

# DynIP<sup>SM</sup> Client

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For Microsoft Windows 95/98/NT

## Quick Start Guide

### Download

- Download the most recent installation program for your version of Windows from your favorite site or [www.dynip.com](http://www.dynip.com).

### Install

- Run the installation program by 'double-clicking' it or entering its name in Start->Run and clicking OK.
- Follow the on-screen instructions to continue the installation.

### Register

- If you kept the default options, the installation program starts the DynIP Control Panel automatically.
- Click the Close button on the Tip of the Day.
- Enter your Name and e-mail address in the spaces provided on the Internet Name tab.
- Choose a Name for your computer (like *myfastpc*) and enter it in the Hostname box. Your full Internet Name will be shown below as you type.
- Press the Register button to send your information to the DynIP servers. You will see a confirmation screen if the information was received properly. Click OK.
- It's a good idea to write down the Registration Key, displayed in the Account Status area (Registered xxxxx-xxxxxx). Your free 30-day trial starts now.

### Check Set-up

- Click on the Connection tab.
- Double-check your Connection Type. The installer chooses the right setting for most situations.
- Click OK to close the control panel. You can find it again in Start->Settings->Control Panel if you need to make additional changes.
- The installer places the DynIP Client program in your Startup Group if you keep the default options. The Client runs automatically each time your computer starts (the 'ball' icon appears on the task bar). The ball turns red when your computer is connected to the Internet and DynIP is active. A grey ball means DynIP is not running.
- That's it! Now you are ready to make use of your Internet Name with your own server software.

### Purchase

- To continue your service after the free 30-day trial period please use the online order form available in the Purchase Section of our web site at [www.dynip.com](http://www.dynip.com) to purchase the service level you need.

**Thank You**



# **DynIP<sup>SM</sup> Client**

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For Microsoft Windows 95/98/NT

## **User's Guide**

*Version 4.01*

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## Table of Contents

<b>INSTALLATION AND OPERATION .....</b>	<b>1</b>
<b>1 INTRODUCTION .....</b>	<b>2</b>
1.1 DYNIP OVERVIEW .....	2
1.2 THE INTERNET .....	2
1.3 WHAT IS AN ADDRESS? .....	2
1.4 STATIC AND DYNAMIC ADDRESSES .....	2
1.5 WHAT IS AN INTERNET NAME? .....	2
1.6 WHAT'S IN A NAME? .....	3
1.7 WHAT IS DNS? .....	3
1.8 WHERE DOES DYNIP FIT? .....	4
1.9 HOW DOES DYNIP WORK? .....	4
1.10 WHAT CAN I DO WITH MY INTERNET NAME? .....	4
<b>2 DYNIP SERVICES.....</b>	<b>5</b>
2.1 FREE 30 DAY TRIAL .....	5
2.2 DYNIP BASIC.....	5
2.3 DYNIP PLUS .....	5
2.4 DYNIP PRO .....	5
2.5 DYNIP MULTIPLE DOMAIN .....	6
2.6 UPGRADES .....	6
2.7 CORPORATE LICENSE PACKS.....	6
<b>3 OPERATING REQUIREMENTS AND ACCEPTABLE USE POLICY.....</b>	<b>7</b>
3.1 USER REQUIREMENTS.....	7
3.2 SYSTEM REQUIREMENTS .....	7
3.3 ACCEPTABLE USE POLICY .....	7
<b>4 CLIENT INSTALLATION.....</b>	<b>8</b>
4.1 DOWNLOADING AND UNPACKING .....	8
4.2 RUNNING THE SETUP PROGRAM .....	8
4.3 UPDATES.....	8
<b>5 REGISTERING YOUR INTERNET NAME .....</b>	<b>9</b>
5.1 INITIAL REGISTRATION.....	9
<b>6 COMPLETE THE SET-UP.....</b>	<b>10</b>
6.1 CHECK YOUR CONNECTION TYPE .....	10
6.2 STARTING THE DYNIP CLIENT.....	10
6.3 THAT'S IT! .....	10
6.4 ONLINE PURCHASE.....	10
<b>7 UPGRADING FROM PREVIOUS VERSIONS .....</b>	<b>11</b>
7.1 UPGRADING FROM VERSION 2.X OR 3.X FOR WINDOWS 95/NT .....	11
7.2 TRANSFERRING FROM VERSIONS FOR OTHER OPERATING SYSTEMS (MACOS/LINUX/FREEBSD/ETC.) .....	11
<b>8 UNINSTALLING .....</b>	<b>11</b>

<b>REFERENCE .....</b>	<b>12</b>
<b>9 DYNIP CLIENT OPERATION.....</b>	<b>13</b>
9.1 To START THE DYNIP CLIENT .....	13
9.2 To START THE DYNIP CLIENT CONTROL PANEL .....	13
9.3 DYNIP CLIENT LOGO 'BALL' ICON.....	13
<b>10 INTERNET NAME.....</b>	<b>14</b>
10.1 REGISTERING YOUR INTERNET NAME .....	14
10.2 MODIFYING YOUR INTERNET NAME OR REGISTRATION INFORMATION .....	14
10.3 DELETING YOUR INTERNET NAME .....	14
10.4 RETRIEVING UPDATES TO YOUR REGISTRATION INFORMATION.....	15
10.5 TRANSFERRING AN EXISTING INTERNET NAME.....	15
<b>11 CONNECTION .....</b>	<b>16</b>
11.1 DIAL-UP MODEM (MOST USERS) .....	16
11.2 CABLE MODEM (ISDN, ADSL) .....	16
11.3 DIAL-UP MODEM (STATIC IP ADDRESS) .....	16
11.4 LOCAL AREA NETWORK (LAN, STATIC IP ADDRESS) .....	16
11.5 UPDATE PACKETS (ALL CONNECTION TYPES) .....	16
11.6 NOTE TO AOL CUSTOMERS .....	16
11.7 OFFLINE IP ADDRESS .....	16
11.8 TESTING YOUR INTERNET NAME .....	16
<b>12 CLOCK .....</b>	<b>18</b>
12.1 CLOCK OPTIONS .....	18
12.2 CHARGE COUNTER .....	18
12.3 CLOCK WINDOW OPTIONS .....	18
<b>13 TIME SET .....</b>	<b>19</b>
13.1 TIME SET.....	19
13.2 ADDING A DAYTIME SERVER .....	19
13.3 DELETING A DAYTIME SERVER .....	19
13.4 MODIFYING A DAYTIME SERVER .....	19
<b>14 SETTINGS.....</b>	<b>20</b>
14.1 LANGUAGE .....	20
14.2 DYNIP SERVER.....	20
14.3 REGISTRATION KEY TRANSFER .....	20
14.4 SHOW TIPS AT START UP .....	20
<b>15 NT SERVICE NT VERSION ONLY.....</b>	<b>21</b>
15.1 INSTALL NT SERVICE.....	21
15.2 UNINSTALL NT SERVICE .....	21
15.3 SERVICE STATUS .....	21
<b>16 KEEP ALIVE.....</b>	<b>22</b>
16.1 ISP WEB ADDRESS.....	22
16.2 CONNECT TIME .....	22
16.3 HOW IS YOUR CONNECTION MONITORED? .....	22

<b>17</b>	<b>SCRIPT.....</b>	<b>23</b>
17.1	CONNECT SCRIPT.....	23
17.2	DISCONNECT SCRIPT .....	23
17.3	BASIC LANGUAGE RESERVED WORDS .....	23
<b>18</b>	<b>DOMAIN.....</b>	<b>24</b>
18.1	OVERVIEW.....	24
18.2	ALIASES .....	24
18.3	ADDING AN ALIAS .....	24
18.4	REMOVING AN ALIAS .....	25
18.5	MX PREFERENCES.....	26
18.6	TO ADD A MAIL HOST .....	26
18.7	TO REMOVE A MAIL HOST .....	27
<b>19</b>	<b>COMMAND LINE OPTIONS .....</b>	<b>28</b>
<b>20</b>	<b>APPENDIX.....</b>	<b>29</b>
20.1	GLOSSARY OF TERMS .....	29
20.2	BASIC LANGUAGE RESERVED WORDS .....	30
20.3	REGISTRATION INFORMATION.....	31
20.4	DYNIP SERVICE REGISTRATION FORM.....	32

# Installation and Operation

## 1 Introduction

### 1.1 *DynIP Overview*

DynIP (pronounced "DYE-nip") is an Internet Name server for customers with changing Internet addresses. DynIP gives your personal computer a name on the Internet. Until now, only computers with 'static' address numbers could be given names. DynIP takes care of the details of adding your permanent Internet Name to the global DNS system even if you have a dynamic address. Now other people can find your computer whenever it is connected. It's that easy!

### 1.2 *The Internet*

A network is the wiring that allows a group of computers to communicate or 'talk' with each other. You can share files, or send electronic mail (e-mail) for example through your network. An 'internet' is a collection of networks. If several different companies decided to connect their internal networks together to share resources; that would be an internet. **'The Internet'** (with a capital I) is *The* worldwide collection of networks. Almost every country has computers connected to the Internet, and each computer can communicate with any other computer on the net if it needs to.

### 1.3 *What is an Address?*

The Internet uses a system of numbers, much like phone numbers, to identify every computer connected to the Internet. The number that your computer uses to talk to the Internet is its 'IP Address' (The IP stands for Internet Protocol). An IP Address consists of four numbers separated with 'dots' like '204.225.44.11'. Your Internet Service Provider (ISP) assigns an IP Address to your computer each time you connect to the Internet.

### 1.4 *Static and Dynamic Addresses*

Every telephone in the world has a different number. However, unlike phone numbers, IP Addresses are sometimes shared because of short supply. Your ISP may share a small group of addresses with a large number of computers so you may get a different address each time you use the Internet. These changing addresses are called 'Dynamic Addresses'. If you have your own permanent address, one that doesn't change, it's called a 'Static Address'. Imagine getting a different phone number each time you made a call, and then trying to tell someone to call you back! Aren't you glad you have a static phone number?

### 1.5 *What is an Internet Name?*

While computer networks must use numbers for addressing each computer, numbers are hard for people to remember. People can remember names more easily than numbers. So system administrators built a 'phone book' and tell the computer to look up the address from a name. An Internet Name is just the name of a computer on the Internet. It sounds simple, but with so many computers on the 'net, the details of giving them all names, without any duplicates is quite complicated.



## 1.6 What's in a Name?

For someone to find a computer on the Internet it must have a unique name. With millions of hosts connected this was a challenge. A method was devised that would allow names to be grouped by organization type or country, and then by the organization name, possibly the department and finally the computer's name itself. This 'hierarchy' looks like this:

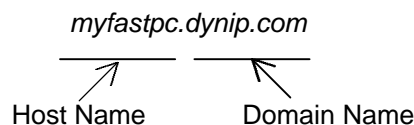
- berkeley.edu                      A large educational institution.
- canweb.ca                        A national level Canadian company
- dynip.com                        A commercial company.

Now we add the machine names:

- www.canweb.ca                      A machine called 'www' at CanWeb.
- myfastpc.dynip.com                      A machine using the Internet Name 'myfastpc' at DynIP.

Periods or 'dots' are used to separate each part of the name. Starting from the right hand side is the country or organization type. The abbreviations '*com*' for commercial businesses, '*edu*' for educational institutions, '*net*' for companies operating the Internet or '*org*' for non-profit organizations are used. Two letter country codes (like '*ca*', '*uk*' and '*br*' for Canada, the United Kingdom and Brazil) can also be used here. Next is the organization's name like berkeley or dynip. And finally on the left is the computer's name itself.

An Internet Name:



The 'computer' part (the first part on the left) of the name can also be called a 'host name'. The remaining part, which identifies the organization, is called a 'domain'. The full Internet Name consists of the 'host name' followed by the 'domain' and can also be called the 'Fully Qualified Domain Name' or FQDN.

## 1.7 What is DNS?

Remember that IP Address numbers are hard to remember - especially ones that look like 204.225.44.11. In the early days of the Internet, people put the names and numbers in a file on each computer. To get to a computer called '*myfastpc*' you could just call it by name and your computer could look up the right number, just like in a phone book. But every time a new computer was added, all the 'phone book' files needed to be updated. As the Internet grew this became a problem. To make things easier for people building the net, the Domain Name System was developed. This is a global database of the computer names and their Address numbers, with each organization, or 'domain' responsible for their own part. To be part of the net, you must provide DNS services to the rest of the world for your computers, or no one will find you!

### **1.8    *Where Does DynIP Fit?***

DynIP takes care of the details of adding your permanent Internet Name to the global DNS system. Until now, only computers with 'static' address numbers could be given names. DynIP's breakthrough technology gives your personal computer a name on the Internet even if you have a dynamic address. Now other people can find your computer by name whenever it is connected. It's that easy!

### **1.9    *How Does DynIP Work?***

The DynIP Servers, along with the DynIP Client software on your computer keep track of your Internet Name and your current IP address. Even if your address changes when connected to the Internet, the DynIP Client will update our servers and your Internet Name remains valid. This ensures that any computer on the Internet will be given your current IP Address every single time a query for your Internet Name is made.

### **1.10   *What can I do with my Internet Name?***

Once you have an Internet Name for your computer the uses are nearly unlimited! A few examples are:

- Run a Web Server
- Have your own personal FTP server
- Connect to your friend's computer with Peer to Peer Networking
- Talk over the net with Voice Conferencing software
- Join a Video Conference
- Run your own Mail Server (a little tricky to set up)
- Build Servers for Multi-player Network Games, MUDs or CHAT
- Remotely Access a client's computer
- Keep track of branch office print servers

Software for many of these programs is available from many Internet Download sites. Check your favorite search engine.

## 2 DynIP Services

DynIP offers the following Internet Name Services:

### 2.1 Free 30 day Trial

**Highlights:**

- A Free 30-day trial, that includes all the DynIP Basic service features, is available to all first-time DynIP users.
- The trial period is activated when you download the software and register an Internet Name.

### 2.2 DynIP Basic .

**Highlights:**

- An Internet Name using the dynip.com domain (like *myfastpc.dynip.com*).
- A charge counter and clock to help keep track of your online time and telephone charges.
- A time set feature that automatically keeps your computer's clock in time with time servers on the Internet.
- You can change your Internet Name at any time during your subscription.

### 2.3 DynIP Plus . .

**Highlights:**

- Includes the DynIP Basic features listed above.
- An Internet Name using a domain from a larger selection of pre-set domain names (such as *myfastpc.ipname.com*, *myfastpc.bbszone.com*, *myfastpc.hamsite.com*).
- A Keep Alive feature to help keep your internet connection active.
- A Scripting Utility that allows you to use your own programming knowledge to automate tasks when you connect or disconnect to the Internet.
- The DynIP Plus features are enabled on your existing registration key. You will continue to use the same DynIP software.

### 2.4 DynIP Pro . . .

**Highlights:**

- Includes the DynIP Plus features listed above.
- An Internet Name using your own top-level domain name (i.e. *yourhostname.yourdomain.com*).
- Use your existing domain name or register a new domain (InterNIC fees are not included with the Pro service).
- Unlimited aliases for your machine (like *www.yourdomain.com*, *ftp.yourdomain.com*).
- MX records which allow you to receive email for any user under your domain (*anyuser@yourdoman.com*) if you are running a mail server.
- A Domain Manager to maintain and control your aliases (CNAMEs or A records) and MX records.
- The DynIP Pro features will be enabled on your existing registration key. You will continue to use the same DynIP software.

## **2.5    *DynIP Multiple Domain***

### **Highlights:**

- Includes the DynIP Pro features listed above plus one additional domain name.
- Your domains will have a single expiry date to simplify the renewal process.
- Upgrade prices are available if you have already purchased the DynIP Pro service.
- Ask about discount pricing available for 5 or more multiple domains.

## **2.6    *Upgrades***

You can upgrade your current service subscription at any time. The remaining dollar value of your current subscription will be credited towards your new service package. Your expiry date will be one year from the purchase date of the upgrade. Contact [sales@dynip.com](mailto:sales@dynip.com) to calculate your upgrade credit!

## **2.7    *Corporate License Packs***

Save time and money! DynIP has corporate licensing plans available for larger users. License Packs are available for groups of 25, 50 or 100 Client Licenses. Set-up is simple with a one-step corporate license ID that can be entered into new DynIP Clients. The license pack has a single expiry date to simplify the renewal process. Please contact us at [sales@dynip.com](mailto:sales@dynip.com) for details.

## 3 Operating Requirements and Acceptable Use Policy

### 3.1 User Requirements

DynIP users are requested to use their real name during the Internet Name registration process. A valid e-mail address **must** be specified. The DynIP server will e-mail you important registration information once your Internet Name has been successfully registered. If your registration key is ever lost, it can **only** be e-mailed to the address you entered in the DynIP Client. New Internet Name registrations that have an invalid e-mail address will be automatically removed.

### 3.2 System Requirements

Your computer must be capable of running Microsoft Windows 95/98 or Windows NT. A modem is required for an Internet Dial-Up connection. A Windows supported network card is required for a LAN connection. Approximately 2.5 MB of free disk space is necessary to install the software. Other versions of the DynIP Client are also available for several other operating systems.

### 3.3 Acceptable Use Policy

All users who have an active Internet Name with DynIP must adhere to the following rules and regulations:

- When registering an Internet Name you must supply a valid e-mail address. We need to supply you with important information regarding your registration, and therefore, you **MUST** provide us with a valid e-mail address.
- Hostnames must not be prejudicial or offensive in nature.
- Referring to or sending Unsolicited Commercial E-mail (spam) from a DynIP Internet Name is not allowed.

If your Internet Name registration is in conflict with this policy, you will be sent an e-mail message informing you that you need to make the necessary changes to your account information.

**DynIP Internet Names referred to in Unsolicited Commercial E-mail (UCE or spam) complaints will be immediately terminated without refund.**

Please note that DynIP reserves the right to refuse or remove an Internet Name registration at any time, without refund if it is in violation with the above policy.

## **4 Client Installation**

### **4.1 *Downloading and Unpacking***

The DynIP Client program is available for various platforms from our Web Site at <http://www.dynip.com> or our FTP Server at <ftp://ftp.dynip.com>. Microsoft Windows® versions are currently available for Windows 95/98, and Windows NT 4.0. Download the correct self-extracting program file version for your operating system.

### **4.2 *Running the Setup Program***

Copy the program file to your computer and run the program. The InstallShield program launches automatically to guide you through the installation process. Follow the on-screen instructions to complete the installation.

### **4.3 *Updates***

New versions are always made available free of charge on our FTP and web sites.

## 5 Registering your Internet Name

### 5.1 Initial Registration

Registering an Internet Name is easy! The first time you use the DynIP Client program it will automatically display the *Internet Name* tab.

Enter your name, in the **First Name** and **Last Name** boxes, respectively. You **must** enter a valid e-mail address in the **E-mail Address** field. The DynIP Server will e-mail you important information once your Internet Name has been successfully registered. Registrations that have an invalid e-mail address will automatically be removed.

Now you can choose your own personal Internet Name! The **Hostname** and **Domain** fields form the complete Internet Name for your computer. You can use numbers or hyphens (-) as long as the hostname starts with a letter. Offensive hostnames are not permitted. Enter your name in the **Hostname** field.

To submit your Internet Name registration, select **Register**. If the registration is successful, you can immediately start using your new Internet Name to refer to your computer. If an error occurs during the registration, you should select the **Cancel** Button and make the necessary changes, then re-submit your registration by pressing the **Register** Button.

Your account status will be displayed at the bottom of the Internet Name tab. The following are the account status messages:

- *Registered (registration key)* - your Internet Name is currently registered.
- *No Internet Name (registration key)* - you do not have an Internet Name registered.
- *Expired (registration key)* - your DynIP Account has expired.

It's a good idea to write down the Registration Key, displayed in the Account Status area (Registered xxxxx-xxxxxx). Your free 30-day trial starts now.

## **6 Complete the Set-up**

### **6.1 Check your Connection Type**

The DynIP Client Installation tool does a good job of choosing default settings for most people, but it's a good idea to check your connection type just in case. Select the *Connection* tab and pick the connection type you use. See the Reference Section of this guide for details if you are not sure what type to pick.

### **6.2 Starting the DynIP Client**

The DynIP files are normally placed in the \Program Files\DynIP\DynIP Client v4.0\ folder on your computer. If the default options are used, the Client program is also placed in the Startup folder during the installation. This automatically starts the DynIP Client each time the computer starts. Once the Client program is running no other settings need to be made for your Internet Name to work. The DynIP Client is completely automatic! If you manually need to start the DynIP Client, Select Start->Programs->Dynip Client for Windows 4.0->DynIP Client

### **6.3 That's It!**

The DynIP 'ball' icon appears on your computers Task Bar (in the System Tray, at the right) whenever the DynIP Client is loaded. The ball turns red when your computer is connected to the Internet and DynIP is keeping your name up to date. A grey ball means that DynIP is waiting for your computer to be connected. You can see the current state of the DynIP Client by holding the mouse pointer over the 'ball' icon until the pop-up box appears. Check the Reference Section of this guide for details of other features.

### **6.4 Online Purchase**

The free 30-day trial period is available for the DynIP Basic service level only. To continue your service after the trial period please use the online order form available in the Purchase Section of our web site at [www.dynip.com](http://www.dynip.com) to purchase the service level you need. You may also use the Registration Form included at the end of this guide.



## 7 Upgrading from previous versions

### 7.1 *Upgrading from Version 2.x, 3.x or 4.0 for Windows 95/98/NT*

After installation the DynIP Client Control Panel tool will automatically detect that you have an existing registration and ask you if you want to reload your previous information. You should press the **Yes** Button to start the reload. Once your information has been retrieved from the DynIP servers you can start using your Internet Name with the new version.

Windows NT users who have previously installed the DynIP Client as an NT Service must stop the service and uninstall it (from the *NT Service* tab) before upgrading the DynIP Client software.

### 7.2 *Transferring from versions for other operating systems (MacOS/Linux/FreeBSD/etc.)*

1. Start the DynIP Client Control Panel tool and click the *Settings* tab.
2. Enter your existing registration key in the **Registration Key Transfer** field. If you are not sure what your existing registration key is, check the website at [www.dynip.com](http://www.dynip.com). Your registration key can be automatically e-mailed to you from the Account Information section. Please note that it will be sent to the e-mail address that you specified when you registered your Internet Name.
3. Press the **Transfer** Button to start the transfer of your registration to the new DynIP Client. If the transfer was successful, you can start using your existing Internet Name by starting the DynIP Client.

## 8 Uninstalling

To remove the DynIP Client from your computer, double click on the unInstallShield icon in the DynIP Client Program Group or select Add/Remove programs in the Control Panel and chose the DynIP Client,

Windows NT users who have installed the DynIP Client as an NT Service must stop the service and uninstall it (from the *NT Service* tab) before uninstalling the DynIP Client software.

# Reference

## 9 DynIP Client Operation

The DynIP Client consists of two parts, the Client itself, which runs in the background (the 'Ball' icon) and a Control Panel. The Client runs all the time managing your Internet Name. The Control Panel is only used to make changes to your settings.

### 9.1 To Start the DynIP Client

To start the DynIP Client, Select Start->Programs->Dynip Client for Windows 4.0->DynIP Client. If the default options are used, this program is also placed in the Startup folder during the installation. This automatically starts the DynIP Client each time the computer starts. Once the Client program is running no other settings need to be made for your Internet Name to work. The DynIP Client is completely automatic!

### 9.2 To Start the DynIP Client Control Panel

To access any of the DynIP Client settings, *double-click* on the DynIP logo (the 'ball' icon) in the Windows 95/98 or Windows NT Task Bar (system tray) at the bottom of your screen to open the Control Panel. The DynIP Control Panel icon is also available in your computer's control panel folder (Start->Settings->Control Panel).

### 9.3 DynIP Client Logo 'Ball' Icon

The DynIP Client Logo Icon (the ball) on the task bar indicates the state of the Client. The icon appears on your computers Task Bar (in the System Tray, at the right) whenever the DynIP Client is loaded. The ball turns red when your computer is connected to the Internet and DynIP is keeping your Internet Name up to date with your current address. A grey ball means that your Internet connection is down and DynIP is waiting for your computer to be reconnected. A grey ball with an "X" means the DynIP Client has expired. A grey ball with a "?" means you do not have an Internet Name registered. If you have *Time Set* enabled, you may occasionally see a small 'hour glass' beside the ball. This means that the DynIP Client is checking the time with an Internet Time Server and setting your clock.

You can see the current state of the DynIP Client by holding the mouse pointer over the 'ball' icon until the pop-up box appears. The following messages may appear:

- DynIP Client Initializing - the DynIP Client is starting up
- DynIP Client Not Connected - waiting for your dial-up connection to start
- DynIP Client Active - DynIP is keeping your Internet Name up to date
- DynIP Client Expired - the DynIP Client has expired
- DynIP Client No Internet Name - you do not have an Internet Name registered

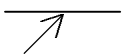
## 10 Internet Name

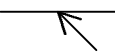
• • • • •

Your Internet Name is the name of your computer on the Internet. The DynIP Client uses this name to track your Internet (IP) Address so that other computers can communicate with yours. An Internet Name is made up of two parts, the **Hostname** and the **Domain**.

An Internet Name:

*myfastpc.dynip.com*

  
Host Name

  
Domain Name

The **Hostname** is the name of a certain computer or machine within an organization. The **Domain** is the name of the organization.

### 10.1 Registering your Internet Name

Enter your name, in the **First Name** and **Last Name** boxes, respectively. You **must** enter a valid e-mail address in the **E-mail Address** field. The DynIP Server will e-mail you important information once your Internet Name has been successfully registered. Registrations that have an invalid e-mail address will automatically be removed.

The **Hostname** and **Domain** fields form the complete Internet Name for your computer. A valid hostname is between 2 and 63 characters long. You can use numbers and dashes (-) as long as the hostname starts with a letter. Offensive hostnames are not permitted. Enter your name in the **Hostname** field.

In the **Domain** menu, DynIP Basic Users can only use the default setting (dynip.com). DynIP Plus Users can select from the list of predetermined domain names in the drop down menu. DynIP Pro Users can use their own registered Private Domain (yourname.com).

To re-submit your Internet Name registration, select **Modify** (if this is the first registration select **Register**). If the registration is successful, you can immediately start using your new Internet Name to refer to your computer. If an error occurs during the registration, press the **Cancel** Button and make the necessary changes, then re-submit your registration by pressing the **Modify** Button.

Your account status will be displayed at the bottom of the Internet Name tab. The following are the account status messages:

- *Registered (registration key)* - your Internet Name is currently registered.
- *No Internet Name (registration key)* - you do not have an Internet Name registered.
- *Expired (registration key)* - your DynIP Client has expired.

### 10.2 Modifying your Internet Name or Registration Information

To modify your existing Internet Name registration simply change any of the fields in the *Internet Name* tab. Once you finish making changes press the **Modify** Button. When the modification is complete, press the **OK** Button.

### 10.3 Deleting your Internet Name

To delete your existing Internet Name registration, press the **Delete** Button in the *Internet Name* tab. Once your Internet Name has been deleted, it is resubmitted to the name pool where it is available for others to register. Now you can now register a new Internet Name.

#### ***10.4 Retrieving Updates To Your Registration Information***

To update your DynIP Client with the current account information from the DynIP Registration Servers, press the **Reload** Button. This is necessary if payment has been applied to your account after it has expired, or if you have purchased an upgraded service level. It is not necessary to use the **Reload** Button under normal circumstances. The **Reload** button does not update your IP Address; the DynIP Client does this automatically!

#### ***10.5 Transferring an existing Internet Name***

If you have an existing Internet Name and would like to transfer it to this computer please refer to the 14.3 Registration Key Transfer in the *Settings* tab section.

## 11 Connection



Your connection type identifies how your computer is connected to the Internet. You can test your connection and specify the address to use when your computer is not connected as well.

### 11.1 *Dial-up Modem (most users)*

Select this option if you use a modem and telephone line to connect to your Internet Service Provider (ISP).

### 11.2 *Cable Modem (ISDN, ADSL)*

Select this option if you use a cable modem or ISDN router to connect to the Internet. If you have a Local Area Network running DHCP or if you are using ADSL, you should also select this option.

### 11.3 *Dial-up Modem (Static IP Address)*

Select this option if you use a dial-up modem but have a static IP Address. Enter your static IP Address in the address field.

### 11.4 *Local Area Network (LAN, Static IP Address)*

Select this option if you are connected to a corporate or campus Local Area Network (LAN) through an Ethernet or token ring card. If you are connected to a Wide Area Network (WAN) through a router and network card you may also select this option. If your Local Area Network runs DHCP you should select the Cable Modem option.

### 11.5 *Update Packets (all connection types)*

The default way to send update packets to DynIP's name server is Type 1. If your DynIP Client is active (red ball) and you are still showing offline then you should change the Update Packet type as directed by DynIP Technical Support ([support@dynip.com](mailto:support@dynip.com)).

### 11.6 *Note to AOL Customers*

The DynIP Client looks for a Microsoft dialer. AOL does not use a standard dialer so the DynIP Client does not detect that you are connected to the Internet. To activate the DynIP Client change your connection type to Cable Modem.

### 11.7 *Offline IP Address*

Specify the IP address that the DynIP Servers should return when you are offline (not connected). You could specify a backup computer to use if your main computer failed for example. The default offline IP address is set to DynIP's offline server, currently 204.225.44.11.

### 11.8 *Testing your Internet Name*

To test the IP Address that the DynIP Servers are supplying for your Internet Name, press the **Test** Button. If your DynIP Client is working normally, your own address, or that of your cable modem or ISDN router is displayed. If the Client is shutdown, your offline address should be displayed.

The following are the status messages you may receive:

- *You are online at (IP Address)*
  - the DynIP Name Servers are receiving updates from your computers (or cable modem or ISDN routers) IP Address.

- *You are offline (IP Address)*
  - the DynIP Servers are not receiving updates and returned the offline IP address specified in *Connection* Tab.

***Changes may take up to two minutes before they are visible.***

## 12 Clock



The DynIP Client includes a real-time clock to display on your desktop. The clock can also display connection charges and the total connection time to your Internet Service Provider (ISP).

### 12.1 Clock Options

The DynIP Client includes a real-time clock that can also display total connection time to your ISP. You can change the time format by selecting the **24-hour**, **12-hour**, or **Online** option in the *Clock* tab. If you do not wish to display a clock on your desktop, select the **No Clock** option. To remove the floating window from your desktop, you also need to disable the **Display Charge Counter** option. Press the **Apply** Button to update any changes.

You can change the color of the clock to Red, Green, Blue or White. You can select these color schemes in the *Clock* tab. Press the **Apply** Button to update the changes

### 12.2 Charge Counter

The charge counter allows you to display your connection charges. To enable the charge counter click on the **Display Charge Counter** option in the *Clock* tab. Enter the hourly charge for your Internet Service Provider (ISP) in the **ISP Connection Charge** field. If you have a flat-rate monthly plan enter zero (0) in this field.

Indicate any per-minute local or long-distance telephone costs in the **Phone Charge** field that may apply when you are connected to your ISP. If no phone charges are incurred enter zero (0) in this field. Press the **Apply** Button to update the changes.

The **Reset Counter** Button resets the current online time and charge counter to zero.

### 12.3 Clock Window Options

You can move the desktop clock window by dragging it by its title bar. If the title bar is not visible, click once anywhere on the digits of the clock or the charge counter. This will reveal the title bar, then drag the clock window to the desired position. To hide the title bar again, click once anywhere on the digits of the clock or the charge counter. The new clock window position will be saved, so that it reappears at exactly the same place where you left it, the next time you start up the DynIP Client.

You can keep the clock window above every window on your desktop by checking the **Always on top** option in the *Clock* tab. Press the **Apply** Button to update the change.



## 13 Time Set



The DynIP Client program allows you to set your computer's internal clock with a *daytime server* on the Internet. This ensures that your computer's clock is always up-to-date. Ask your ISP for the hostname or IP address of the nearest machine that supports TCP port 37 daytime services. An example list of servers is provided in the initial configuration.

### 13.1 Time Set

To enable synchronization of your PC clock to a time server on the Internet, select the **Automatically set my clock** option in the *Time Set* tab. Next, place a check mark in front of the time server address that is closest to your geographical location. You can determine which time server is closest to you by looking at the description for each time server entry.

You can check more than one time server; this is useful in the event that a selected time server is down. The time servers are contacted in the order in which they appear in the **Server Address** list until an answer is obtained. Your PC clock is synchronized every time a new connection to the Internet is established and every 24 hours after that.

### 13.2 Adding a Daytime Server

To add a daytime server, enter its complete hostname or IP address in the **Hostname or IP Address** field. Then, press the **Add** button to add it to the list. New servers are automatically placed at the top of the list.

### 13.3 Deleting a Daytime Server

To delete a daytime server, highlight it in the server list and press the **Delete** Button.

### 13.4 Modifying a Daytime Server

You can only modify the description of an existing time server. To modify a time server's address, you must delete the entry that you wish to modify and then re-add it to the list. To modify the description, select the address of the time server you wish to modify. The time server's address and optional description will appear in the **Hostname or IP Address** and **Description** fields respectively. You can then make changes to the description. When you have finished, press the **Add** Button to update the existing time sever entry in the list with the new description.

**DynIP does not maintain the default daytime servers provided. If you cannot connect to a daytime server in this list, it is possible the service is no longer available from that server. We suggest that you obtain a hostname from your ISP that provides daytime services.**

## 14 Settings



Additional configuration settings in the DynIP Client are available in the *Settings* tab.

### 14.1 *Language*

Select the desired language. English is the default language.

### 14.2 *DynIP Server*

This entry specifies the hostname of the DynIP Server that this machine's Client should connect to. Select the DynIP Dynamic DNS Server. This should only be changed if you have access to a private DynIP Server on a corporate LAN.

### 14.3 *Registration Key Transfer*

If you have an existing Internet Name registration and would like to activate it on this computer, enter your existing registration key in the **Key** fields of the *Settings* tab. Next, press the **Activate** Button to retrieve your existing registration information from the DynIP server and re-activate your Internet Name. When the activation has been successful, press the **OK** Button.

You can also copy the *DYNIP.CFG* file from the computer that has the Internet Name registration to the new computer. This file is compatible between DynIP Clients for different operating systems and can be copied without a problem.

Note: The activation of the registration key does not remove the Internet Name registration from the computer that you are transferring from. This allows you to use the DynIP Client on two different operating systems (but not at the same time!). For example, under Linux or FreeBSD UNIX and Windows 95/98 operating on the same computer using a dual-boot feature.

### 14.4 *Show tips at start up*

The Tip of the Day can be activated by clicking the box to the left of the **Show tips at start up** field.

## 15 NT Service

*NT Version only*



The DynIP Client can be installed as a Windows NT service. This allows the Client to run when no one is logged into the NT Server console screen. The *NT Service* tab is only displayed in the Windows NT Client.

### 15.1 Install NT Service

Press the **Install Service** Button to add the DynIP Client as an NT service. The DynIP Client should be removed from the Startup Group if this is done. The NT service must also be uninstalled before upgrading or uninstalling the DynIP Client software.

### 15.2 UnInstall NT Service

Press the **UnInstall Service** Button to remove the DynIP Client if it was previously installed as an NT service. The DynIP Client should be added to the Startup Group to continue automatic operation.

### 15.3 Service Status

The Server Status area shows the current state of the DynIP Client as an NT Service. Possible messages here are:

- DynIP Client service not installed
- DynIP Client service installed; service running
- DynIP Client service installed; service not running

An installed Client can be started without rebooting the NT Server by selecting it in the Service Control Panel and pressing Start.

## 16 Keep Alive



The *Keep Alive* tab is available when you subscribe to the DynIP Plus or Pro Service. Selecting the Keep My Connection Alive check box activates the Keep Alive feature.

**Note:** Your connection to the Internet may still be dropped due to line noise or line resets. The Keep Alive feature cannot prevent disconnects caused by these interruptions.

### 16.1 ISP Web Address

Specify your Internet Service Provider's (ISP) World Wide Web (www) address in the **Address**. You can specify either a hostname or IP address. It is not necessary to include the *http://* part of the web site address.

### 16.2 Connect Time

Specify how many minutes you can remain idle before your ISP disconnects you from the Internet. The majority of ISP's drop your connection after 20 minutes of inactivity. To determine the idle time that your ISP uses, connect to the Internet and close down all Internet applications but make sure you remain connected to the Internet. Then measure the elapsed time in minutes until your connection is closed. Move the **Idle time** slider to indicate this elapsed time.

### 16.3 How is your connection monitored?

In this area indicate if your service provider monitors your connection by **Connections Made** or **Data Received** to see if it is active. Most ISP's monitor the amount of data transferred between your computer and the Internet over a certain time span to determine if your connection is still *alive*. If you are not sure what scheme your ISP uses, select the **Data Received** option. If your ISP monitors the number of connections that you make to www hosts, select the **Connection Made** options. This is the preferred option because it uses the least bandwidth.

The **Data Received** option causes the DynIP Client to transfer 8KB of data over the period of time specified in the **Idle time** setting. It is possible that your ISP uses a higher or lower value for the amount of data that needs to be transferred. If this is the case, you will have to modify the **Idle time** setting to be less or greater than actual.

## 17 Script



The *Script* tab is available when you subscribe to the DynIP Plus or Pro Service. This feature can be used to start an external script when you connect or disconnect to the Internet. You can rotate log files and then start your web server, for instance.

### 17.1 Connect Script

Use this field to run an external file when you connect to the Internet. The scripts must be ANSI BASIC programs (\*.scr) or DOS Batch (\*.bat) files.

The **Browse** Button allows you to look for script files. Samples scripts are provided.

The **Edit** Button is enabled when a valid filename is specified in the script field.

The **Test** Button will allow you to test your script as if you are connecting to the Internet.

To activate the script select the **Execute Script Files upon Connect or Disconnect** check box.

### 17.2 Disconnect Script

Use this field to run an external file when you disconnect from the Internet. The scripts must be ANSI BASIC programs (\*.scr) or DOS Batch (\*.bat) files.

The **Browse** Button allows you to look for script files. Samples scripts are provided.

The **Edit** Button is enabled when a valid filename is specified in the script field.

The **Test** Button will allow you to test your script as if you are connecting to the Internet.

To activate the script select the **Execute Script Files upon Connect or Disconnect** check box.

### 17.3 Basic Language Reserved Words

See Appendix for command list.

## 18 Domain



### 18.1 Overview

The *Domain* tab is available when you subscribe to the DynIP Pro or the DynIP Multiple Domain Services. The domain manager allows you to control aliases (CNAMEs and A records) and mail preferences (MX records) for your domain.

### 18.2 Aliases

Each computer on the Internet must have a valid Internet Name. Your computer's Internet Name is made up of the **Hostname** and the **Domain** shown in the *Internet Name* tab.

An **alias** is *another* name for your computer's Internet Name. Traditionally, aliases are created to direct services (like `www`) for your domain and have them point to the name of the computer that is running that service (i.e. the web server). That way you do not actually need to have a computer called `www`.

For example, the Internet Name in your DynIP Client may look like `myfastpc.yourdomain.com`. You can create a 'www' alias for `myfastpc.yourdomain.com` so your computer can also be called `www.yourdomain.com`.

You can set-up an unlimited number of aliases for your computer's Internet Name.

The following information will outline how to manage the aliases for your domain using the Domain Manager tool in the DynIP Client.

### 18.3 Adding an Alias

#### From the Domain tab:

Select a domain from the **Domain** pull-down menu.

Enter the alias in the **Alias** field.

If you are only using one domain with the DynIP Client it will automatically be selected.

For example, enter '**ftp**' if you want to create an alias for `ftp.yourdomain.com`.

**NOTE:** If your hostname in the Internet Name tab is 'www' you do not need an alias for 'www'.

**Wildcard Alias.** Enter a '\*' in the alias field will create a wildcard alias so `*.yourdomain.com` (or `anything.yourdomain.com`) will point to the specified machine.

Complete the **Points To** field.

You may specify a hostname or an IP Address in this field. This field tells our server where to direct your alias.

For a **Name**: In most cases, enter the Hostname that appears in the Internet Name tab of the DynIP Client.

For an **IP address**: Enter the static IP address.

Press the **Add** button.

This will add the alias for your domain to the alias list in the domain tab.

To add more aliases repeat the above steps.

When you are finished:

Press the **Apply** button.

This will upload your new domain settings to our server and make the alias(es) available to the Internet.

Select the **OK** button.

A confirmation box will appear if you have successfully uploaded your changes to our server.

## 18.4 Removing an Alias

**From the Domain tab:**

Select a domain from the **Domain** pull-down menu.

If you are only using one domain with the DynIP Client it will automatically be selected.

Select the Alias from the **Alias** list.

The alias name should be highlighted.

Press the **Delete** button.

You will see a prompt box to confirm that you want to remove the selection from your domain record.

Select the **Yes** button.

This will remove the alias for your domain from the alias list in the domain tab.

Press the **Apply** button.

This will upload your new domain settings to our server. The alias will no longer be available to the Internet.

Select the **OK** button.

A confirmation will appear if you have successfully uploaded your changes to our server.

## 18.5 MX Preferences

**Mail Preferences** are the list of machines that you wish to receive email for users in your domain.

**NOTE:** If you are running a mail server the mail preference feature will allow you to receive e-mail for any user under your domain (i.e. anyuser@yourdomain.com). This tells other mail servers that mail for anyuser@yourdomain.com should be sent to anyuser@yourhost.yourdomain.com.

When mail is sent to an address in your domain, the sender's computer will ask our name servers for the preferred computer to handle mail for that domain (the MX record). The MX record is a pointer, which will tell it which machine to attempt to deliver the e-mail to. Mail will be delivered to the first choice MX record (with the lowest preference number) unless that computer is not available. If that mail delivery fails, then the sender's computer would try the second MX record (next lowest number) and the process repeats. In all cases these mail exchange computers must be set up to accept mail for all users in your domain and forward it to the correct place.

## 18.6 To Add a Mail Host

### From the Domain tab:

Select a domain from the **Domain** pull-down menu.

If you are only using one domain with the DynIP Client it will automatically be selected.

Enter the server name in the **Mail Host** field.

Enter the fully qualified domain name of the name server (ie. *mailserver.yourdomain.com*).

Press the **Add** button.

The mail hostname will automatically be assigned the first choice designation of 0 in the Mail Preference List.

Select the **Apply** button.

This will upload your new mail preference settings to our server.

Press the **OK** button.

A confirmation will appear if you have successfully uploaded your changes to our server.



## 18.7 To Remove a Mail Host

### From the Domain tab:

Select a domain from the **Domain** pull-down menu.

If you are only using one domain with the DynIP Client it will automatically be selected.

Select the **Mail Host** to remove.

The name will be highlighted in the Mail Host list.

Press the **Delete** button.

You will see a prompt box to confirm that you want to remove the selection from your domain record.

Select the **Yes** button.

This will remove the mail host for your domain from the mail host list in the domain tab.

Press the **Apply** button.

This will upload your new mail preference settings to our server.

Select the **OK** button.

A confirmation will appear if you have successfully uploaded your changes to our server.

## 19 Command Line Options

The DynIP Client program accepts a number of command-line options. Some of these have an effect on an already running copy of DYNIPCLT.EXE. This allows you to modify the behavior of the client program without having to restart it.

- R**     Reset the connection time and charge counter to zero. If the client program is not already running, then this option has no effect.
- C**     Terminate (Close) the client program. The client first notifies the DynIP Server that you are disconnecting from the Internet. This is useful in your logout script. If the client program is not already running, then this option has no effect.
- I**     Specify an alternate configuration file. This is required if you are executing the client program from a different directory than where the client program is installed in. For example,

```
c:\> DYNIPCLT.EXE -Ic:\dynip\dynip.cfg
```

## 20 Appendix

### 20.1 Glossary of Terms

Address	- see IP Address
Client	- a small computer that obtains services from a larger computer, see Server
Daytime server	- A computer that provides time services
Dial-Up	- a connection made with a modem through phone lines
DNS	- Domain Name System
Domain	- the organization part only of a Internet Name (i.e. dynip.com)
Dynamic	- changing, opposite of static
e-mail	- electronic mail
FTP	- File Transfer Protocol, a method of transferring files on a network
Hostname	- the name of a computer on the Internet (i.e. discovery.dynip.com)
Internet	- the global network of connected computers
Internet Name	- the name of a computer (i.e. myfastpc.dynip.com)
IP Address	- the numbers that describe a particular computer on the Internet
IP	- Internet Protocol
ISP	- Internet Service Provider
LAN	- Local Area Network
MB	- megabyte, 1 million (approx.) bytes
Modem	- Modulator/Demodulator, a device that allows computers to talk through phone lines
Network	- a collection of computers connected together
Server	- a large computer that provides services to many smaller computers, see Client
Static	- fixed, permanent, opposite of dynamic
TCP	- Transmission Control Protocol
TCP/IP	- Transmission Control Protocol/Internet Protocol
UDP	- User Datagram Protocol
UTC	- Universal Coordinated Time, Greenwich Mean Time

## 20.2 Basic Language Reserved Words

end	run	goto	rem	list	let
print	stop	delete	edit	input	clear
save	old	new	noop	resume	if
random	dim	for	next	gosub	return
on	error	?	'	auto	read
data	cls	restore	base	open	close
merge	quit	bye	exit	chain	def
cont	poke	linput	repeat	until	while
wend	renumber	fnend	fn	lset	rset
field	put	get	mid\$	defint	defstr
defdbl	defproc	deffn	opt	lprint	else
then	tab	step	to	and	or
xor	mod	<=	<>	>=	as
output	append	not	==	using	imp
eqv	right\$	left\$	string\$	errmsg\$	chr\$
str\$	space\$	xlate	mkis\$	mkds\$	hex\$
oct\$	bin\$	dec\$	upper\$	lower\$	date\$
sgn	len	abs	val	asc	instr
eof	posn	sqrt	log	exp	eval
int	peek	sin	cos	atan	mksi
mksd	system	log10	tan	fix	bval
sinh	cosh	tanh	asinh	acosh	atanh
asin	acos	varptr	launch	max	min
cint	creal	rinstr	rnd	pi	erl
err	tim	syserr	date	sysvar	rad
deg	grad				

Options for non-standard (added) functions:

```
launch("Program filename", code)
```

code:

- 0 hide the window
- 1 Show Normal (let Windows determine position/ placement of Window)
- 2 Maximize Window
- 3 Minimize Window

```
sysvar(CONNECTSTATUS) = 1 If connected/ 0 Disconnected
```

```
sysvar(INTERNETNAME) = String variable equal to the FQDN of the registered Internet Name.
```

```
sysvar(IPADDRESS) = String of current IP Address of this host.
```

### **20.3 Registration Information**

There are four convenient ways to order:

**1. Secure Online Order:**

To place your order online please visit the Purchase Section of our web site at [www.dynip.com](http://www.dynip.com)

**2. Telephone:**

Toll Free in North America please call 877-422-6932  
or 519-332-6900

**3. Fax:**

Complete the order form included at the end of this manual  
and fax it to 519-332-6464

**We accept Visa or MasterCard for telephone, fax or online orders.**

**4. Mail:**

Complete the order form included at the end of this manual and mail it with your check or money order to:

CanWeb Internet Services Ltd.  
204-265 N. Front Street  
Sarnia, ON  
N7T 7X1  
Canada

*Please visit our web site for current pricing information.  
Please remember to include your DynIP registration key with your order!*

**20.4 DynIP Service Registration Form****DynIP User Information**

First Name		Last Name	
Company			
Address			
City		State/Prov	
Zip/Postal Code		Country	
Telephone Number			
E-mail Address			

Registration Key	
------------------	--

**Service Options**

Quantity (Yr.)	Service	Price (US)	Total
	DynIP Basic •		
	DynIP Plus ••		
	DynIP Pro ••• Domain Name:		
	DynIP Multiple Domain Domain Names:		
		Subtotal	
Plus 7% Tax (GST #898246574RT)		7%	
<b>Total Enclosed</b>			

**Payment Method**

Visa	MasterCard	Check	Money Order
------	------------	-------	-------------

**Credit Card Information**

Card Holder Name			
Card Number		Expiry Date	
Signature			

Please send the completed form to: CanWeb Internet Services Ltd.  
204-265 N. Front Street,  
Sarnia, ON, N7T 7X1 CANADA.

or Fax to: 519-332-6464

You will be sent confirmation of your payment by e-mail.

**Thank You!**