

# Connecting EWS using DDNS

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ver.1.0

This application note explains how to establish communication between PROS and EWS over internet, in case EWS is connected using provider service without Static IP

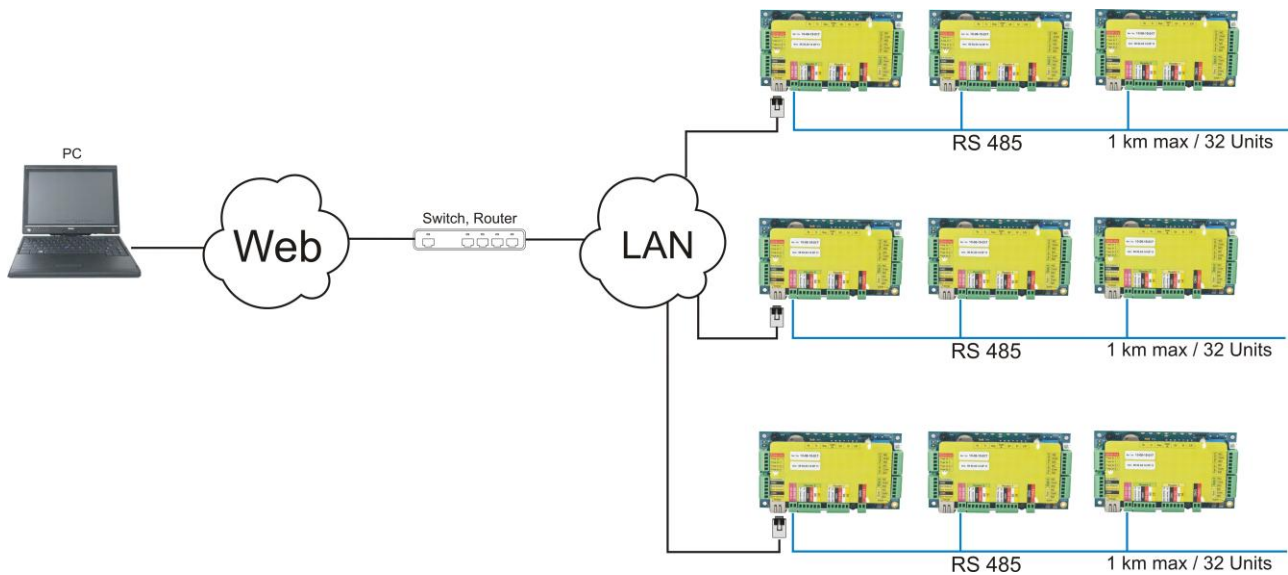
If the site where the installation is made is different than the site where the PROS software will run and there is no static IP on the installation then there are two basic ways to achieve interconnection:

### **Method I (Recommended)**

**Configure the Router at the installation site to obtain DNS domain**

### **Method II**

**Configure one EWS Controller to obtain DNS domain**



## Method I (Recommended)

**“Configure the router at the installation site to obtain DNS domain”**

### Requirements:

The router at the installation site supports Dynamic DNS Service

**Step1:** Register DNS Hostname at DDNS service (choose one supported by your router). The example given bellow is with TP Link Router.

- Click on Dynamic DNS
- Select the service provider

**TP-LINK® 54M Wireless Router with eXtended Range™**

**54M Wireless Router**  
Model No.: TL-WR541G / TL-WR542G

**DDNS**

Service Provider: Dyndns ( www.dyndns.org ) [Go to register...](#)

User Name:

Password: ●●●●●●

Domain Name: sytechrd.dyndns.org

☒ Enable DDNS

Connection Status: Succeeded!

Login Logout

Save

Go to the web site of the selected Provider (in this case **dyndns.org**) to register a hostname.

1. Click on Get Started and this window will appear. Click on Sign Up under the DynDNS Free column.

| DynDNS Free             | DynDNS Pro              | DynDNS Custom           |
|-------------------------|-------------------------|-------------------------|
| FREE                    | \$15.00/yr              | \$29.95/yr              |
| <a href="#">Sign Up</a> | <a href="#">Sign Up</a> | <a href="#">Sign Up</a> |
| 2                       | 25                      | 75                      |
| Choose from one of ours | Choose from one of ours | Custom Domain           |
| -                       | ✓                       | ✓                       |
| 1                       | 1                       | 1                       |
| 5 Unicast               | 5 Unicast               | 5 Unicast               |
| -                       | Update history (24 hr.) | Update history (24 hr.) |
| -                       | -                       | -                       |
| <a href="#">Sign Up</a> | <a href="#">Sign Up</a> | <a href="#">Sign Up</a> |

- 2.

### Add New Hostname

You don't currently have a [Dynamic DNS Pro service](#) in your account.

To get the full benefits of Dynamic DNS, including premium subscriber domains and other features, [add Dynan your shopping cart](#) (or try it with \$1.99 [monthly subscription](#)).

**Hostname:** my-company . dyn dns.org

**Wildcard:** ☐ create "\*.host.dyn dns-yourdomain.com" alias (for example to use same settings for www.host.dyn dns-yourdomain.com)

**Service Type:** ☒ Host with IP address ☐ WebHop Redirect (URL forwarding service) ☐ Offline Hostname

**IP Address:** 89.205.29.136  
[Your current location's IP address is 89.205.29.136](#)  
TTL value is 60 seconds. [Edit TTL...](#)

**Mail Routing:** ☐ I have mail server with another name and would like to add MX hostname...

**What do you want to use this host for?**  
Select services and devices you would like to use with this hostname.  
Work From Home Office or VPN: ☐ vpn ☐ remote file access ☐ remote desktop ☐ mail server ☐ web server ☐ chat server ☐ ftp backup ☐ ssh ☐ database ☐ voip

**Hosting and Design For Web Sites and Blogs:** ☐ blog ☐ gallery ☐ wiki ☐ portfolio ☐ ecommerce ☐ web page

**Remote Access For Devices:** ☐ dvr ☐ webcam ☐ data storage ☐ cctv ☐ printer ☐ alarm and security ☐ thermostat ☐ weather station ☐ game server ☐ home automation

[Add To Cart](#)

- Enter Hostname (ex. **my-company**)
- Click on the link in order to obtain Your Dynamic IP address.
- Select type of application i.e. "alarm and security"
- Click "Add to Cart"

- 3.

Settings

View

My Settings

My

File

HIRING

by Dyn

**Upgrade Options**  
Free accounts allow only two Dynamic DNS hosts.  
• to add more and enjoy additional benefits for only \$15.00 per year, [purchase Dynamic DNS Pro \\$15](#).  
• to get Dynamic DNS for **your own domain**, use [Custom DNS](#).

**Dynamic DNS Hosts**  
my-company.dyn dns.org - [remove](#) \$0.00  
**Order Total: \$0.00**

Create account or log in to continue checkout:

Username   
Password   
Confirm password   
Email   
Confirm Email   
Security Image   
Enter the numbers from the above image:

**Subscribe to:** ☐ DynDNS.com newsletter (1 or 2 per month) ☐ Dyn Inc. press releases  
☐ I agree with the [acceptable use policy \(AUP\)](#) and [privacy policy](#).  
[Create Account](#)

**Already Registered?**  
Username   
Password   
[Forgot your password?](#) [Login](#)

- Fill in this form and remember the Username and the Password.
- Wait for confirmation mail and confirm the account.

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#### 4. Click “proceed to checkout”

The screenshot shows the DynDNS.com Shopping Cart page. The cart is empty, showing a total of \$0.00. There are two 'Proceed to checkout' buttons. The left sidebar shows 'My Account' and 'My Services' links. The top navigation bar includes 'DNS & Domains', 'Email Services', and 'Performance & Security'.

#### 5. Click “Activate Services”

The screenshot shows the DynDNS.com Free Services Checkout page. The page displays a confirmation message and a table of services. The table has columns for Service, Period, and Price. The service listed is 'Dynamic DNS Hosts' for 'my-company.dyndns.org' with a price of \$0.00. There is an 'Activate Services >>' button.

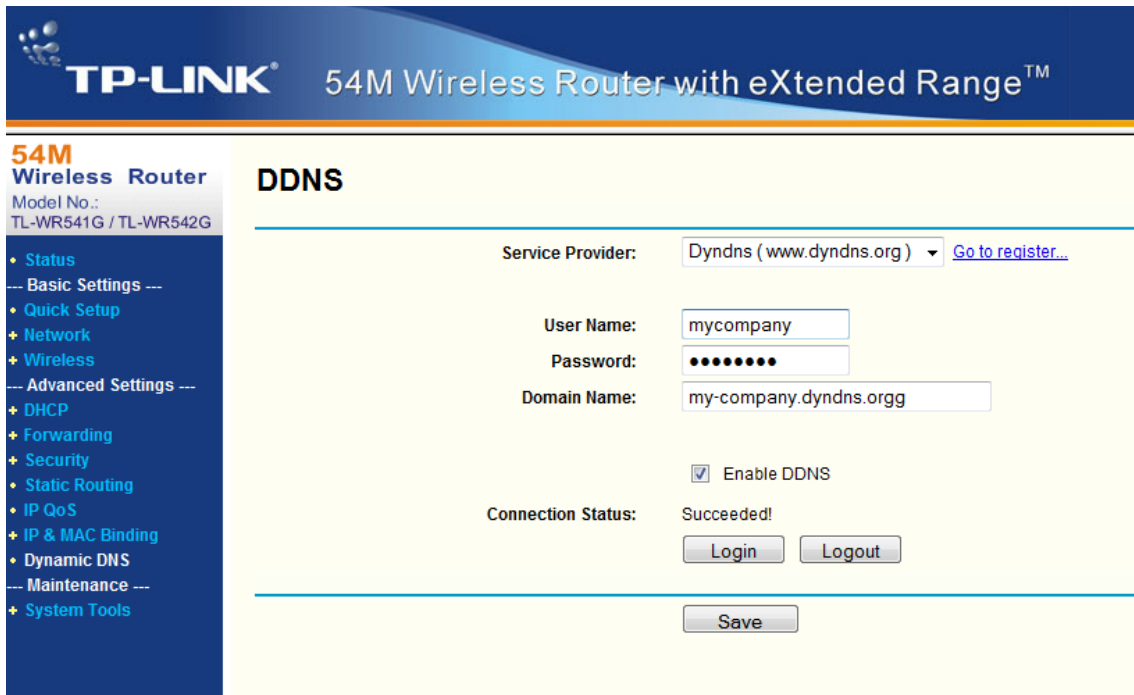
| Service           | Period | Price  |
|-------------------|--------|--------|
| Dynamic DNS Hosts | -      | \$0.00 |
| Sub-Total:        |        | \$0.00 |

#### 6. Copy the Hostname “my-company.dyndns.org”

The screenshot shows the DynDNS.com Host Services page. The page displays a confirmation message and a table of host services. The table has columns for Hostname, Service, Details, and Last Updated. The service listed is 'my-company.dyndns.org' as a Host with IP 89.205.29.136, last updated on Apr. 12, 2011 8:29 AM. There is a '+ My Services' button.

| Hostname              | Service | Details       | Last Updated          |
|-----------------------|---------|---------------|-----------------------|
| my-company.dyndns.org | Host    | 89.205.29.136 | Apr. 12, 2011 8:29 AM |

## Step2: Set your router to use that DYNDNS Service.



The screenshot shows the DDNS configuration page of a TP-LINK 54M Wireless Router. The page has a blue header with the TP-LINK logo and the text "54M Wireless Router with eXtended Range™". On the left, there is a navigation menu with options: Status, Basic Settings, Quick Setup, Network, Wireless, Advanced Settings, DHCP, Forwarding, Security, Static Routing, IP QoS, IP & MAC Binding, Dynamic DNS, Maintenance, and System Tools. The main content area is titled "DDNS" and contains the following fields and options:

- Service Provider:** A dropdown menu set to "Dyndns ( www.dyndns.org )" with a link "Go to register..." next to it.
- User Name:** A text input field containing "mycompany".
- Password:** A password input field with masked characters "••••••••".
- Domain Name:** A text input field containing "my-company.dyndns.orgg".
- Enable DDNS:** A checkbox that is checked.
- Connection Status:** A label indicating "Succeeded!".
- Login/Logout:** Two buttons, "Login" and "Logout", located below the connection status.
- Save:** A button at the bottom of the form.

- Paste the Hostname "my-company.dyndns.org"
- Put the Username and the Password
- Check "Enable DDNS"
- Click "Login"
- After successful configuration, "Succeeded" message will appear in the "Connection status" field

### Step3: Setup Port forwarding for the EWS

**TP-LINK® 54M Wireless Router with eXtended Range™**

**54M Wireless Router**  
Model No.: TL-WR541G / TL-WR542G

- Status
- Basic Settings ---
- Quick Setup
- Network
- Wireless
- Advanced Settings ---
- DHCP
- Forwarding
  - Virtual Servers**
  - Port Triggering
  - DMZ
  - UPnP
- Security
- Static Routing
- IP QoS
- IP & MAC Binding
- Dynamic DNS
- Maintenance ---
- System Tools

#### Virtual Servers

| ID | Service Port | IP Address   | Protocol | Status  | Modify                                        |
|----|--------------|--------------|----------|---------|-----------------------------------------------|
| 1  | 4010         | 192.168.1.21 | ALL      | Enabled | <a href="#">Modify</a> <a href="#">Delete</a> |
| 2  | 8080         | 192.168.1.15 | ALL      | Enabled | <a href="#">Modify</a> <a href="#">Delete</a> |
| 3  | 80           | 192.168.1.21 | ALL      | Enabled | <a href="#">Modify</a> <a href="#">Delete</a> |

- Click on Forwarding/Virtual servers
- Click "Add New"

**TP-LINK® 54M Wireless Router with eXtended Range™**

**54M Wireless Router**  
Model No.: TL-WR541G / TL-WR542G

- Status
- Basic Settings ---
- Quick Setup
- Network
- Wireless
- Advanced Settings ---
- DHCP
- Forwarding
  - Virtual Servers**
  - Port Triggering
  - DMZ
  - UPnP
- Security
- Static Routing
- IP QoS
- IP & MAC Binding
- Dynamic DNS
- Maintenance ---
- System Tools

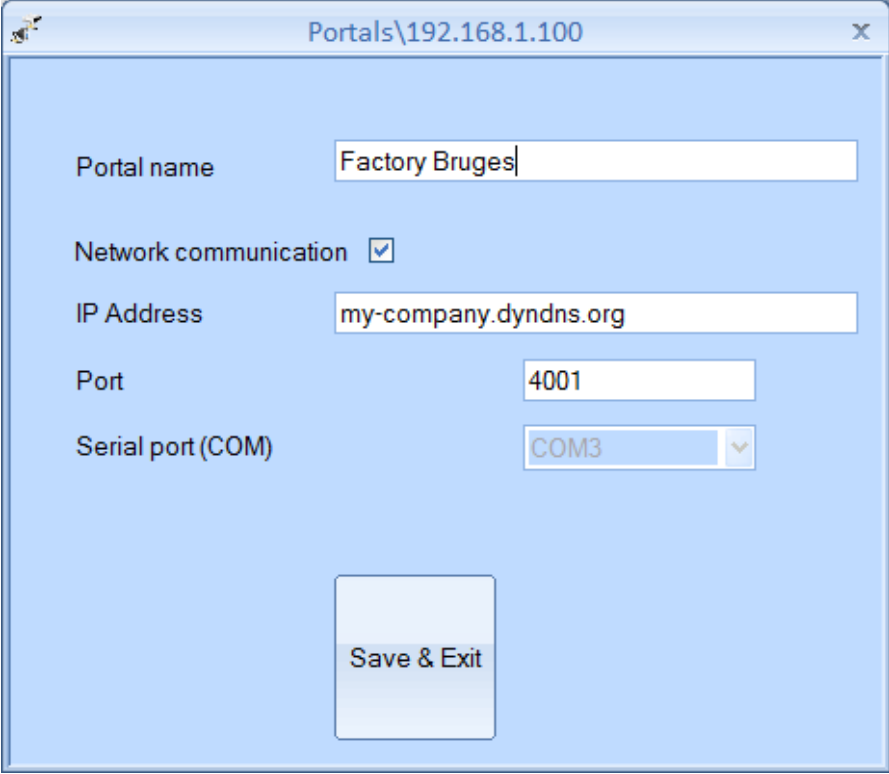
#### Add or Modify a Virtual Server Entry

Service Port:  (XX-XX or XX)  
 IP Address:   
 Protocol:   
 Status:   
 Common Service Port:

- Put the Port
- Put the IP Address of the EWS Controller (192.168.1.100)
- Save

## Step4: Inserting the DNS Hostname in the PROS software

- Open the PROS Software
- Create a portal with IP address: my-company.dyndns.com



The screenshot shows a window titled "Portals\192.168.1.100" with a close button (X) in the top right corner. The window contains the following fields and controls:

- Portal name:** A text box containing "Factory Bruges".
- Network communication:** A checkbox that is checked.
- IP Address:** A text box containing "my-company.dyndns.org".
- Port:** A text box containing "4001".
- Serial port (COM):** A dropdown menu showing "COM3".
- Save & Exit:** A button at the bottom center of the window.



## Method II

### “Configure one EWS Controller to obtain DNS domain”

#### Limitations:

Only 1 EWS Controller can be set. Only [www.dyndns.com](http://www.dyndns.com) Provider can be used.

#### Step1: Configuring the EWS and creating DYNDNS hostname

1. Type in the browser (Internet Explorer, Mozilla...) the IP of the EWS Controller <http://192.168.1.100> and this window will appear:

A screenshot of a web browser window showing a login page. The title of the page is "Login to EWS" in green text. Below the title, there are two input fields: "Username:" and "Password:". Below the "Password:" field, there is a "Login" button. The entire form is enclosed in a thin black border.

Login to EWS

Username:

Password:

Login

Default:

Username: **admin**

Password: **00000000**

2. Type: **admin** for username and **00000000** for password.

or "admin" on http://192.168.1.100/

**EWS2 Settings**

---

**System WAN / LAN**

IP Address: 192.168.1.100

SubnetMask: 255.255.255.0

Gateway IP: 192.168.1.1

DNS Server: 1.1.1.1

DHCP Enable: ☐

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**Dynamic DNS**

Service: [dyndns.org](http://dyndns.org)

DDNS Hostname:

DDNS Username:

DDNS Password:

Public IP Address: 89.205.29.136

Last known STATUS: Disabled

To disable DDNS service, leave the Hostname box blank.

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**Network Ports**

TCP Data Port: 4001

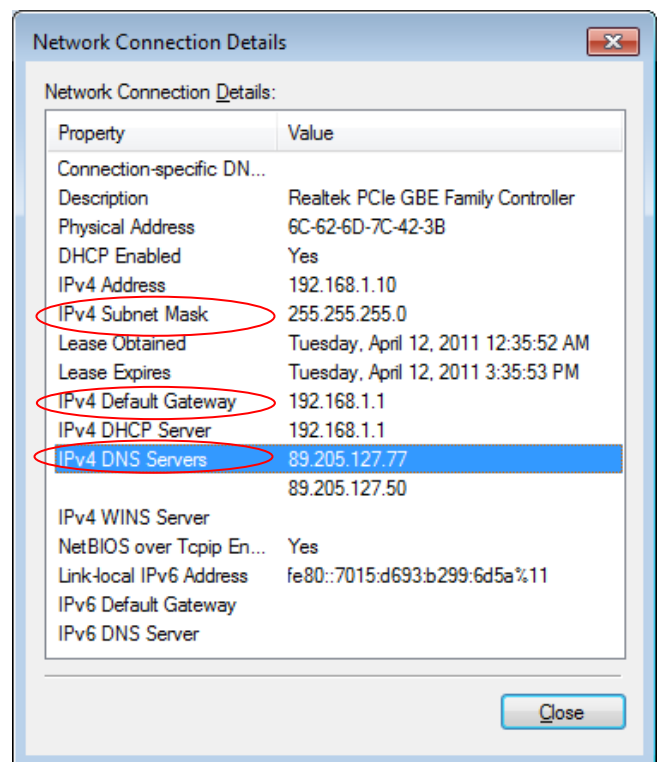
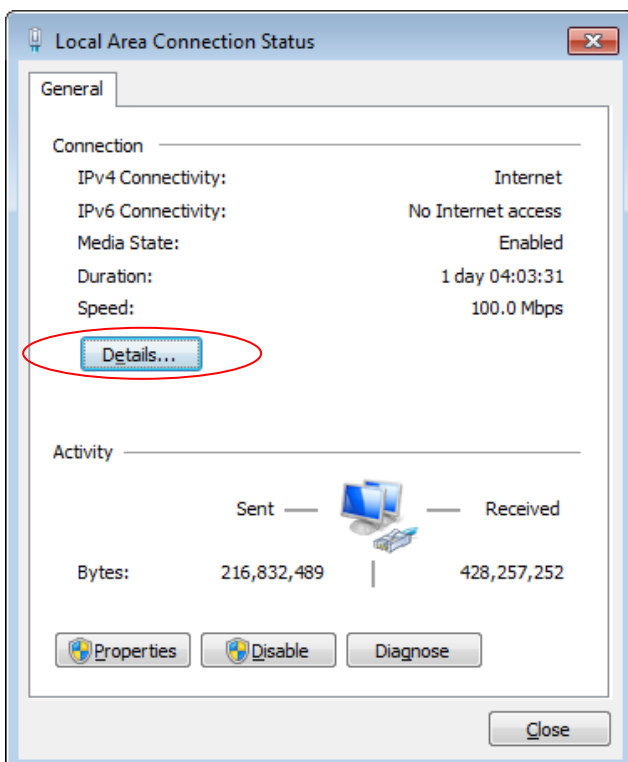
UDP SetupPort: 8000

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Firmware v 1.09  
NetID: 62985379

3. The parameters marked in red must be set according to your network configuration.

- To do that go to Local Area connection properties and click on details (the example given bellow refers to Windows 7)
- Read out Subnet Mask, the Gateway and the DNS Server address.



- Write the parameters in the EWS settings window.

**Note:** If DHCP was enabled, all the parameters would have been set automatically by the router, including the IP address of the EWS Unit.

**EWS2 Settings**

---

**System WAN / LAN**

IP Address

SubnetMask

Gateway IP

DNS Server

DHCP Enable ☐

---

**Dynamic DNS**

Service: [dyndns.org](http://dyndns.org)

DDNS Hostname:

DDNS Username:

DDNS Password:

Public IP Address:

Last known STATUS:

To disable DNS service, leave the Hostname box blank.

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**Network Ports**

TCP Data Port

UDP SetupPort

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Firmware v 1.09  
NetID: 62985379

- Click on [dyndns.org](http://dyndns.org) to create FREE Hostname.

- Click on Get Started and this window will appear. Click on Sign Up under the DynDNS Free column.

| DynDNS Free<br>FREE     | DynDNS Pro<br>\$15.00/yr | DynDNS Custom<br>\$29.95/yr |
|-------------------------|--------------------------|-----------------------------|
| <a href="#">Sign Up</a> | <a href="#">Sign Up</a>  | <a href="#">Sign Up</a>     |
| 2                       | 25                       | 75                          |
| Choose from one of ours | Choose from one of ours  | Custom Domain               |
| -                       | ✓                        | ✓                           |
| 1                       | 1                        | 1                           |
| 5 Unicast               | 5 Unicast                | 5 Unicast                   |
| -                       | Update history (24 hr.)  | Update history (24 hr.)     |
| -                       | -                        | -                           |
| <a href="#">Sign Up</a> | <a href="#">Sign Up</a>  | <a href="#">Sign Up</a>     |

7.

Add New Hostname

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To get the full benefits of Dynamic DNS, including premium subscriber domains and other features, [add Dynan your shopping cart](#) (or try it with \$1.99 [monthly subscription](#)).

**Hostname:** my-company . dyndns.org

**Wildcard:** ☐ create "\*" host.dyndns-yourdomain.com" alias (for example to use same settings for www.host.dyndns-yourdomain.com)

**Service Type:**
☒ Host with IP address  
☐ WebHop Redirect (URL forwarding service)  
☐ Offline Hostname

**IP Address:** 89.205.29.136  
[Your current location's IP address is 89.205.29.136](#)  
TTL value is 60 seconds. [Edit TTL...](#)

**Mail Routing:** ☐ I have mail server with another name and would like to add MX hostname...

**What do you want to use this host for?**  
Select services and devices you would like to use with this hostname.  
Work From Home Office or VPN:  

vpn

remote file access

remote desktop

mail server

web server

chat server

ftp backup

ssh

database

voip

Hosting and Design For Web Sites and Blogs:  

blog

gallery

wiki

portfolio

ecommerce

web page

Remote Access For Devices:  

dvr

webcam

data storage

cctv

printer

alarm and security

thermostat

weather station

game server

home automation

Add To Cart

- Enter Hostname (ex. **my-company**)
- Click on the link in order to obtain the IP address.
- Select type of application i.e. "alarm and security"
- Click "Add to Cart"

8.

Settings  
vices  
my Settings  
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file

E HIRING

by Dyn

**Upgrade Options**  
 Free accounts allow only two Dynamic DNS hosts.  
 • to add more and enjoy additional benefits for only \$15.00 per year, [purchase Dynamic DNS Pro](#).  
 • to get Dynamic DNS for **your own domain**, use [Custom DNS](#).

| Dynamic DNS Hosts          |               |
|----------------------------|---------------|
| my-company.dyndns.org      | remove \$0.00 |
| <b>Order Total: \$0.00</b> |               |

Create account or log in to continue checkout:

Username  
Password  
Confirm password  
Email  
Confirm Email  
Security Image  

8 4 0 8 3

Enter the numbers from the above image:

**Subscribe to** ☐ DynDNS.com newsletter (1 or 2 per month)  
☐ Dyn Inc. press releases  
☐ I agree with the [acceptable use policy \(AUP\)](#) and [privacy policy](#).  

Create Account

Already Registered?  
Username  
Password  

Login

[Forgot your password?](#)

If you're having difficulty creating your account, for any reason, feel free to [contact us](#).

- Fill in this form and remember the Username and the Password, because they will be used upon log on in the EWS controller.
- Wait for confirmation mail and confirm the account.

## 9. Click “proceed to checkout”

**DynDNS.com**  
by Dynamic Network Services Inc.

What are you looking for?

Why DynDNS.com? Services & Pricing Support Welcome **tose123**

**My Account**

My Services

Account Settings

Billing

Active Services

Auto Renew Settings

Order History

Billing Profile

**WE'RE HIRING**

Powered by **Dyn**

**Shopping Cart**

**Upgrade Options**

Free accounts allow only two Dynamic DNS hosts.

- to add more and enjoy additional benefits for only \$15.00 per year, [purchase Dynamic DNS Pro](#).
- to get Dynamic DNS for **your own domain**, use [Custom DNS](#).

**Dynamic DNS Hosts**

| Host                  | Remove                                | Price  |
|-----------------------|---------------------------------------|--------|
| my-company.dyndns.org | <input type="button" value="remove"/> | \$0.00 |

**Order Total: \$0.00**

## 10. Click “Activate Services”

**DynDNS.com**  
by Dynamic Network Services Inc.

What are you looking for?

Why DynDNS.com? Services & Pricing Support Welcome **tose123**

**My Account**

My Services

Account Settings

Billing

Active Services

Auto Renew Settings

Order History

Billing Profile

**Free Services Checkout**

Once you have confirmed the contents of your cart your services will be instantly activated.

| Service                               | Period | Price  |
|---------------------------------------|--------|--------|
| <a href="#">my-company.dyndns.org</a> | -      | \$0.00 |

**Sub-Total: \$0.00**

## 11. Copy the Hostname “my-company.dyndns.org”

**DynDNS.com**  
by Dynamic Network Services Inc.

What are you looking for?

Why DynDNS.com? Services & Pricing Support Welcome **tose123**

**My Account**

My Services

Dynamic DNS Pro

Internet Guide

SLA

Premier Support

Domain names, DNS hosting, Sendlabs e-mail services

Dynamic DNS Hosts

Dynect SMB

Sendlabs SMTP

**Host Services**

[my-company.dyndns.org](#) successfully activated.

Just signed up for my free domain name with DynDNS! Now I can remote desktop, host web sites at home, and more.

Show us some love!

| Hostname                              | Service | Details       | Last Updated          |
|---------------------------------------|---------|---------------|-----------------------|
| <a href="#">my-company.dyndns.org</a> | Host    | 89.205.29.136 | Apr. 12, 2011 8:29 AM |

12.

## EWS2 Settings

### System WAN / LAN

IP Address

SubnetMask

Gateway IP

DNS Server

DHCP Enable ☐

### Dynamic DNS

Service: [dyndns.org](https://dyndns.org)

DDNS Hostname:

DDNS Username:

DDNS Password:

Public IP Address:

Last known STATUS:

To disable DDNS service, leave the Hostname box blank.

### Network Ports

TCP Data Port

UDP SetupPort

Firmware v 1.09  
NetID: 62985379

- Paste the Hostname in the EWS settings window
- Put the Username and the Password
- Click “Update and reset”
- Wait for 30 sec
- Reconnect to the EWS Controller by typing 192.168.1.100 in the browser
- After successful configuration, “Success” message will appear in the “last known status” field.

## Step2: Port Forwarding the Router

After configuring the EWS Controller, a **Port Forwarding** (dedicated switch port) is mandatory.

Bellow is given example of Port Forwarding in Linksys Switch. The Ports **80** and **4001** are forwarded to the EWS controller's IP **192.168.1.100**.

- Click the **Applications & Gaming** link near the top of the page.
- You should now see a new menu. In this new menu, click **Port Range Forward**.
- If you are forwarding a single port, enter that port number into the **Start** and the **End** boxes. If you are forwarding a range of ports, enter the lowest number of that range into the **Start** box. Then enter the highest number of that range into the **End** box.



### Step3: Inserting the DNS Hostname in the PROS software

- Open the PROS Software
- Create a portal with IP address: my-company.dyndns.com



Portals\192.168.1.100

Portal name

Factory Bruges

Network communication

☒

IP Address

my-company.dyndns.org

Port

4001

Serial port (COM)

COM3

Save & Exit