



Network Installation Guide

For Network DVR and Video Network Server

ver. 1.0.0

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I. Introduction

CPcam Network DVR (and **Video Web Server**) can be accessible on the Internet. Users can use Internet Explorer (called **IE** hereafter) or the application program on included CD (called **AP** hereafter) to connect to a DVR through the Internet. Users may monitor and configure the DVR (and cameras) remotely.

There are two methods to connect a DVR to the Internet: **Static IP** and **Dynamic IP**. Network installation requires a broadband Internet connection from service providers such as **SHAW** or **TELUS**. The following table shows 4 different scenarios.

SCENARIOS	STATIC IP	DYNAMIC IP
SHAW	(A)	(C)
TELUS	(B)	(D)

The following sections will provide detail instructions as to how to set up a DVR on the Internet for all 4 scenarios. However, this guide is meant to be a supplement to the official user's manual. As a result, please also refer to the network setting section in the user's manual while reading this guide.

Note: In order to set up DVR on Internet, make sure your router supports the following features:

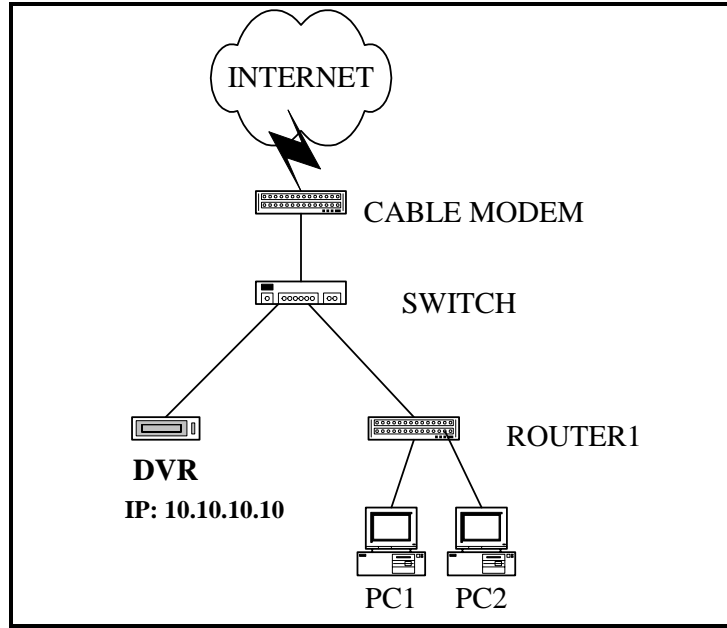
- **Virtual Server (Port Forwarding)**
- **Dynamic DNS (DDNS)**

II. Static IP Setting VS. Dynamic IP Setting

Static IP setting is suitable for a corporate office that requires a separate network for its video surveillance system (separate from its corporate network).

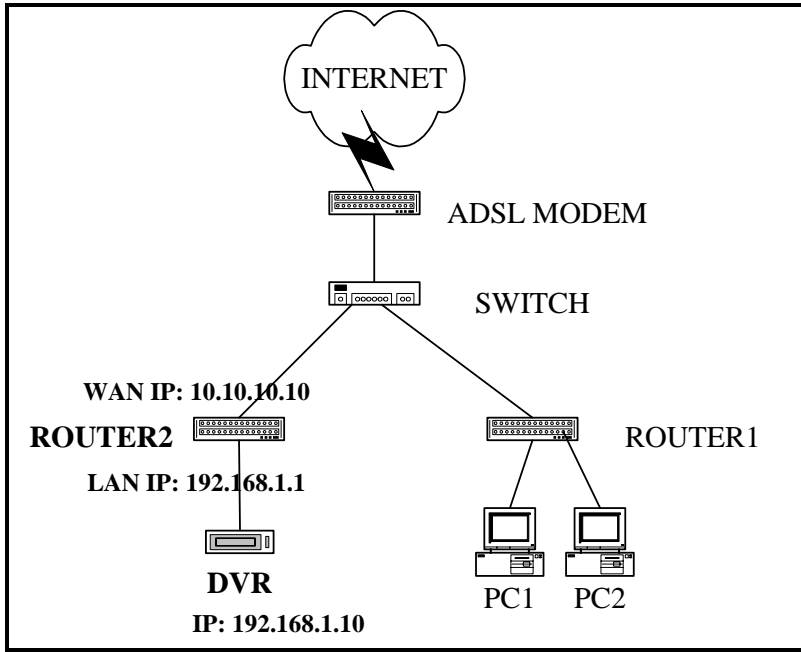
Dynamic IP setting is suitable for any environment ranging from a small household to a large corporate office. Since dynamic IP is a basic service for both SHAW and TELUS, this type of installation can be used for almost every client.

III. Static IP with SHAW Cable



Step 1	Contact SHAW Customer Service to obtain the following information: <ul style="list-style-type: none">▪ Static IP Address (e.g. 10.10.10.10)▪ Subnet Mask▪ Gateway▪ DNS Server Address
Step 2	Enter the above information in the DVR Network menu. Set Port to 80.
Step 3	Connect to the DVR in following two ways: <ol style="list-style-type: none">1. Enter address <code>http://10.10.10.10</code> in IE.2. Use AP (User Name: admin. Password: admin. Server IP: 10.10.10.10. Web Port: 80)

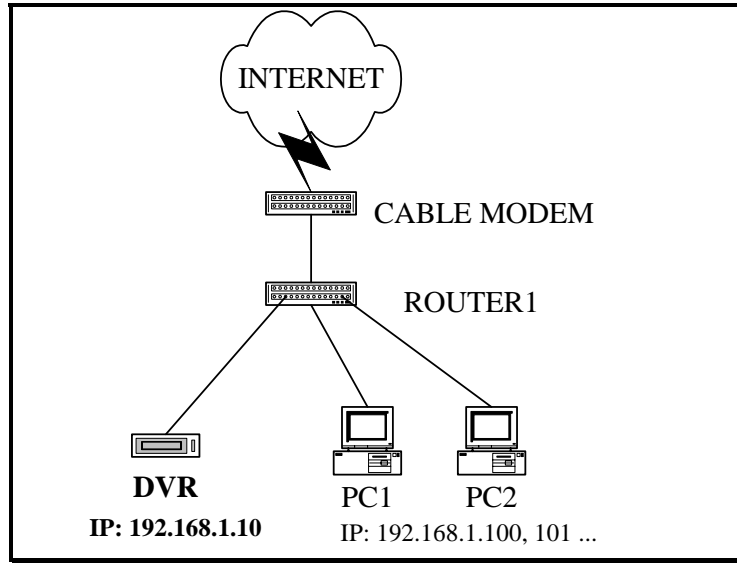
IV. Static IP with TELUS ADSL



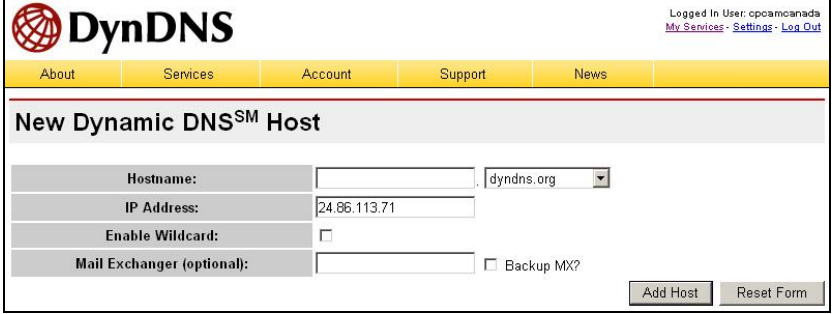
Step 1	<p>Contact TELUS Customer Service to obtain a static IP address (e.g. 10.10.10.10)</p> <p>Note: According to TELUS, customer has to provide the MAC Address of router2 in order to get a static IP. Refer to router2 user's manual regarding how to obtain the MAC address.</p>
Step 2	<p>Enter the static IP address for WAN in router2. (Refer to router2 user's manual)</p>
Step 3	<p>Enter the following information in the DVR network menu:</p> <ul style="list-style-type: none"> ▪ IP Address: e.g. 192.168.1.10 ▪ Subnet Mask: e.g. 255.255.255.0 ▪ Gateway: e.g. 192.168.1.1 (equal to router2 LAN IP) ▪ Port: 80 <p>Note: DVR IP address, subnet mask and gateway values may vary depending on user's router2 settings.</p>
Step 4	<p>Configure router2 Virtual Server setting:</p> <ol style="list-style-type: none"> 1. Add a virtual server by Port. 2. Select Port Type – TCP, or both TCP and UDP. 3. Enter Port Number 80. <p>Set Local IP Address: e.g. 192.168.1.10 (DVR IP address).</p>

Step 5	Connect to the DVR in following two ways: <ol style="list-style-type: none"><li data-bbox="506 279 1011 310">1. Enter address <code>http://10.10.10.10</code> in IE.<li data-bbox="506 321 1243 405">2. Use AP (User Name: admin. Password: admin. Server IP: 10.10.10.10. Web Port: 80)
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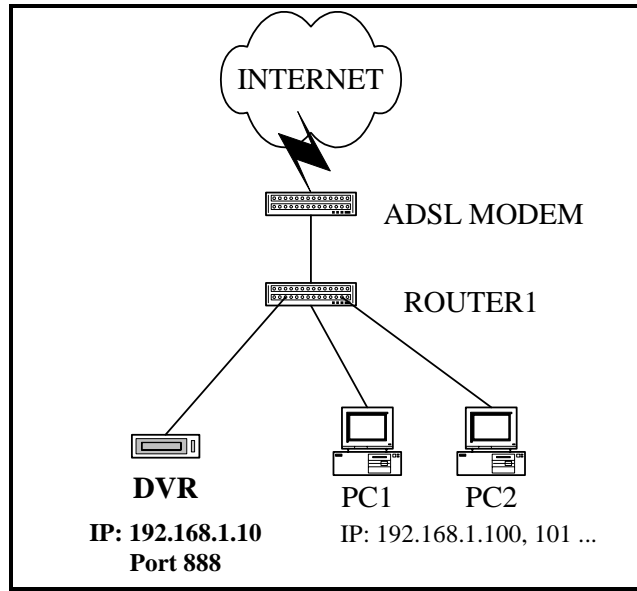
V. Dynamic IP with SHAW Cable



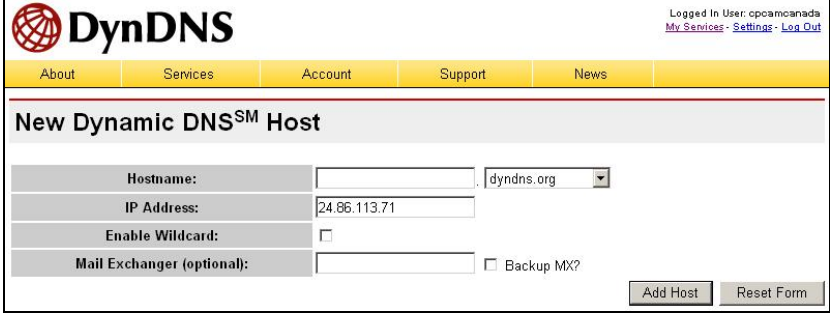
Step 1	Enter router1 settings page (Refer to router1 user's manual)																					
Step 2	<p>Apply for Dynamic DNS (DDNS):</p> <ol style="list-style-type: none"> 1. Go to http://www.dyndns.org to sign up for a free account. 2. After successful login, click My Services. Then the following screen will appear. <div data-bbox="503 1134 1307 1648" data-label="Image"> <p>The screenshot shows the DynDNS website interface. At the top, it says 'Logged In User: opcmcanda' with links for 'My Services', 'Settings', and 'Log Out'. Below this is a navigation menu with 'About', 'Services', 'Account', 'Support', and 'News'. The main content area is titled 'Account Level Services' and contains a table with the following data:</p> <table border="1"> <thead> <tr> <th>Service</th> <th>Status</th> <th>Action</th> </tr> </thead> <tbody> <tr> <td>Credited Account</td> <td>No</td> <td>Technical Support</td> </tr> <tr> <td>Account Upgrades</td> <td>No</td> <td>View - Add</td> </tr> <tr> <td>MailHop Outbound</td> <td>None</td> <td>View - Add</td> </tr> <tr> <td>Recursive DNS</td> <td>None</td> <td>View - Add</td> </tr> <tr> <td>DNS Service Level Agreement</td> <td>None</td> <td>View - Add</td> </tr> <tr> <td>Premier Support Option</td> <td>None Available</td> <td>Add Premier Support Cases</td> </tr> </tbody> </table> <p>Below the table are sections for 'Zone Level Services' (with an 'Add Zone Services' link) and 'Host Level Services' (with an 'Add Host Services' link). A message states 'No zone level service items registered.'</p> </div> <ol style="list-style-type: none"> 3. Click Add Host Service, and then click Add Dynamic DNS Host. The following screen will appear. 	Service	Status	Action	Credited Account	No	Technical Support	Account Upgrades	No	View - Add	MailHop Outbound	None	View - Add	Recursive DNS	None	View - Add	DNS Service Level Agreement	None	View - Add	Premier Support Option	None Available	Add Premier Support Cases
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	 <p>4. Refer to the DVR user’s manual for DDNS application. Write down the Hostname and DynDNS username and password for Step 5.</p>
Step 3	Check router1 DHCP setting to make sure that DVR does not conflict with DHCP. For example, DHCP ranges from 192.168.1.100 to 192.168.1.253. Then DVR can reside on IP 192.168.1.10 with no conflict.
Step 4	<p>Configure router1 Virtual Server setting (set up router1 Port Forwarding to DVR):</p> <ol style="list-style-type: none"> 1. Add a virtual server by Port. 2. Select Port Type – TCP, or both TCP and UDP. 3. Enter Port Number 80. 4. Set Local IP Address: e.g. 192.168.1.10 (DVR IP address).
Step 5	Configure router1 Dynamic DNS (DDNS) setting. Set up DDNS function with the server/hostname, username and password from Step 2.
Step 6	<p>Enter the following information in the DVR network menu:</p> <ul style="list-style-type: none"> ▪ IP Address: e.g. 192.168.1.10 ▪ Subnet Mask: e.g. 255.255.255.0 ▪ Gateway: e.g. 192.168.1.1 (equal to router1 LAN IP) ▪ Port: 80 <p>Note: DVR IP address, subnet mask and gateway values may vary depending on user’s router1 setting.</p>
Step 7	<p>Connect to the DVR in following two ways:</p> <ol style="list-style-type: none"> 1. Enter address (e.g. http://sample.dyndns.org) in IE. 2. Use AP (User Name: admin. Password: admin. Server IP: e.g. sample.dyndns.org. Web Port: 80)

VI. Dynamic IP with TELUS ADSL



Step 1	Enter router1 settings page (Refer to router1 user's manual)																					
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	<ol style="list-style-type: none"> 1. Go to http://www.dyndns.org to sign up for a free account. 2. After login, click My Services. Then the following screen will appear. 																					
	<p>The screenshot shows the 'My Services' page on dyndns.org. At the top right, it says 'Logged In User: opcamcanada' with links for 'My Services', 'Settings', and 'Log Out'. Below this is a navigation bar with 'About', 'Services', 'Account', 'Support', and 'News'. The main content is divided into three sections: 'Account Level Services', 'Zone Level Services', and 'Host Level Services'. The 'Account Level Services' section contains a table with the following data:</p> <table border="1"> <thead> <tr> <th>Service</th> <th>Status</th> <th>Action</th> </tr> </thead> <tbody> <tr> <td>Credited Account (?)</td> <td>No</td> <td>Technical Support</td> </tr> <tr> <td>Account Upgrades (?)</td> <td>No</td> <td>View - Add</td> </tr> <tr> <td>MailHop Outbound (?)</td> <td>None</td> <td>View - Add</td> </tr> <tr> <td>Recursive DNS (?)</td> <td>None</td> <td>View - Add</td> </tr> <tr> <td>DNS Service Level Agreement (?)</td> <td>None</td> <td>View - Add</td> </tr> <tr> <td>Premier Support Option (?)</td> <td>None Available</td> <td>Add Premier Support Cases</td> </tr> </tbody> </table> <p>The 'Zone Level Services' section shows 'No zone level service items registered.' and a link for 'Add Zone Services'. The 'Host Level Services' section has a link for 'Add Host Services'.</p>	Service	Status	Action	Credited Account (?)	No	Technical Support	Account Upgrades (?)	No	View - Add	MailHop Outbound (?)	None	View - Add	Recursive DNS (?)	None	View - Add	DNS Service Level Agreement (?)	None	View - Add	Premier Support Option (?)	None Available	Add Premier Support Cases
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	 <p>4. Refer to the DVR user’s manual for DDNS application. Write down the Hostname and DynDNS username and password for Step 5.</p>
Step 3	Check router1 DHCP setting to make sure that DVR does not conflict with DHCP. For example, DHCP ranges from 192.168.1.100 to 192.168.1.253. Then DVR can reside on IP 192.168.1.10 with no conflict.
Step 4	<p>Configure router1 Virtual Server setting (set up router1 Port Forwarding to DVR):</p> <ol style="list-style-type: none"> 1. Add a virtual server by Port. 2. Select Port Type – TCP, or both TCP and UDP. 3. Enter Port Number 888. (Port 80 is blocked, cannot be used) 4. Set Local IP Address: e.g. 192.168.1.10 (DVR IP address).
Step 5	Configure router1 Dynamic DNS (DDNS) setting. Set up DDNS function with the server/hostname, username and password from Step 2.
Step 6	<p>Enter the following information in the DVR network menu:</p> <ul style="list-style-type: none"> ▪ IP Address: e.g. 192.168.1.10 ▪ Subnet Mask: e.g. 255.255.255.0 ▪ Gateway: e.g. 192.168.1.1 (equal to router1 LAN IP) ▪ Port: 888 <p>Note: DVR IP address, subnet mask and gateway values may vary depending on user’s router1 setting.</p>
Step 7	<p>Connect to the DVR in following two ways:</p> <ol style="list-style-type: none"> 1. Enter address (e.g. http://sample.dyndns.org:888) in IE. 2. Use AP (User Name: admin. Password: admin. Server IP: e.g. sample.dyndns.org. Web Port: 888)