



Control v3
*The Next Generation of
Digital Home Software*

REMOTE ACCESS AND AUTHENTICATION

REVISIONS

Version	Date	Revisions
V1.00	November 10, 2011	Initial Document

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DESCRIPTION

This document provides guidelines on how to configure mControl v3 to use Windows Authentication for remote access.

This guideline uses the following methodology:

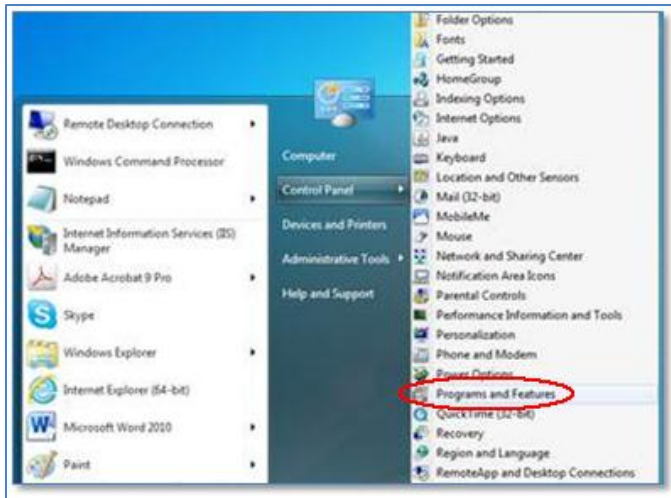
1. Enable (Windows) authentication option for IIS7
2. Create new mControl v3 website for remote access
3. Add Authentication to the new mControl v3 website
4. Configure router to allow remote access via port forwarding

ENABLE AUTHENTICATION OPTION

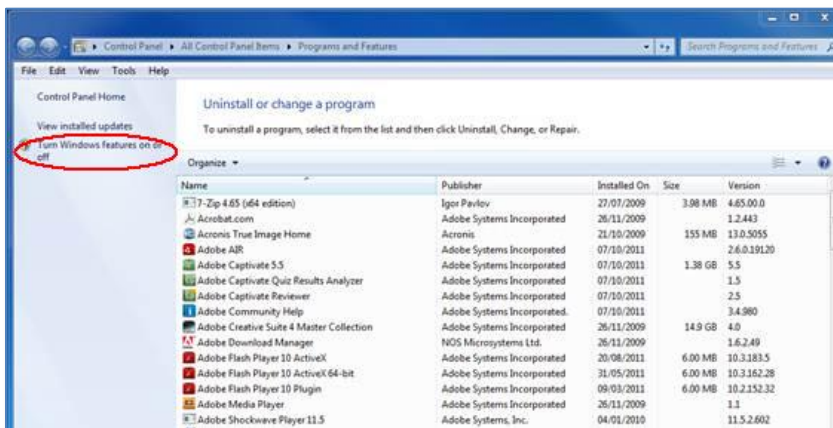
User authentication is a means of identifying and verifying a user's access. This is especially relevant if you are accessing applications, mControl v3, on your home network from a remote location. Here we will use IIS7's Windows Authentication option to perform the authentication task.

Use Control Panel's Program and Features to enable IIS7's Windows Authentication option.

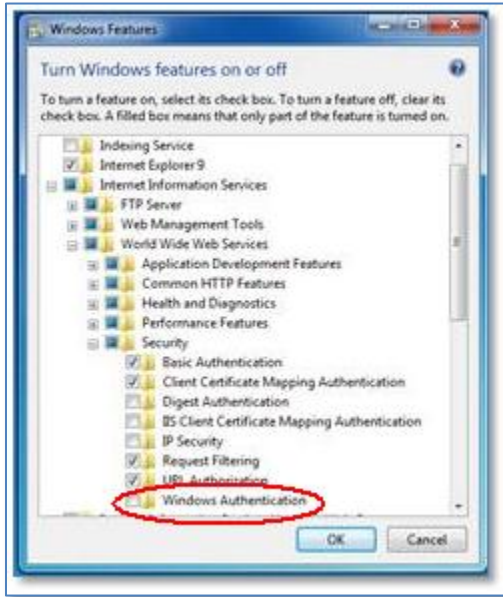
1. Press the Start button, select Control Panel's "Program and Features" option



2. Select "Turn Windows Features On or Off"



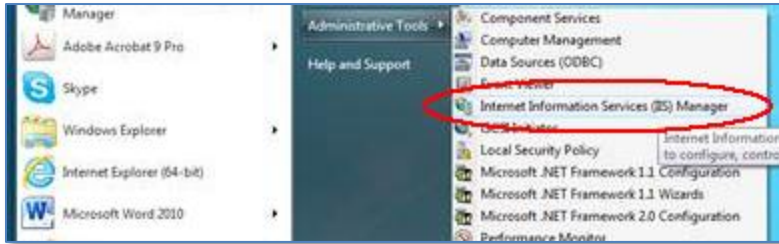
3. Select and enable the Windows Authentication option for IIS7, by selecting the “Windows Authentication” option and pressing OK.



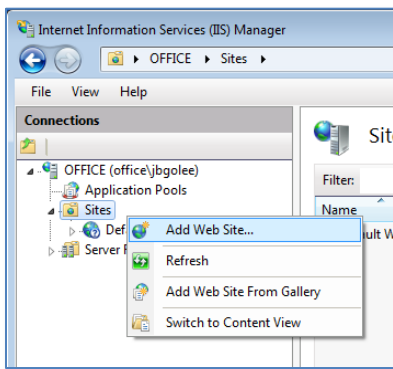
CREATE MCONTROL V3 WEBSITE FOR REMOTE ACCESS

For remote access, we will create a new mControl v3 website.

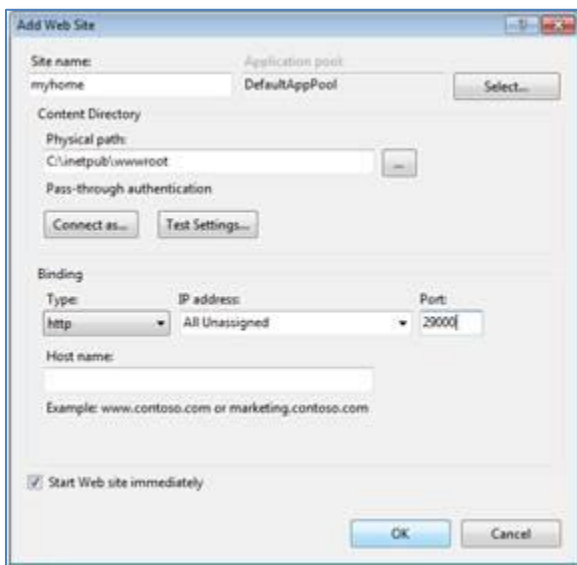
1. Open Internet Information Services (IIS) Manager



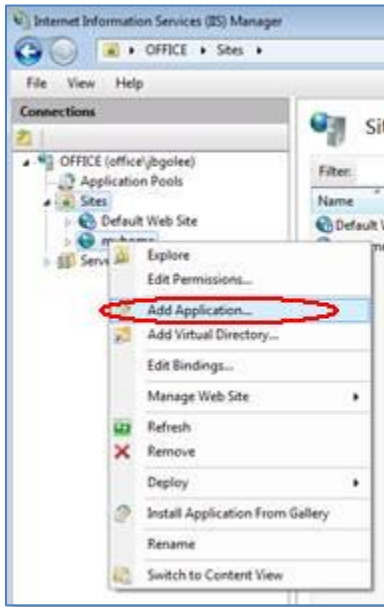
2. Select Sites and right-mouse click to Add new site



3. Enter information about the new website. Select a friendly name like "myHome" and select a port number to use (e.g, 29000). Once you are done, press OK.

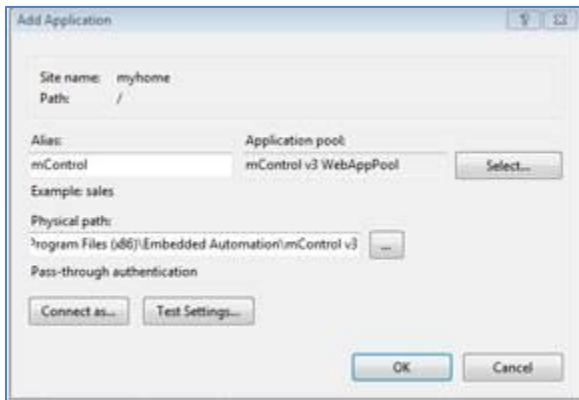


- Now we will add mControl to this new site. Select the site you just created and right-click to Add and application.



- Configure the mControl application by providing an alias (e.g., mControlv3) and the path to where the mControl v3 application resides.

NOTE: we have shown "Program Files (x86)\Embedded Automation\mControl v3" for x64 systems, but if you have a 32-bit system, you need to select "Program Files\Embedded Automation\mControl v3".

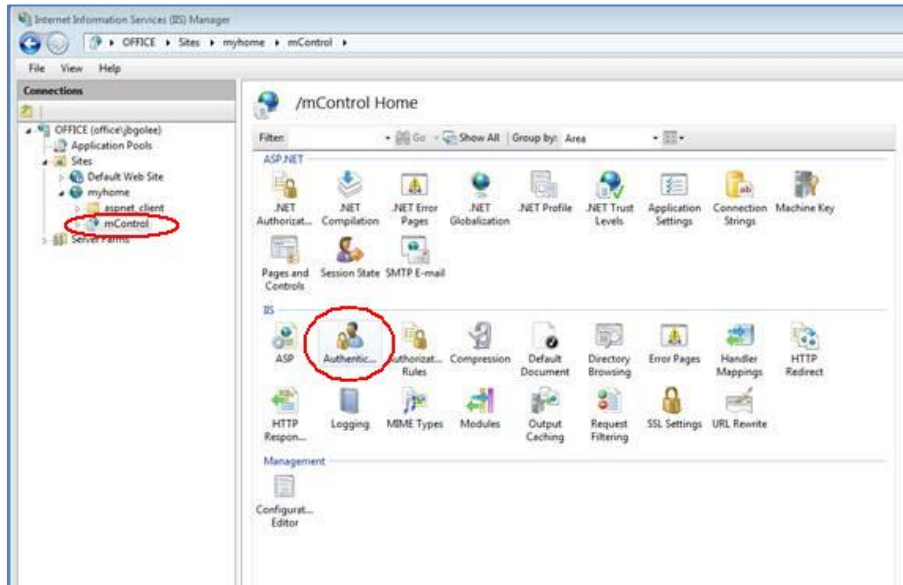


- You can now test your website by going opening your browser and entering: <http://<ApplicationName>:<SitePortNumber>/<Alias>/mobile.aspx>, which will show you the Mobile page for mControl.

ENABLE AUTHENTICATION FOR THE WEBSITE

Up to now, we have added mControl as a website but it is accessible by anyone – we will now add Windows Authentication to this website to ensure that only validated access is allowed.

1. Select the new mControl v3 application select the Authentication option



2. For Authentication, set Windows Authentication to ENABLED and all other methods to DISABLED

The screenshot shows the 'Authentication' configuration page in IIS Manager. The 'Group by' dropdown is set to 'No Grouping'. Below the dropdown is a table with three columns: 'Name', 'Status', and 'Response Type'. The table contains two rows: 'Anonymous Authentication' with 'Status' 'Disabled' and 'Response Type' 'HTTP 401 Challenge'; and 'Windows Authentication' with 'Status' 'Enabled' and 'Response Type' 'HTTP 401 Challenge'.

Name	Status	Response Type
Anonymous Authentication	Disabled	HTTP 401 Challenge
Windows Authentication	Enabled	HTTP 401 Challenge

3. Now when accessing mControl remotely, you will be prompted for a user name and password. Use the user name and password of your login for your PC on which mControl is installed.

CONFIGURE ROUTER TO PORT FORWARD TO MCONTROL

As a final step, you must configure your network router to port forward any remote access to the PC where mControl is installed.

1. Configure your router, using the following guide: <http://www.wikihow.com/Set-up-Port-Forwarding-on-a-Router>. You must select the port that matches the port configured in your web site application and the IP address should be the IP address of the PC on which mControl is installed.
2. To access mControl remotely, you will need to find out your external IP address, using applications like www.IPChicken.com.

You are now able to access mControl from a remote location by going to <http://<ExternalIPAddress>:<SitePortumber>/mControl/Mobile.aspx>.

ADDITIONAL INFORMATION

Since the external IP address provided by your ISP (i.e., cable or telephone company) for your router will change from time to time, you'll want to consider a "static" IP.

DYNAMIC DNS SERVICE

There are companies that provide a dynamic DNS (DDSN) service, allowing management of changing IP address. This is a free or nominal charge service and takes minutes to set up.

To find out more information:

- Learn about dynamic and static IPs at Wikipedia: http://en.wikipedia.org/wiki/IP_address
- A static IP service employs a Dynamic DNS system - which you can read about here: http://en.wikipedia.org/wiki/Dynamic_DNS
- Do a google on "static IP ddns" to find companies which offer this service. We have used www.no-ip.com and www.tzo.com with good results.

STATIC IP SERVICE

Your Internet service provider may also provide a static external IP address at a premium cost.