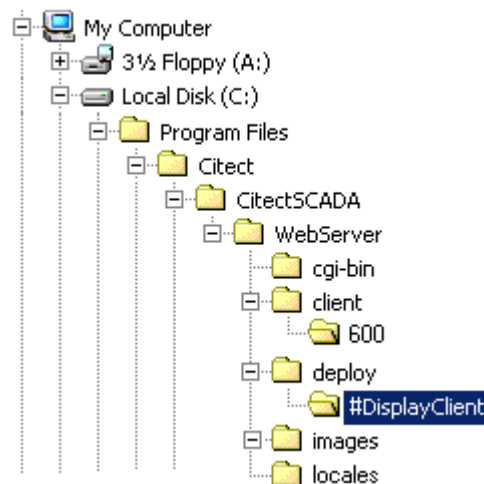
5 Click **Next** , then click **Finish**.

Your computer is ready to install CitectSCADA Web Server for IIS.

See Also [What's been installed?](#)

### What's been installed?

Once you've installed **CitectSCADA Web Server for IIS**, you will find the following directories in the specified destination folder.



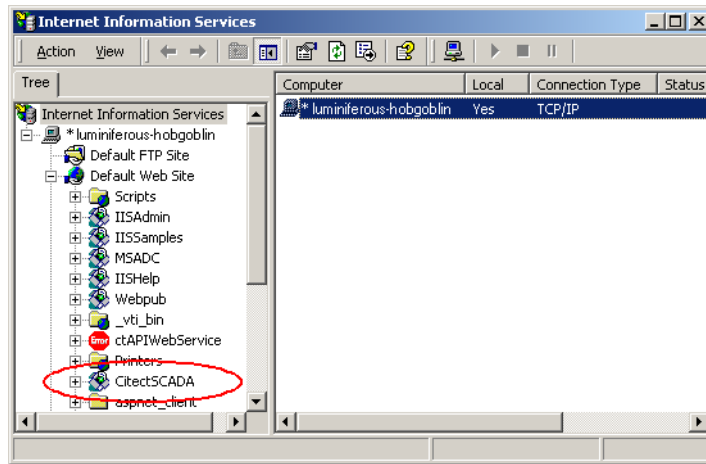
- The **WebServer** directory primarily hosts the administrative pages that are displayed by a Web Server.
- The **cgi-bin** and **images** directories contain the content required to display these pages.
- The **client** folder contains the client components (.cab files) that are delivered to a remote computer to run a deployment. Any subdirectories includes the components associated with a particular release (in this case, Version 6.00).
- The **Deploy** folder includes the files associated with any deployments (CitectSCADA projects) configured on the Web Server.
- The **#DisplayClient** folder (located in the `Deploy` folder) plays a key role in the Web Server security, as the permissions defined for this folder determine the access rights for each user.
- The **locales** folder contains the files required to support different languages for the client interface. See also [Implementing Multiple Language Support](#).

**Note:** If you're upgrading your version of the Web Client to version 6.1, your installation looks a little different, since you'll also now have a `601` folder in your `client` folder. For details, see [Web Client Upgrade Issues](#).

### The IIS virtual directory

The installation process also adds a virtual directory called **CitectSCADA** to Windows IIS (Internet Information Services). This virtual directory establishes the Web Server as a valid destination for client applications. However, it also plays an important role in managing which users have access to the site.

You can view evidence of this virtual directory in the IIS management console, which is launched by selecting **Internet Information Services** (or **Internet Services Manager** on Windows 2000) from Windows' **Administration Tools** menu. The CitectSCADA virtual directory should appear under the list of default web sites.



You can view the properties for the directory by selecting **Properties** from the right-click menu.

The Virtual Directory inherits all security settings from the computer's default web site, with the following exceptions:

- Directory Browsing is enabled
- Script Source Access is disabled
- The default document is set to default.htm only
- Anonymous access is disabled
- Integrated Authentication is disabled
- Basic Authentication is enabled

These security settings, including integrated authentication, anonymous access and SSL Encryption, can be customized by the local administrator. However, proper configuration requires experience with IIS and an understanding of the implications of adjusting its settings.

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See Also [Setting up security using IIS](#)



## Security

Security on the Web Server is based on the implementation of user accounts.

In the case of an IIS-based Web server, security is tightly integrated with Windows user authentication. With an Apache Tomcat Web Server, the access rights for each user type is defined through the creation of “roles”.

Both systems support the same user account types on a Web Client.

### Web Client user account types

The Web Client has three types of user account.

Client type	Description
Administrator	User is permitted to remotely view, add, update and delete deployments.
Display Client	User can view project pages and make adjustments to writable values.
Manager Client	User can only view the project pages.

The Web Server tests the access rights for each user when they log in and then displays or hides the appropriate buttons on the home page accordingly.

**Note:** Although the Web Client security architecture controls access to your projects on the Web Server, note that the CitectSCADA system security (privilege/area settings) still manages protection of the control system, maintaining a primary level of security.



## Setting up security using IIS

Setting up security on an IIS-based Web Server primarily involves creating three Windows user groups, each representing one of the Web Client user account types. Individual users can then be assigned to the relevant user group, and automatically inherit appropriate access rights based on the Windows security settings defined for the group.

### Client type access rights

The following table defines the access rights that each type of user has to the Web Server's installed directories, as defined by the properties for each.

In the table, **read** means Read & Execute, List Folder Contents and Read user permissions are allowed; **read and write** means Full Control is allowed, and **access denied** means Full Control is denied.

Installed directory	ADMINISTRATOR	DISPLAY	MANAGER
WebServer	read	read	read
WebServer \ cgi-bin	read	read	read
WebServer \ client	read	read	read
WebServer \ deploy	read and write	read	read
WebServer \ deploy \ #DisplayClient	read	read	access denied
WebServer \ images	read	read	read

For example, an administrator client needs to be able to read all the installed folders to fully access the components of the home page. Additionally, they need write access to the Deploy subdirectory to create new deployments.

By comparison, a manager client must be denied access to the #DisplayClient folder to prevent the ability to write back to a CitectSCADA project.

Therefore, when setting up security on the Web Server, you need to make sure that your user accounts align appropriately with the permissions outlined in the table above.

To implement the Web Server's security strategy successfully, you should follow the procedure below that will protect your system and simplify managing client accounts.

Setting up security involves the following steps:

- 1 [Configuring client account user groups](#)
- 2 [Preparing the Web Server folder](#)
- 3 [Setting up access rights for client accounts](#)
- 4 [Testing the Web Server security settings](#)

The ongoing management of your Web Server security should then involve adding and removing individual accounts as required.

### Notes

- The installation and initial configuration of the Web Server must be performed by a Windows user with local administrator permissions; that is, they must be able to add and edit Windows User accounts, and modify file/folder protection. This capability is required to set up Web Client user accounts and manage security settings.
- It is important to understand the distinction between the role of the Windows Local Administrator, and the Web Client's Administrator users:
  - **Windows Administrator** - configures security on the Web Server and sets up client accounts.
  - **Web Client Administrator** - an end user capable of modifying and managing projects deployed on the Web Server.

The two roles parallel a Citect configuration engineer and a runtime operator.

### Configuring client account user groups

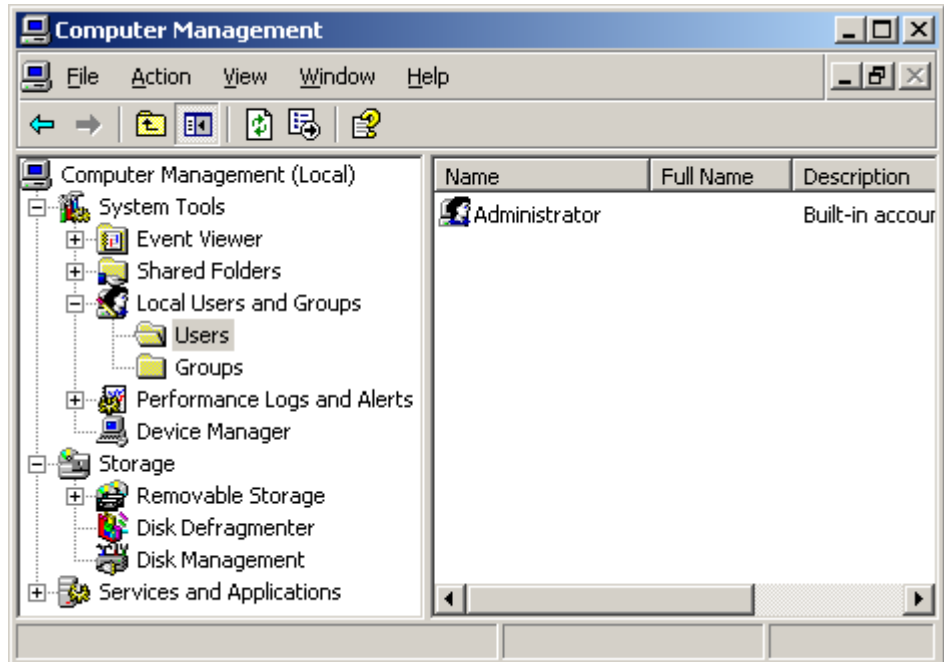
Creating a user group associated with each type of Web Client account on your Web Server allows you to manage security without having to deal with individual users. Users can be added to a group and inherit the security status set for the group.

To create a User Group on the Web Server computer, you must log in to Windows with Local Administrator permissions.

#### To create the client account user groups:

- 1 Go to the **Computer Management** tool, which is launched from the Windows **Start** menu or **Control Panel**.

- 2 Locate **Local Users and Groups** in the directory tree. This is where the users and groups for the local machine are configured and managed.



- 3 Right-click the **Groups** folder and select **New Group**. This calls up the **New Group** dialog.
- 4 In the **Group Name**, type **Web Client Administrator** (or something appropriate), and describe the group's purpose.
- 5 Click **Create**.  
The group you have just created should appear in the list of groups presented in the Computer Management console.
- 6 Repeat steps 3 to 5 to create Display Client and Manager Client user groups.
- 7 To eventually test your security settings, you should add at least one user to each group.

You are now ready to start [Preparing the Web Server folder](#).

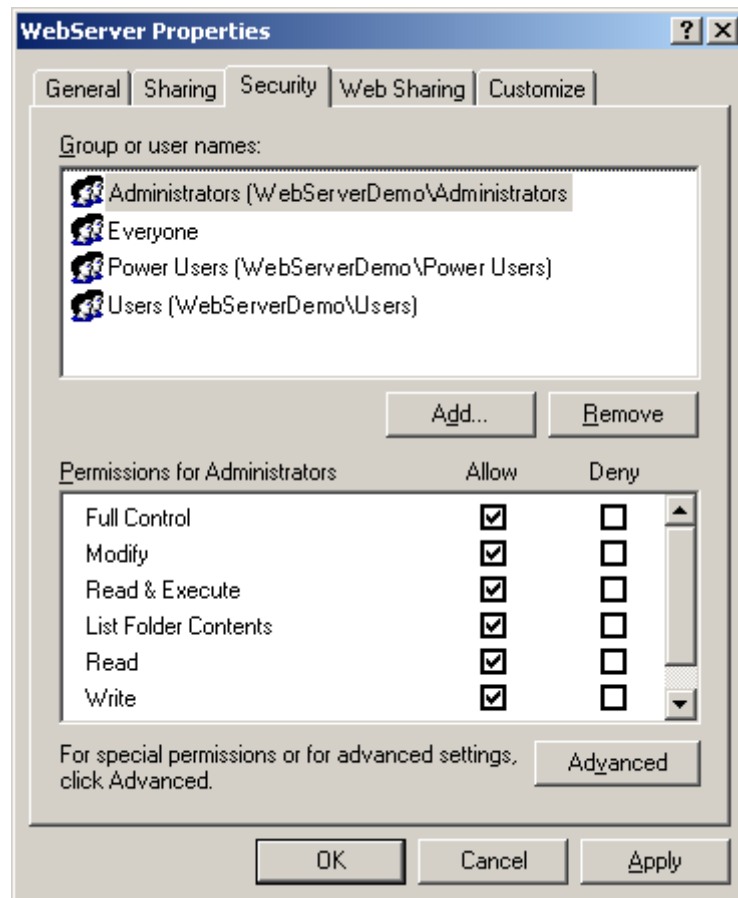
## Preparing the Web Server folder

You need to adjust the security settings for the WebServer folder and its sub-directories, as this will determine the access granted to each type of client account.

### To prepare the WebServer folder:

- 1 Log on to the Web Server computer as a Windows Administrator.

- 2 Launch **Windows Explorer** and browse to the **WebServer** folder.  
The WebServer folder is located in the installation directory. By default, this is C:\Program Files\Citect\CitectSCADA\WebServer.
- 3 Right-click the **WebServer** folder and select **Properties**.
- 4 From the Properties dialog, select the **Security** tab to display the users currently configured for the folder.

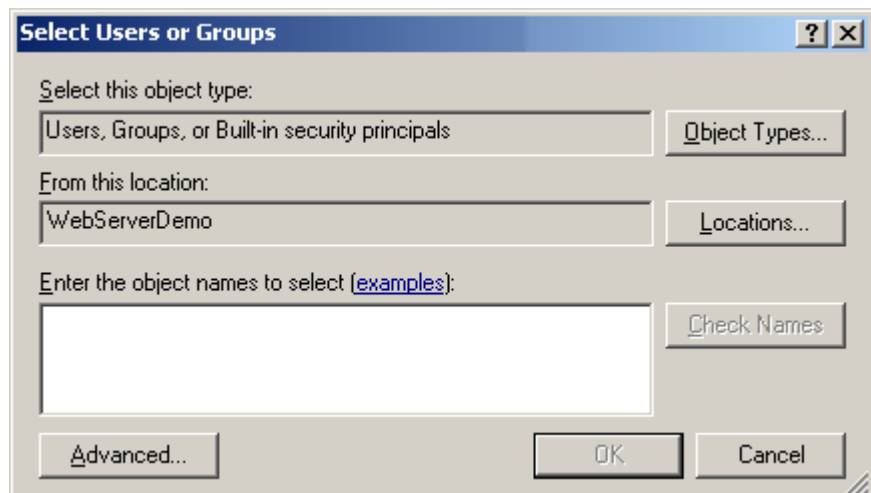


- 5 There will probably be several groups already defined in this folder. The two you need to pay attention to are the **Administrators** group and the **Everyone** group.
  - The **Administrators** group represents all the Windows users recognized by the Web Server computer with Local Administrator rights. This group has **Full Control** permissions on the folder, facilitating the ability to adjust the Web Server security settings. If this is the case, there should be no reason to modify this group.

- The **Everyone** group represents all other users recognized by the local machine. You should give this group “read” access to the WebServer folder; that is, allow **Read & Execute**, **List Folders Contents**, and **Read** permissions. This provides local users on the Web Server machine with the equivalent of Display Client permissions.

If there are other groups defined for the Web Server folder, for example “Power Users”, you might want to remove these groups to simplify managing your Web Client accounts.

- 6 To add the three groups you have created to the WebServer folder, go to the **Security** tab of the WebServer folder properties, and select **Add**. Using the dialog that appears, locate the user groups you created on the local machine. The **Advanced** button allows you to search for defined groups.



**Note:** The Select Users or Groups dialog appears differently in Windows 2000 to the Windows XP version pictured above. In Windows 2000, you can simply select a user or group from the list of those available and click **Add**.

- 7 Confirm the security settings for the three newly created groups. Each should have the same read access as the Everyone group: **Read & Execute**, **List Folders Contents**, and **Read** permissions.
- 8 Ensure all the subdirectories inherit the permissions set for the WebServer folder. This ensures consistent security settings across all the installed directories.

To do this, click the folder properties’ **Advanced** button, and select **Replace permission entries on all child objects**, then click **OK**.

**Note:** With Windows 2000, this option reads **Reset permissions on all child objects and enable propagation**.

A Security dialog might appear warning that this will “remove explicitly defined permissions on child objects”. Click **Yes** to continue.

The Web Server’s installed directories should now have consistent security settings for all the required user groups.

Next, you must modify the security setting for two specific folders to implement the required permissions for the different client account types.

See Also [Setting up access rights for client accounts.](#)

## Setting up access rights for client accounts

The three client account types supported by the Web Client are defined by the security settings for each within the installed directories on the Web Server machine.

The differences, outlined in the table in [Client type access rights](#), require specific security settings for the Administrator Client and Manager Client types. An Administrator needs write access to the Deploy subdirectory, and the Manager needs to be denied access to the #DisplayClient subdirectory.

The Display Client group needs no additional configuration, as it uses the settings outlined in [Preparing the Web Server folder](#).

### To configure security setting for the Administrator Client group:

The Administrator Client requires full access to the Deploy subdirectory to enable the creation and modification of deployments.

- 1 Locate the **Deploy** subdirectory in the Web Server folder. By default, this is C:\Program Files\Citect\CitectSCADA\WebServer\Deploy.
- 2 Right-click the folder and select **Properties** to display the Deploy folder properties.
- 3 Click the **Security** tab and locate the Web Client Administrator group you created in the list of users and groups.
- 4 Edit the permissions set for the group to **Allow Full Control**.

### To configure the security settings for the Manager Client group:

The Manager Client must be denied access to the #DisplayClient subdirectory to prevent write changes being made to a deployed CitectSCADA project.

- 1 Locate the **#DisplayClient** subdirectory in the Web Server folder. By default, this is C:\Program Files\Citect\CitectSCADA\Web-Server\Deploy\#DisplayClient.
- 2 Right-click the folder and select **Properties to display** the folder properties.
- 3 Click the **Security** tab and locate the Web Client Manager group you created in the list of users and groups.

- 4 Edit the permissions set for the group, which you should change to **Deny Full Control**.

A Security dialog appears warning “Deny entries take priority over all Allow entries”. Click **Yes** to continue.

You have now configured the security settings for the client groups on the Web Server. Next, you should commence [Testing the Web Server security settings](#).

See Also [Deleting a user account](#)

## Deleting a user account

You can deny a user access to the Web Server by removing them from the groups that have permissions set for the Web Server folder.

However, if security is a concern, you should deny the user access to the Web Server folder before you delete them. This avoids a known problem where the operating system doesn’t immediately acknowledge that a user account has been deleted, creating a short period where a deleted user can still log on.

### To securely delete a user account

- 1 Add the user as an individual to the Web Server folder.
- 2 Set their access rights to **Deny Full Control**.
- 3 Remove the user from the groups that have permissions set for the Web Server folder.

With all access denied, they cannot do anything even if they gain access.

## Testing the Web Server security settings

### To test the security settings for your Web Server client groups:

- 1 Launch Internet Explorer on the Web Server machine.
- 2 Call up the Web Client home page by typing in the following address:  
http://localhost/CitectSCADA
- 3 Try logging in to the home page using a user name and password that’s been added to the Administrator Client group.

If successful, the System Messages dialog should read “LOGINADMIN Admin (UserName) logged in”.

If the message starts with LOGINDC (for Display Client) or LOGINMC (for Manager Client), there is a problem with your configuration. Confirm that you are using the correct user name for the group you are testing. If the problem still occurs, revisit the process in [Setting up security using IIS](#) to ensure an error hasn’t been made.

- 4 Repeat this process with a Display Client and Manager Client user.

Once you have confirmed that security is correctly set up on the Web Server, you can now prepare your CitectSCADA project for deployment. For more information see [Configuring a deployment](#).

## Logging on to the Web Server

After setting up your client accounts, you must provide the following details to each end user so they can log on to the Web Server:

- **Address of the Web Server**

This is the address users have to type into their Web browser to gain access to the CitectSCADA Web Server.

If they are doing this remotely, the address is:

```
http://<machine name>/CitectSCADA
```

or

```
http://<machine IP address>/CitectSCADA
```

If they are logging on to the Web Server computer, the address is:

```
http://localhost/CitectSCADA
```

- **User name and password**

Once the browser has arrived at the Web Server, the end user is asked to provide a user name and password. Typically, you just need to tell them that their Windows user name and password will provide appropriate access. If you had to create a new user profile for someone, you must provide them with the details.

## Preparing a CitectSCADA Project for Deployment

Before deploying a project on a Web Server, you will probably need to adjust the CitectSCADA configuration environment to ensure it is ready for Web-based delivery. You need to consider the following issues:

- [Functionality limitations of the Web Client platform](#)
- [Preparing a project's user files for delivery](#)
- [Running the Web Deployment Preparation tool](#)

**Note:** By default, CitectSCADA uses NetBIOS to facilitate communications over a network. To use the Web Client, you must switch your system over to TCP/IP by adjusting two specific [LAN] parameters and mapping your server TCP/IP addresses. For example:

```
[LAN]
tcpip=1
netbios=0
```

```
[DNS]
<SCADA I/O server name>=<IP address>
<alarm server name>Alarm=<IP address>
<report server name>Report=<IP address>
<trend server name>Trend=<IP address>
```

**Note:** If the project is set up for redundancy, both servers must appear in the [DNS] section of the `citect.ini` file.

Refer to the topic [Using TCP/IP for network communications](#) in the *CitectSCADA User Guide* for details on setting your DNS parameters.

### Functionality limitations of the Web Client platform

Due to the architecture required to support Web-based execution of CitectSCADA projects, the Web Client cannot offer the full functionality of a standard CitectSCADA system.

You should consider the following list of unsupported features and Cicode functions to assess if this will be detrimental to the performance of your project. Some adjustments might be required.

#### Feature limitations

The following features are not supported:

- Cicode Debugger.
- Remote shutdown.
- Fuzzy Logic.
- Cluster functionality.
- Kernel windows.

- Keyboard shortcuts that clash with Internet Explorer's keyboard shortcuts.
- Web Client is unable to act as a CitectSCADA Server.
- Pages based on the default Menu Page template will only show buttons for pages previously visited.
- The **Page Select** button on the default Normal template only lists pages previously visited.
- The CSV\_Include project's Update Page List menu item will not work.

**Note:** If your project is based on the CSV\_Include template, you must create a customized menu to access pages from the menu bar.

#### Cicode Function Limitations

Several Cicode functions are unavailable with the Web Client, or limited in their capabilities:

Cluster Functions	Cluster functionality not supported
DebugBreak	Cicode debugger not supported
DelayShutdown	Programmatic Shutdown not supported
FTP Functions	All FTP functions are not supported
Fuzzy Logic Functions	Removed from control due to size
KerCmd	Kernel windows not supported
ProjectRestartGet	Programmatic Shutdown not supported
ProjectRestartSet	"
ProjectSet	"
Shutdown	"
ShutdownForm	"
SwitchConfig	Configuration environment not available
TraceMsg	Kernel windows not supported
UserCreate	Changes to user profiles must be made on the machine where the project is compiled and auto-deployed.
UserCreateForm	"
UserDelete	"
UserEditForm	"
UserPassword	"
UserPasswordForm	"
GetWinTitle	Windows other than the main window only
WinFree	"
WinMode	"
WinMove	"
WinPos	"
WinSize	"
WinTitle	"

WndShow " "  
 WndViewer Invokes multimedia applications Feature not supported

See Also [Preparing a project's user files for delivery](#)

## Preparing a project's user files for delivery

If the content of your CitectSCADA project incorporates user-created files, such as DBF files, HTML files, or CSV files, you must manually place these into a special zip file called **Misc.zip** for delivery to the Web Server. Similarly, if a project contains ActiveX objects, these also must be included in a zip file called **ActiveX.zip**.

### To prepare any user-created files for deployment:

- 1 Identify all the user-created files that are associated with the project you want to deploy.  
 These files could include CSV or DBF files associated with tables presented on project pages, or HTML content.
- 2 Use a compression tool to zip these files up into a single file called **Misc.zip**.
- 3 Place **Misc.zip** in the main folder for the project. For example, in the case of the CSV\_Example project, this would be:

```
C:\Program Files\Citect\CitectSCADA\User\CSV_Example
```

**Note:** If your project has included projects that use ActiveX objects, ensure these are also zipped up in an **Activex.zip** file in the included project's directory.

The files are now ready for deployment on the Web Server.

### To prepare any included ActiveX objects for deployment:

- 1 Identify all the ActiveX objects associated with the project you want to deploy.
- 2 Use a compression tool to zip these files up into a single file called **ActiveX.zip**.
- 3 Place **ActiveX.zip** in the main folder for the project. For example, in the case of the CSV\_Include project, this would be:

```
C:\Program Files\Citect\CitectSCADA\User\CSV_Include
```

**Note:** If an ActiveX object has an associated data source, ensure the data source can be located by the computer hosting the Web Client. See the topic [Managing associated data sources](#) under the section on ActiveX objects in the CitectSCADA User Guide Help.

See Also [Running the Web Deployment Preparation tool](#)

## Running the Web Deployment Preparation tool

The final step in preparing a project for deployment involves running it through the Web Deployment Preparation tool. This takes a freshly compiled project and creates the required files and directories for Web-based delivery.

**To run a project through the Web Deployment Preparation tool:**

- 1 Ensure the project you want to deploy has all its associated user files and ActiveX objects zipped up for delivery (see [Preparing a project's user files for delivery](#)).
- 2 Locate the project you want to deploy in Citect Explorer and do a fresh compile.
- 3 Go to the Citect Explorer **Tools** menu and select **Web Deployment Preparation** (or click the following icon on the Explorer toolbar):



- 4 A progress indicator appears. The size of the project significantly affects how long this process takes; a large project with many files can take over ten minutes to process, depending on your hardware. (You can abort the deployment preparation if you want.)
- 5 When complete, a dialog appears stating the preparation was successful. Click **OK**.

The project is now ready for deployment on the Web Server. If you change a project, you must do a fresh compile and run the Web Deployment Preparation tool again.

**Hint:** You can run the Web Deployment Preparation tool automatically when you compile a project. To do this, go to the Citect Project Editor **Tools** menu and select **Options**. Select the **Prepare for Web Deployment** option and click **OK**. Note that this increases the time taken for each compile, particularly for large projects.

## Configuring a deployment

A deployment represents the implementation of a CitectSCADA project on the Web Server. It incorporates the files and components required to display a project, and then stores the location of the servers where CitectSCADA Runtime data is generated.

The deployments configured on a Web Server are listed on the Web Client home page, which is the page that appears when you initially log in. The configuration details for a deployment can be displayed by clicking the small plus (+) icon to the left of the deployment name.



# CitectSCADA

## CitectSCADA Web Client Deployment

**System Messages**





|< <<>> >|

LOGINADMIN Admin administrator  
logged in

Deployment	Description	Action	
Example	Example	 	
<b>Server</b>	<b>IP Address</b>	<b>Port</b>	<b>File Paths</b>
primary	192.168.0.135		<b>Project Path:</b> C:\Program Files\Citect\CitectSCADA\User\Example <b>Client Control:</b> 600/CitectSCADA\WebClient_6_0_182.cab

The types of action you can implement for a deployment depend on the permissions granted by your log in. For example, if you log in as a Manager Client, you can only view a deployment. If you are an administrator, you can edit deployments and create new ones.

The following list describes the functionality associated with each of the icons presented on the home page.:

-  **Add New Deployment** - takes you to the Deployment Configuration page where you can create a new deployment (Administrator Clients only).
-  **Help** - launches a PDF file explaining how to configure and use the Web Client.
-  **Edit Deployment** - takes you to the Deployment Configuration page and allows you to edit the selected deployment (Administrator Clients only).
-  **Delete Deployment** - Deletes the selected deployment (Administrator Clients only).



**Start Display Client** - Displays the selected deployment with Display Client permissions (Display Client and Administrator Client only)



**Start Manager Client** - Displays the selected deployment with Manager Client permissions

Additionally, the **System Messages** panel provides notification of events that impact the current status of the Web Server.

See Also

[Preparing a CitectSCADA Project for Deployment](#)  
[Creating a new deployment](#)  
[Deploying a project from within CitectSCADA](#)  
[Displaying a deployment](#)  
[Editing an existing deployment](#)  
[Updating a deployment to reflect project changes](#)  
[Deleting a deployment](#)

## Creating a new deployment






To configure a deployment of a CitectSCADA project on a Web Server, you must log in with Administrator Client permissions. This will provide you with access to the full functionality of the home page.

To add a new deployment

- 1 Click the **Add New Deployment** icon.



This takes you to the Deployment Configuration page.

Deployment			Description		Action
example					 
Server	IP Address	Port	 File Paths	210 / 6 MB	
primary	192.168.0.217		 <b>Project Path:</b> C:\Program Files\Citect\CitectSCADA\User\Example		
			<b>Client Control:</b>	600/CitectSCADAWebClient_6_0_182.cab	

- 2 Type in a name in the **Deployment** text box, and include a **Description** if required. A deployment name cannot contain any of the following characters: \ \* ? | . , / " ' : ; < > # &

**Note:** If you've upgraded your version of the Web Client, you can still view your legacy deployments that you created using version 6.0 of the Web Client. For details, see [Web Client Upgrade Issues](#).

- 3 Identify the source of the CitectSCADA project's content in the **Project Path** field. You need to consider the location of the project files in relation to the Web Server, as it will determine how you define the project path.

If the project is located locally on the Web Server, you can use a normal path address. The path must point directly to the project within the CitectSCADA User directory. For example, the location of the Example project would be:

```
C:\Program Files\Citect\CitectSCADA\User\Example
```

**Note:** If you are remotely administering the Web Server and use a local path address, make sure the path represents the location of the project on the Web Server computer, not the computer you are currently using.

If the project is not located on the Web Server, you need to use a UNC address that identifies the host network computer and the directory it can be found in. For example,

```
\\ComputerName\Program Files\Citect\CitectSCADA\User\Example
```

**Note:** You must share the directory a project resides in to allow the Web Server access to it. Ideally, you should create a share from the directory (called WebShare, for example) and then use the following project path:

```
\\ComputerName\WebShare
```

Remember that if you are trying to access the project directory from a remote computer, a "local" administrator log in will not provide you with appropriate access on a different computer. You should use a network user profile that will be recognized by other computers on the same domain.

- 4 Identify the CitectSCADA servers associated with the deployment. You can type a name in the **Server** field (as defined in your CitectSCADA project), the **IP Address** of the server, and the **Port** number.

There are, however, two scenarios you need to consider here:

- Have the IP addresses for the project servers already been identified in the [DNS] section of the `citect.ini` file? If you have already done this when setting up TCP/IP, you don't need to identify any servers as the IP addresses can be retrieved from the `citect.ini` file. See [Using TCP/IP for network communications](#) in the CitectSCADA User Guide Help for details on using [DNS] parameters.

**Note:** If you included an IP address for a server when configuring your deployment, it takes precedence over a different address identified for the same server in the [DNS] section of your `citect.ini` file.

- Are your CitectSCADA servers protected behind a firewall? If so, with each server name you must provide the public address and port number for your firewall. The firewall should be configured to handle the mapping to private IP address and port number for each Citect server.

- 5 Add any additional servers to your deployment by clicking **Add New Server**, and repeating step 4 for each server.



Typically, a CitectSCADA project incorporates an I/O server, alarms server, trends server and report server. You must identify each of the servers associated with the project.

- 6 Use the **Client Control** text box to specify the use of a particular version of the Web Client component when the deployment is displayed.

The menu lists all the different versions of the Web Client control currently installed on the Web Server. Typically, you should choose the version of the control that matches the version of CitectSCADA your project was compiled on.

- 7 Click **Apply Changes**. (This is important, as you'll lose your changes if you jump straight back to the home page.)



All the project files are retrieved from the path indicated, and copied to the Web Server ready for access by the Web Clients.

Once complete, information about the size of the project appears in the File Paths banner above the Project Path field. The number to the left indicates how many files are included in the project; the number to the right indicates the total size of the project.

The deployment is saved. When you return to the Web Client home page, by clicking the home icon, your new deployment is listed.

See Also [Deploying a project from within CitectSCADA](#)  
[Displaying a deployment](#)

## Deploying a project from within CitectSCADA

The Web Client architecture lets you deploy a project from within the CitectSCADA configuration environment, avoiding the need to use the Web Client interface to setup a system.

This process requires you to adjust two parameters in the Citect.ini file, [\[WebServer\]WebClientCab](#) and [\[WebServer\]DeployRoot](#). These parameters identify the client component used with the project and the location of the deployment root directory. When the project is compiled and prepared for deployment, it is placed directly on the Web Server.

## Notes

- If you've upgraded your WebClient to version 6.1, you can still view your legacy deployments. For details, see [Web Client Upgrade Issues](#).
- When implementing this option, pay attention to your `citect.ini` file configuration, as any errors with these parameters are difficult to diagnose. To avoid input errors, use the Web Deployment Tool on the Citect Explorer toolbar with the Web Server's Web Deployment GUI.
- If the project name contains non-English characters, deploying from within CitectSCADA might fail. Under these circumstances, use the Web Server interface to create the deployment.

### To deploy a project from within CitectSCADA:

- 1 Confirm that your CitectSCADA system is configured to use TCP/IP by adjusting the following `citect.ini` parameters:

```
[LAN]
tcpip=1
netbios=0
```

- 2 Confirm that your CitectSCADA servers are correctly mapped to their IP addresses within the [DNS] section of the `citect.ini` file. (Refer to the topic [Using TCP/IP for network communications](#) in the *CitectSCADA User Guide* for more information.)

For example:

```
[DNS]
<SCADA I/O server name>=<IP address>
<alarm server name>Alarm=<IP address>
<report server name>Report=<IP address>
<trend server name>Trend=<IP address>
```

**Note:** NetBIOS automatically identifies a server's role by appending the suffix "Alarm", "Trend" or "Report" to the end of the proposed server name when it is initially created by the Computer Setup Wizard. To identify a server for TCP/IP, you must add this suffix yourself in the DNS identification settings.

If the project is set up for redundancy, both servers must appear in the `citect.ini` file.

- 3 Adjust the `[WebServer]DeployRoot` and `[WebServer]WebClientCab` parameters within the `citect.ini` file.

The **DeployRoot** parameter represents the directory where the deployment will be located on the WebServer.

If you have set up an IIS-based Web Server, the default location will be the Deploy directory within the installed directories. For example:

```
[webservice]
DeployRoot="C:\Program
Files\Citect\CitectSCADA\WebServer\deploy"
```

If you are using an Apache Tomcat Web Server, this will be:

```
[webservice]
DeployRoot="C:\Program Files\Apache Software Foundation\Tomcat
5.5\webapps\CitectSCADA\deploy"
```

**Note:**

- When setting the [WebServer]DeployRoot ini parameter, the path must contain “deploy” as the last subfolder name, otherwise the deployment will fail.
  - Use a mapped drive instead of a UNC address if deploying to a network destination from a Windows 2000 system. This avoids potential deployment failures. Do not map a drive directly to the deployment location, as the path must finish with a “deploy” subfolder.
- 4 The **WebClientCab** parameter represents the directory path and client component to use when a deployment is run, in relation to the installed Client directory. For example:

```
[webservice]
WebClientCab=600/CitectSCADAWebClient_6_0_176.cab
```

Note the use of a forward slash in the defined path.

- 5 Compile your project and then prepare it for deployment. Go to the Citect Explorer **Tools** menu and select **Web Deployment Preparation** or select the following icon on the Explorer toolbar.



**Note:** You can run the Web Deployment Preparation process automatically when you compile a project. To do this, go to the Citect Project Editor **Tools** menu and choose **Options**. Select the **Prepare for Web Deployment** option and click **OK**. Be aware, however, that this might increase the time required for a project to compile.

Your project should now appear as a deployment within the Web Client home page next time you log in.

See Also [Displaying a deployment](#)

## Displaying a deployment

When you display a deployment, it downloads the required Web Client component file from the Web Server, enabling you to run the associated CitectSCADA project in your Web browser.

**To display a deployment:**

- 1 Locate the deployment you want to display in the list of available deployments.
- 2 Click the relevant icon (**Start Display Client** or **Start Manager Client**) to display the deployment.



The display options available to you depend on your login permissions. If you select the Manager Client icon (the one with the gold lock), you can only read the current values for the CitectSCADA project.

Once the required project files and components have been downloaded, the CitectSCADA project appears. You can now navigate the project pages as required.

**Note:** An error message might appear if the current user on the client machine does not have Windows administrator rights when a new or updated component file (.cab file) is downloaded. Ensure the current Windows user has administrator rights if a new deployment is run or an updated .cab file needs to be downloaded.

See Also [Editing an existing deployment](#)

## Editing an existing deployment

If required, you can edit the settings for a deployment. For example, you can change the name of the deployment or specify a new address for a runtime server.

To edit a deployment's settings, you must be logged in as an Administrator Client.

**To edit an existing deployment**

- 1 Select the deployment you want to edit in the list of available deployments.
- 2 Click the **Edit Deployment** icon.



This takes you to the Deployment Configuration page.

Change the fields as required. For field descriptions, see [Creating a new deployment](#).

**Note:** If you give a deployment a new **Name**, it is duplicated instead being updated and overwritten. This allows you to easily copy an existing deployment; however, you must delete the original deployment with the old name if it's no longer required.

- 3 Click **Apply Changes**. (This is important, as you'll lose your changes if you jump straight back to the home page.)



The Web Server retrieves a fresh set of pages and components for the CitectSCADA project, which will include any recent changes.

See Also [Updating a deployment to reflect project changes](#)

## Updating a deployment to reflect project changes

If you change a source CitectSCADA project, you must update its associated deployment to ensure the changes are reflected on the Web Server.

Updating a deployment ensures the latest project pages and components are retrieved by the Web Server and available for distribution. This is important as discrepancies might occur between the project pages and the data being pulled from the runtime servers if the content is not up to date.

### To update a deployment:

- 1 Ensure that the project you want to update has been compiled and processed within the CitectSCADA by the Web Deployment Preparation tool. See [Running the Web Deployment Preparation tool](#).
- 2 Select the deployment you want to update.
- 3 Click the **Edit Deployment** icon.



This takes you to the Deployment Configuration page.

- 4 Click **Apply Changes**.



The Web Server retrieves a fresh set of pages and components for the CitectSCADA project, which will include any recent changes.

See Also [Editing an existing deployment](#)  
[Deleting a deployment](#)

## Deleting a deployment

To delete a deployment from a Web Server, you must log in as an Administrator Client.

### To delete a deployment from the Web Server:

- 1 Select the deployment you want to delete from the list of available deployments.

---

2 Click **Delete Deployment**.



A dialog asks you to confirm that you want to delete the deployment. Click **OK**.

See Also [Configuring a deployment](#)



## Implementing Multiple Language Support

The Web Client deployment configuration interface can be displayed using languages other than English. The following languages are supported by default:

- French
- German
- Spanish
- Chinese
- Japanese
- Korean

You can also implement other languages by translating the resource message file that defines the text displayed. In the case of the languages listed above, this file has already been translated with a version for each language stored in the installed `locales` folder.

See Also [How default languages are implemented](#)  
[Using a language different to the current system locale setting](#)  
[Implementing a non-default language](#)

### How default languages are implemented

When you connect a client computer to the Web Server, the script on the web page automatically detects the [language code](#) currently defined as the default for the browser. This code is drawn from the system locale setting defined in **Control Panel | Regional Options** on the client machine.

Once the browser's language code has been determined, the script attempts to match it with those available on the Web Server. If a match is made, the associated language is automatically used for the Web Client deployment configuration interface. If a match cannot be made, it defaults to English.

For example, if your Windows **Locale** setting is Chinese (PRC), the language code set for your browser would be "**zh-cn**". This is compared to the current list of language codes on the Web Server, which by default is the following:

Language	Windows Language Code
English	en
French	fr
German	de
Spanish	es
Simplified Chinese	zh
Japanese	ja
Korean	ko

Having failed to match “zh-cn”, the script tries to load Simplified Chinese language, “zh”, as a match. The interface will automatically display in Chinese.

See Also [Using a language different to the current system locale setting](#)

## Using a language different to the current system locale setting

You can display the content of the Web Client’s deployment configuration pages using a language that’s different to the current system locale setting for the computer. To do this, use a URL query string in the address field of your browser.

**To switch to a language other than the default:**

- 1 Decide which language you want to use and determine its associated language code. (See [How default languages are implemented](#) for a list of the codes for the default languages supported by the Web Server).

For example, if you want to use Chinese, the code required would be **zh**.

**Note:** If the language you want to use is not one of the supported languages, you must create and translate your own message file. See [Implementing a non-default language](#).

- 2 Use a URL query to indicate the language you want to use for the Web Client deployment pages. For example, if the address field on your browser currently reads:

```
http://localhost/CitectSCADA
```

add a “/?lang=” query to the end of the address. For example, Chinese would be:

```
http://localhost/CitectSCADA/?lang=zh
```

**Note:** If you use a code that represents a regional variation of one of the default languages and that specific code cannot be matched, the Web Server can only implement the available default version of the language. For example, using the language code for Chinese (PRC), “zh-cn”, results in the Simplified Chinese being used, “zh”.

Your Web browser now displays the Web Client’s deployment configuration pages using the appropriate language.

See Also [Implementing a non-default language](#)

## Implementing a non-default language

If you need to use a language on the Web Client’s deployment configuration interface other than one of the default languages supported by the Web server, you can implement your own translation of the messages file that defines the text that appears.

### To display a language other than those supported by default:

- 1 Using a text editor that supports the language you want to edit, open one of the existing message files located in the Web Server's `locales` directory; the default path is:

```
C:\Program Files\Citect\CitectSCADA\Web Server\locales
```

The file you open should include the language that will be easiest to translate. The language code at the start of each file name can be used to identify the language each file represents; for example, the English language file is called **enmsg.xml**.

- 2 Save the file back to the `locales` directory, using the appropriate language code in the name.

To name the file correctly, check the list of [Windows Language Codes](#) for the appropriate code. This will allow your translated resource file (`XXmsg.xml`) to be automatically loaded when the Web Client home page is launched, provided it matches the current system locale setting.

For example, to implement Hebrew on the Web Client's configuration pages, you would name your file **hemsg.xml**. To use the Taiwanese variation of Chinese, you would call the file **zh-twmsg.xml**.

- 3 Now change the file content. Firstly, set the correct encoding format.

The encoding format is defined in the top line of the file, which appears as follows:

```
<?xml version="1.0" encoding="iso-8859-1" ?>
```

If the language uses English characters, the format you would use is ANSI, which is defined as "iso-8859-1" (see example above).

If the language uses non-English characters, you would use Unicode, which is defined as "UTF-8" (see example below).

```
<?xml version="1.0" encoding="UTF-8" ?>
```

- 4 Now translate the text that appears on the Web Client interface.

The content that needs to be translated is divided across two sections within the file: "labels" and "messages". The labels section includes the content used to describe and identify the elements of the interface; the messages section includes the notifications that appear in the system messages panel.

To translate these sections, alter the text between the enclosing XML tags. Do not alter the tags themselves.

**Note:** Make sure you maintain any "%" characters, as these are used to insert system information.

For example, the English file:

```

<!-- Labels -->
<span id="TITLE">CitectSCADA Web Client Deployment</span>
<span id="SYSMSG">System Messages</span>
<span id="DEP">Deployment</span>
<span id="DESC">Description</span>
<span id="ACTION">Action</span>
<!-- Messages -->
<sysmsg id="DELOK">% deleted.</sysmsg>
<sysmsg id="DELCAN">% will NOT be deleted.</sysmsg>
<sysmsg id="DEPNULL">You can't % an empty deployment.</sysmsg>
...

```

would appear as follows in Spanish:

```

<!-- Labels -->
<span id="TITLE">Despliegue del Cliente Web CitectSCADA</span>
<span id="SYSMSG">Mensajes del Sistema</span>
<span id="DEP">Despliegue</span>
<span id="DESC">Descripción</span>
<span id="ACTION">Acción</span>
<!-- Messages -->
<sysmsg id="DELOK">% eliminado.</sysmsg>
<sysmsg id="DELCAN">% NO será eliminado.</sysmsg>
<sysmsg id="DEPNULL">No puede % un despliegue vacío.</sysmsg>

```

Once you have translated the file and saved it with the appropriate name to the `locales` folder, your Web Server will be able to support the language.

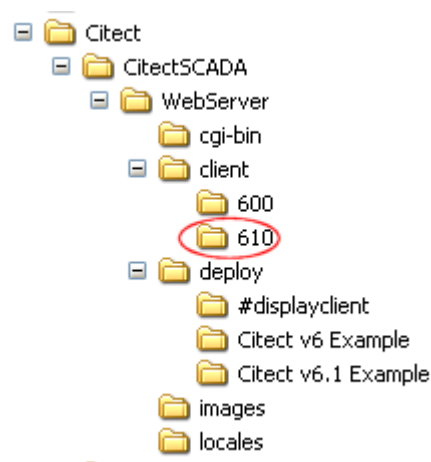
**Note:** When you save your file, make sure the text editor you used saves the file in the appropriate format, i.e. ANSI or Unicode (UTF-8).

## Web Client Upgrade Issues

If you've upgraded your Web Client from version 6.0 to version 6.1, read the following sections about installation and how to use the upgraded Web Client tool with existing deployments.

### Installation

Upgrading to the new version of the Web Client adds a new folder named 610 to the `client` folder, circled here:



If you're planning on installing Web Client version 6.1 but want to view legacy (that is, pre-version 6.1) deployments, before installing the new version, back up your old deployments to a safe location. Then, after installing the new version, copy your old deployment(s) back to the `deploy` folder (see above), and the legacy `.cab` file(s) to the corresponding folder in the `client` folder; this will make your old deployments available for use.

### Creating new deployments

When creating a new deployment, note that the `.cab` file you use (**Client Control**) for the deployment must correspond to the correct version of the project you want to access. For example, to create a deployment based on a version 6.0 CitectSCADA project, from the **Client Control** menu choose **600/ filename.cab**.

### Deploying a project from within CitectSCADA

If you are deploying a project from within CitectSCADA, edit the `[webserver]` section in your `citect.ini` file to specify the correct `cab` file for the version of the Web Client you're using. For example, for a version 6.1 deployment, specify a `.cab` file located in the `610` folder; for a 6.0 version, specify the `600` folder.

## Frequently Asked Questions

This section answers frequently asked questions concerning the Web Client. One section is dedicated to issues pertaining to Windows 2003 Server, and the other to general issues.

### Windows 2003 Server-related issues

This section describes issues relating to the Windows 2003 server product.

**Q. My Web Client Deployment Page displays incorrectly on Windows 2003 Server: Show Server Details is missing and the icons for Start Display Client, Delete Deployment, and Edit Deployment are also missing. How do I fix this?**

A: There are two problems that could be occurring here:

- When IIS 6.0 is installed, it defaults to a secure "locked" mode, meaning it can serve up only static content. ASP, ASP.NET, and FrontPage Server Extensions are all disabled and must be explicitly and separately enabled. The CitectSCADA Web Server needs ASP enabled on the IIS.

### To enable ASP for IIS6 on Windows 2003 Server:

- 1 Choose **Start | Control Panel**, then double-click **Add or Remove Programs**.
  - 2 In the Add or Remove Programs dialog box, click **Add/Remove Windows Components**.
  - 3 In the Windows Components Wizard dialog box, select **Application Server**, and then click **Details**.
  - 4 In the Application Server dialog box, select **Internet Information Services (IIS)** and click **Details**.
  - 5 In the Internet Information Services (IIS) dialog box, select **World Wide Web Service** and click **Details**.
  - 6 In the World Wide Web Service dialog box, make sure **Active Server Page** is selected.
- On Windows 2003 Server, the default setting is to have all the web locations except localhost as an untrusted site. Consequently you must modify your browser's security settings.

### To update your Trusted Sites settings for Windows 2003 Server:

- 1 Choose **Tools | Internet Options**.
- 2 Click the **Security** tab and then **Trusted Sites | Sites**.
- 3 In **Add this Web site to the zone** field, add the web server's IP address as follows:

`http://<ip address>`

**Note:** If you have other problems on your Web Client pages, you should verify your security settings even if you are not running Windows 2003 Server.

**Q: When I try to start the Web Client, I get the error message “Starting Citect Web Client Failed: Can not initialize citect system”, and then the Web Client fails. How do I correct this?**

A: First check that you haven’t accidentally deleted the #DisplayClient folder from the installed Web Server directory, as this will cause this error. By default, this directory is located at:

```
C:\Program  
Files\Citect\CitectSCADA\WebServer\Deploy\#DisplayClient
```

If this is not the case, this issue is due to a MIME configuration problem: the initialization files are not being recognized in Windows 2003 as registered file extensions. To correct this, add the correct MIME type extension by doing the following:

- 1 Run the IIS manager and go to **Web Sites | Default Web Site | CitectSCADA | deploy**.
- 2 Choose **Properties** from the folder’s right-click menu.
- 3 Go to **HTTP Headers | MIME types**.
- 4 In the Extension field, enter “.\*”.
- 5 In the MIME type field, enter “all”.
- 6 Restart your Web server and client.

#### General issues

This section describes general issues relating to the Web Client product.

**Q. When I try to run a deployment in Internet Explorer, I get the following error: “Problems with this page might prevent it from being displayed properly...”. What is the problem?**

A. The cause of this problem stems from downloading the client component (the .cab file) associated with the deployment. If the current user on the client computer does not have Windows’ local administrator rights when the download takes place, this error message appears.

The solution is to ensure that the person who runs a deployment for the first time is a Windows local administrator on the client machine. Once the components have been downloaded, the problem will not reoccur and any user can access the deployment; unless the .cab file is updated and a newer version must be downloaded.

**Q. I deployed a project from within CitectSCADA using the appropriate citect.ini [WebServer] parameters, but the project does not appear in the list of**

**deployments on the Web Server. A dialog informed me that the deployment was successful. What has happened?**

A. This problem can occur if you make an error with the syntax for the [WebServer]DeployRoot parameter. If, for example, you use a curly bracket instead of a square bracket, (for example, "[WebServer}DeployRoot"), the compiler cannot read the parameter and deployment files are sent to the CitectSCADA project directory instead:

```
C:\Program Files\Citect\CitectSCADA\User\<Project Name>
```

The deployment is flagged as successful, but it cannot be located by the Web Server.

You should check the location above for evidence of this problem, as a subfolder called "Web Deploy" will have appeared. If this is the case, you should review the syntax used in your `citect.ini` file.

**Q. I deleted a user from the list of users configured for access to the Web Server, but they can still log in. How do I deny them access?**

A. Sometimes a user can connect to the Web Server even after their user account has been deleted. This is due to the operating system failing to acknowledge, for a period of around half an hour, that a user has been deleted.

The solution is to deny full access to the user before deleting them. That way, they cannot gain access. See the topic [Deleting a user account](#).

**Q. When I try to run the Web Client component for the first time, I get a "System Settings Change" message instructing me to restart my computer. What should I do?**

A. This is a known problem affecting computers that contain old versions of some system files required by the Web Client Control. If these files are used by another application during installation, this System Settings Change message appears. Click **OK** to restart your machine to allow the newer versions of the required files to be installed during system reboot. The problem will disappear.

**Q. One of the ActiveX Object's included in my project cannot locate its associated data source. Where is it?**

A. If an ActiveX object has an associated data source, you need to ensure the data source can be located by the computer hosting the Web Client. See the topic [Managing associated data sources](#) for details.

**Q. Why does a pop-up saying "Client control (CitectSCADAWebClient\_6\_0\_xxx.cab) is not in the option list!" when I try to edit my deployment from the Web Client Deployment Configuration Page?**

There are two possible reasons for this dialog:

- 1 You might have set the [Web Server] parameter WebClientControl incorrectly. The Web page might not recognize the name or version of the .cab file. You should also check that you've used a forward slash in front of the cab file name, as this is required for the Web Server to locate the correct file.
- 2 A user might have deleted the required .cab file from C:\Program Files\Citect\CitectSCADA\WebServer\client\600 (or the specified location). Therefore, the Web page cannot find it.

**Q. The Process Analyst interface normally displays in a foreign language as I translated the language resource DLL, but it displays in English on the Web Client platform. How do I correct this?**

A. A Process Analyst control running inside a CitectSCADA Web Client supports runtime language switching, but you must configure which languages the Web Client will download to the client machine.

**To configure the languages to download:**

- 1 Create a zip file in the CitectSCADA \bin folder called **bin.zip**.
- 2 Add to the zip file all the language resource DLL files that you want the client to download and use. (You can find these files in your \Program Files\Common Files\Citect folder.)

**Note:** The bin.zip file and its contents are not version-checked. This means you must manually remove the bin.zip from the Web Client machines if your server contains a more recent bin.zip file. To do this:

- 1 Find the installation directory of the Analyst.dll file on your Web Client machines and look for a file called **bin.zip** in this directory.
- 1 Delete this file.
- 1 Reconnect to the Web server to download the latest bin.zip file.

**Q. I have keyboard shortcuts configured in my CitectSCADA project, but they do not work properly when the project is deployed in the Web Client. What's wrong?**

A. Keyboard shortcuts configured for Internet Explorer (IE) take precedence over keyboard shortcuts configured within your CitectSCADA projects. For example, the CSV\_Example project has F11 assigned to call up Help on a selected animation point on a graphics page. If the project is run as a Web Client deployment, F11 will toggle the view to full screen, as is the case normally with IE.

This is a limitation of using Internet Explorer to host CitectSCADA projects. The easiest solution is to return to the CitectSCADA configuration environment and assign your shortcuts so that no clashes occur. See the Internet Explorer Help for details of preconfigured keyboard shortcuts.

**Q. I can't print from the Web Client. Why not?**

A. You *can* print from the Web Client, but not by using your browser's **File | Print** command. Instead, in your CitectSCADA project, create a Print control that uses the Cicode `WinPrint()` function to print the page you want.

**Q. The new page that I added to my CitectSCADA project does not appear in the Page Select list or the default menu page in the Web Client. How can I correct this?**

A: If the page you added to your CitectSCADA project does not appear in Web Client, you can manually type in the page name in the Page Select list to view this new page. In this version of the Web Client, the new page is not added to the default menu page.

**Q. How does the Web Client deal with ActiveX controls (for example, CiMeterX.ocx) and user files (Recipes.dbf, for example) that are required by a user project?**

A. If your user project requires files such as these, you need to create special zip files to contain them. Create an `ActiveX.zip` file to contain the ActiveX files required by your project, and a `Misc.zip` file to contain other files that your project needs; for example, `recipes.dbf`, `Chinese.dbf`, `Japan.dbf`, and so on. Add these files under the main project path (for example, `C:\Program Files\Citect\CitectSCADA\User\Example`).

**Note:** You can have subfolders within the zip files, but your project must be configured to use the same relative path structure.

During compilation, any zip files that contain supporting files required by a CitectSCADA project are copied to the Webdeploy subfolder. During startup, the Web Client will check the timestamp of any zip files to determine if the zip files have been updated; if the files have been updated, the zip files will be downloaded.

**Q. My project was created using CitectFacilities and incorporates the Citect TimeScheduler. The TimeScheduler is not working when I run the project on the Web Client. What's wrong?**

A. If you want to run the Time Scheduler on a CitectSCADA Web Client, you must ensure that the user profile you log in with has appropriate network access to the configuration tool, and the location of the configuration files. The user must be able to execute the configuration tool, and write to the configuration files.

**Q. The Web Client Deployment Page displays incorrectly on Windows 2000 Advanced Server. 'Show Server Details' is missing, and the icons for Start**

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**Display Client, Delete Deployment and Edit Deployment are also missing.  
What is wrong?**

A. This appears to be caused by Windows Automatic Update installing several components at the same time after a fresh install of the operating system. Even though Internet Explorer might have been upgraded to the latest version (for example, 6.0.2800.1106) it might still behave as a version 5 browser; for example, it offers limited support for "iframes". If you call up **About Internet Explorer** from the Help menu, and a Version 5-style dialog appears with a version 6 release number, then your computer is affected in this way.

A complete uninstall/reinstall of Internet Explorer will correct the problem.



# Appendix A: Windows Language Codes

code	Windows locale setting	code	Windows locale setting
af	Afrikaans	hu	Hungarian
sq	Albanian	is	Icelandic
ar-sa	Arabic (Saudi Arabia)	id	Indonesian
ar-iq	Arabic (Iraq)	it	Italian (Standard)
ar-eg	Arabic (Egypt)	it-ch	Italian (Switzerland)
ar-ly	Arabic (Libya)	ja	Japanese
ar-dz	Arabic (Algeria)	ko	Korean
ar-ma	Arabic (Morocco)	ko	Korean (Johab)
ar-tn	Arabic (Tunisia)	lv	Latvian
ar-om	Arabic (Oman)	lt	Lithuanian
ar-ye	Arabic (Yemen)	mk	FYRO Macedonian
ar-sy	Arabic (Syria)	ms	Malaysian
ar-jo	Arabic (Jordan)	mt	Maltese
ar-lb	Arabic (Lebanon)	no	Norwegian (Bokmal)
ar-kw	Arabic (Kuwait)	no	Norwegian (Nynorsk)
ar-ae	Arabic (U.A.E.)	pl	Polish
ar-bh	Arabic (Bahrain)	pt-br	Portuguese (Brazil)
ar-qa	Arabic (Qatar)	pt	Portuguese (Portugal)
eu	Basque	rm	Rhaeto-Romanic
bg	Bulgarian	ro	Romanian
be	Belarusian	ro-mo	Romanian (Moldavia)
ca	Catalan	ru	Russian
zh-tw	Chinese (Taiwan)	sz	Sami (Lappish)
zh-cn	Chinese (PRC)	sr	Serbian (Cyrillic)
zh-hk	Chinese (Hong Kong SAR)	sr	Serbian (Latin)
zh-sg	Chinese (Singapore)	sk	Slovak
hr	Croatian	sl	Slovenian
cs	Czech	sb	Sorbian
da	Danish	es	Spanish (Traditional)
nl	Dutch (Standard)	es-mx	Spanish (Mexico)
nl-be	Dutch (Belgium)	es-gt	Spanish (Guatemala)
en	English	es-cr	Spanish (Costa Rica)
en-us	English (United States)	es-pa	Spanish (Panama)
en-gb	English (United Kingdom)	es-do	Spanish (Dominican Republic)

code	Windows locale setting	code	Windows locale setting
en-au	English (Australian)	es-ve	Spanish (Venezuela)
en-ca	English (Canada)	es-co	Spanish (Colombia)
en-nz	English (New Zealand)	es-pe	Spanish (Peru)
en-ie	English (Ireland)	es-ar	Spanish (Argentina)
en-za	English (South Africa)	es-ec	Spanish (Ecuador)
en-jm	English (Jamaica)	es-cl	Spanish (Chile)
en	English (Caribbean)	es-uy	Spanish (Uruguay)
en-bz	English (Belize)	es-bo	Spanish (Bolivia)
en-tt	English (Trinidad)	es-sv	Spanish (El Salvador)
et	Estonian	es-hn	Spanish (Honduras)
fo	Faeroese	es-ni	Spanish (Nicaragua)
fa	Farsi	es-pr	Spanish (Puerto Rico)
fi	Finnish	sx	Sutu
fr	French (Standard)	sv	Swedish
fr-be	French (Belgium)	sv-fi	Swedish (Finland)
fr-ca	French (Canada)	th	Thai
fr-ch	French (Switzerland)	ts	Tsonga
fr-lu	French (Luxembourg)	tn	Tswana
gd	Gaelic (Scotland)	tr	Turkish
gd-ie	Gaelic (Ireland)	uk	Ukrainian
de	German (Standard)	ur	Urdu
de-ch	German (Switzerland)	vg	Valley Girl
de-at	German (Austria)	ve	Venda
de-lu	German (Luxembourg)	vi	Vietnamese
de-li	German (Liechtenstein)	xh	Xhosa
el	Greek	ji	Yiddish
he	Hebrew	zu	Zulu
hi	Hindi		

# Index

## A

- ActiveX.zip, 23
- Administrator
  - Web Client, 11

## C

- configuring
  - Web Client deployment, 25
- creating
  - Web Client deployment, 26

## D

- default languages for Web Client, 35
- deployment for Web Client
  - configuring, 25
  - creating, 26
  - deleting, 32
  - displaying, 30
  - editing, 31
  - from CitectSCADA, 28
  - updating, 32
- Display Client
  - Web Client, 11

## F

- FAQs
  - Web Client, 40
- frequently asked questions
  - Web Client, 40
- functionality limitations, 21

## L

- languages
  - Web Client, 35
- limitations
  - Cicode functions, 21
  - functionality, 21
- logging on to Web Server, 20

## M

- Manager Client
  - Web Client, 11
- Misc.zip file, 23
- multiple language support for Web Client, 35
  - non-default languages, 36

## P

- preparing a project for Web Client deployment, 21

## R

- requirements
  - Web Server, 5

## S

- security
  - configuring Web Client user groups, 14
  - deleting Web Client users, 19
  - preparing the Web Server folder, 15
  - setting up Web Client accounts, 18
  - testing Web Client settings, 19
    - Web Client, 11
    - Web Client setup, 13

## U

- unsupported functionality, 21
- users
  - Web Client, 11

## W

- Web Client, 1
  - ActiveX.zip file, 23
  - Administrator, 11
  - client account access rights, 18
  - configuring a deployment, 25
  - configuring client account user groups, 14
  - creating a deployment, 26
  - default languages, 35
  - deleting a deployment, 32
  - deleting a user account, 19
  - Deploy folder, 7
  - deploying a project from CitectSCADA, 28
  - Display Client, 11

- DisplayClient folder, 7
- displaying a deployment, 30
- editing a deployment, 31
- frequently asked questions, 40
- functionality limitations, 21
- getting started, 3
- implementing non-default languages, 36
- installed directories, 7
- introduction, 1
- logging on to Web Server, 20
- Manager Client, 11
- Misc.zip file, 23
- multiple language support, 35
- preparing a project for deployment, 21
- preparing the Web Server folder, 15
- preparing user files for delivery, 23
- security, 11
- setting up a system, 3
- setting up access rights, 18
- setting up security, 13
- system architecture, 1
- testing security, 19
- updating a deployment, 32
- user account types, 11
- using a different language to the locale setting, 36
- Web Deployment Preparation tool, 24
- Web Server address, 20
- Web Deployment Preparation tool, 24
- Web Server
  - address, 20
  - requirements, 5