

# Remote Desktop How-To

How to log into your computer ... remotely  
using Windows XP, etc.



# Overview

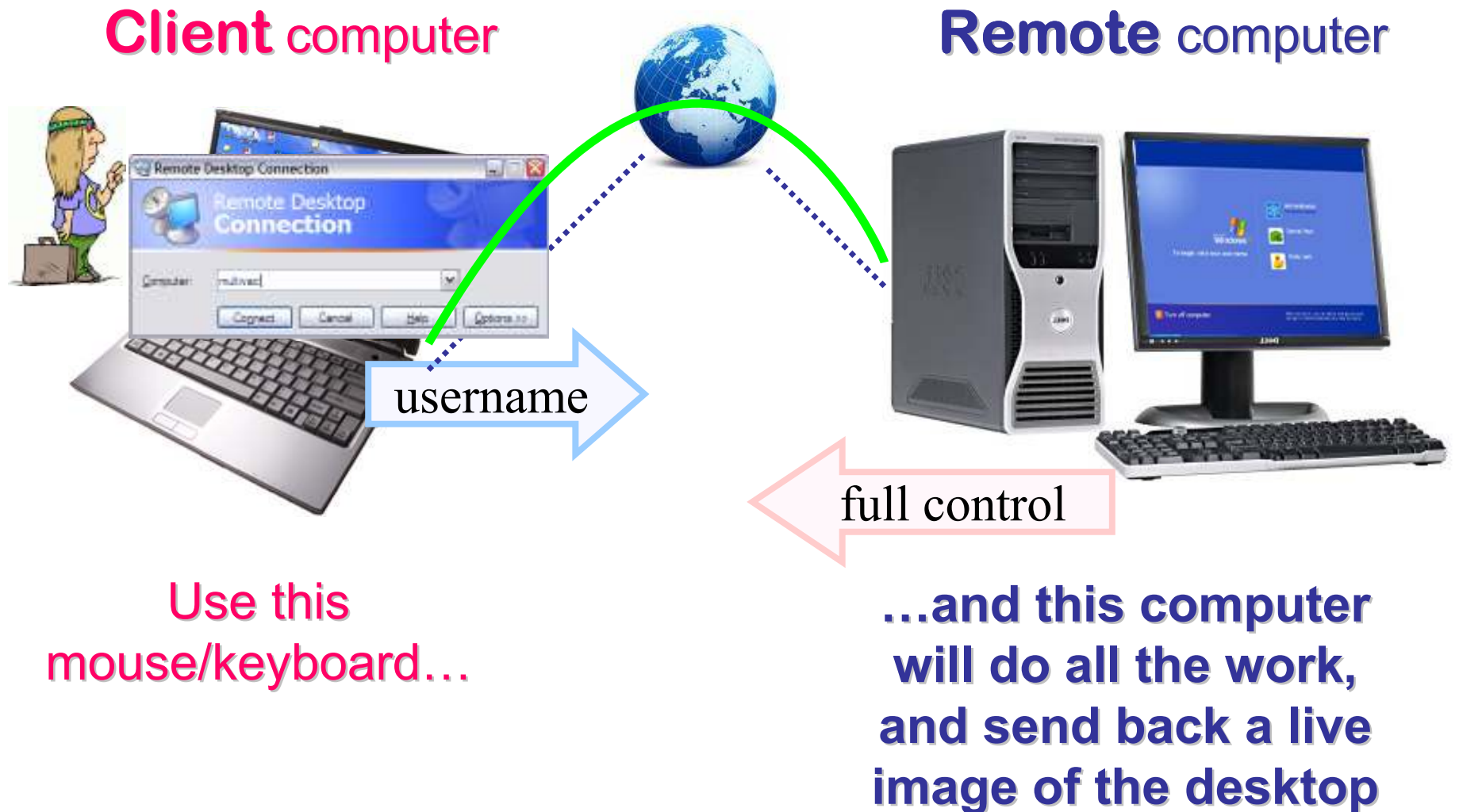
- How XP Remote Desktop works, its features
  - Unattended usage, drag'n drop between computers
- How to set it all up - [3 ways: from easy to hard]
  - Enabling remote logins
  - Firewalls and port forwarding
  - Drag and drop files
- How to keep track of a dynamic IP address on the internet -- a dynamic DNS tutorial

*An alternative, free and **very easy** way to share desktops and files is provided by CrossLoop. Skip to the last slide to for further information about CrossLoop.*

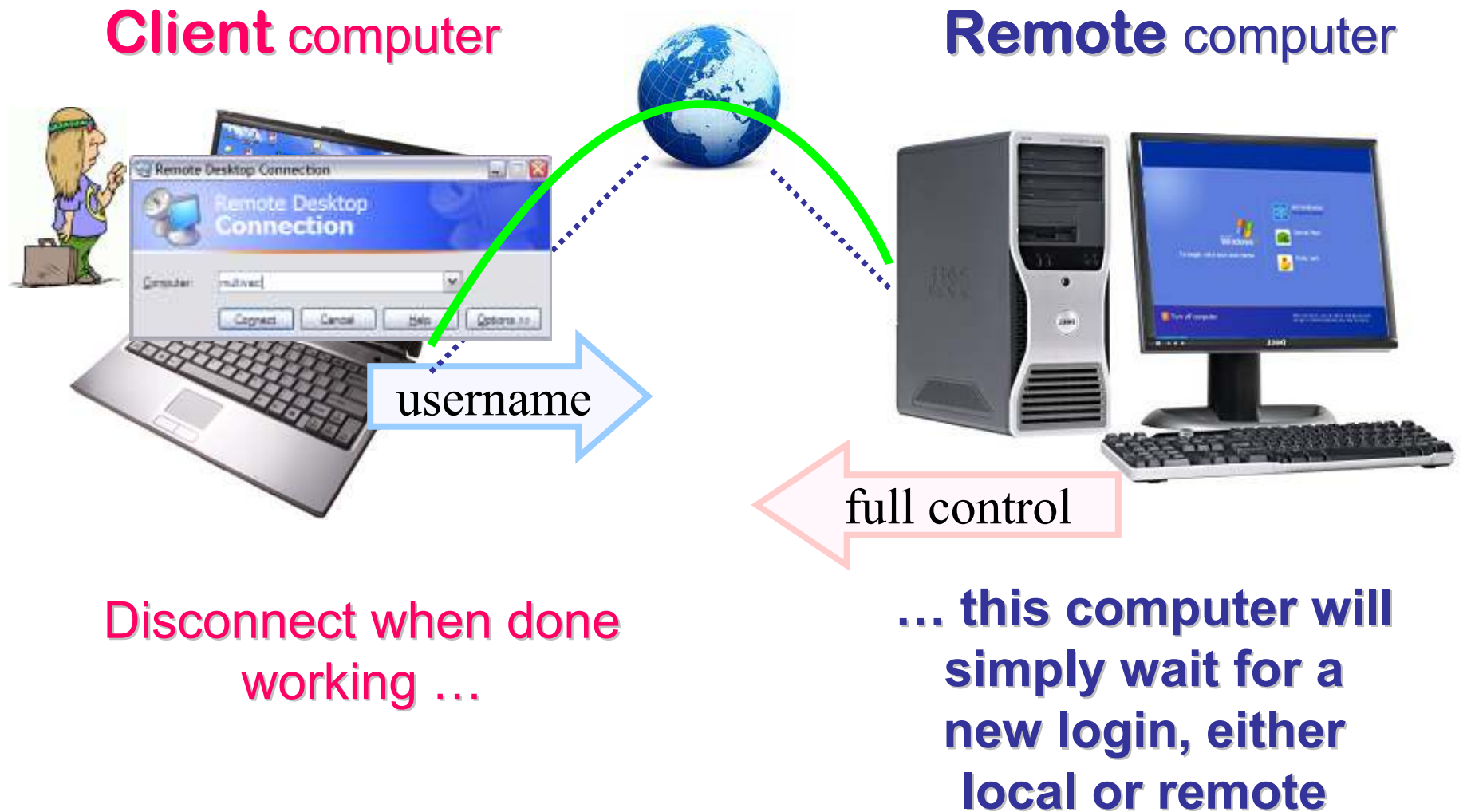
# Remote Desktop is not the same as Remote Assistance

Remote Assistance can let another computer user take over your computer's desktop, but requires an exchange of permissions while an operator (a person) sits at each computer. The maximum connection time is 24 hours.

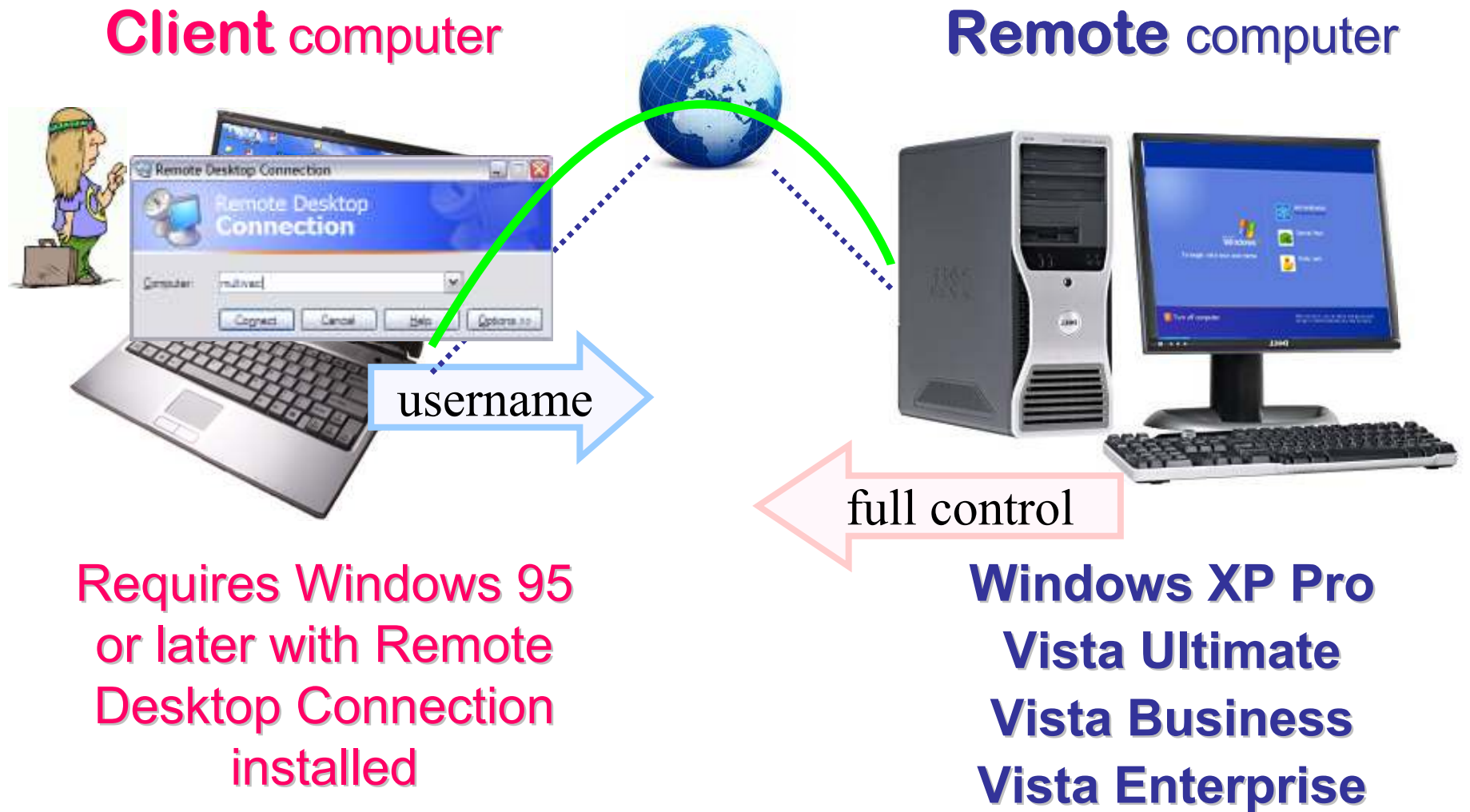
# How Remote Desktop Works



# How Remote Desktop Works



# How Remote Desktop Works



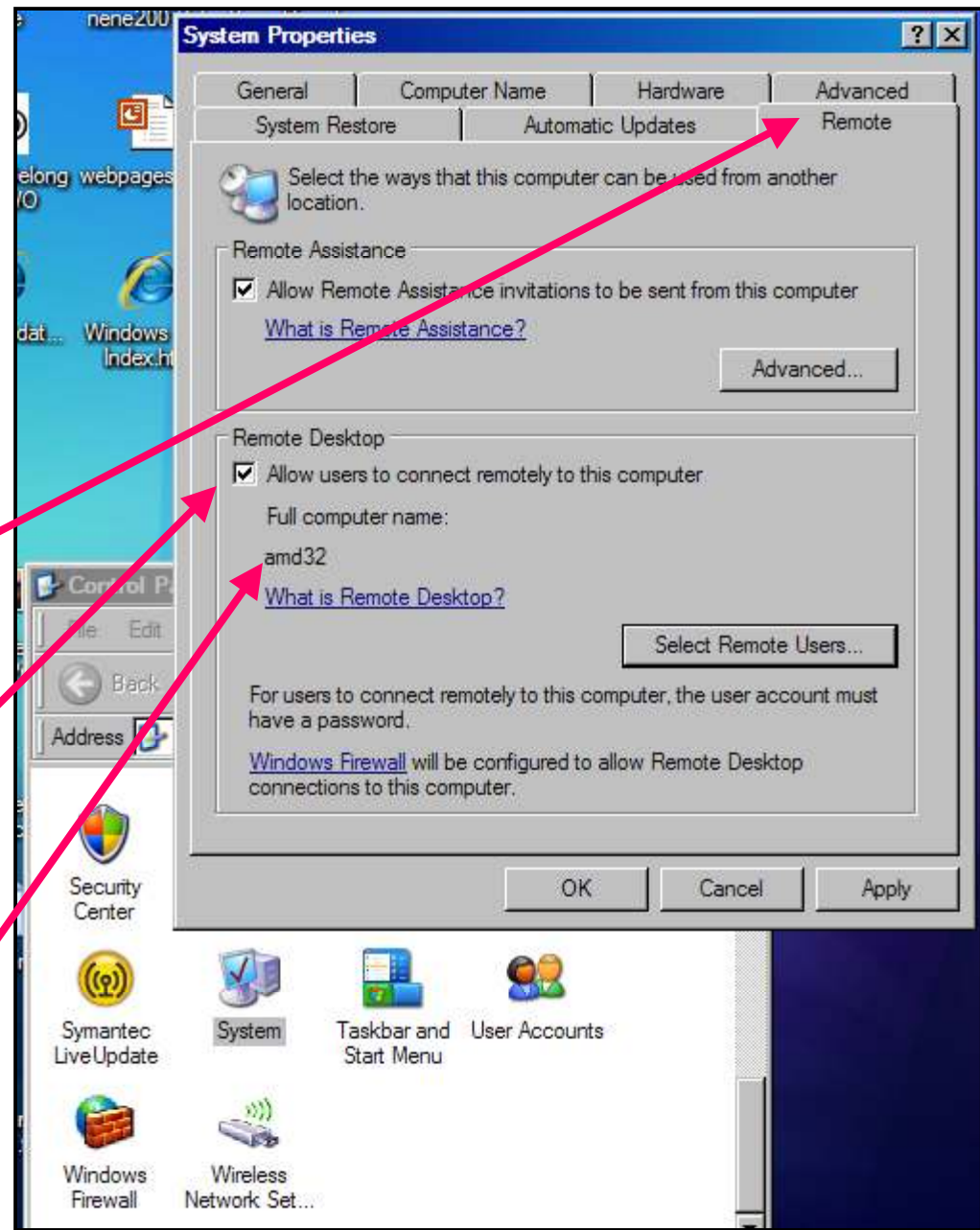
# Enable Remote Login on Host



- Control Panel ... System ... Remote tab

- Check ✓ mark box... Allow Users to connect remotely ...

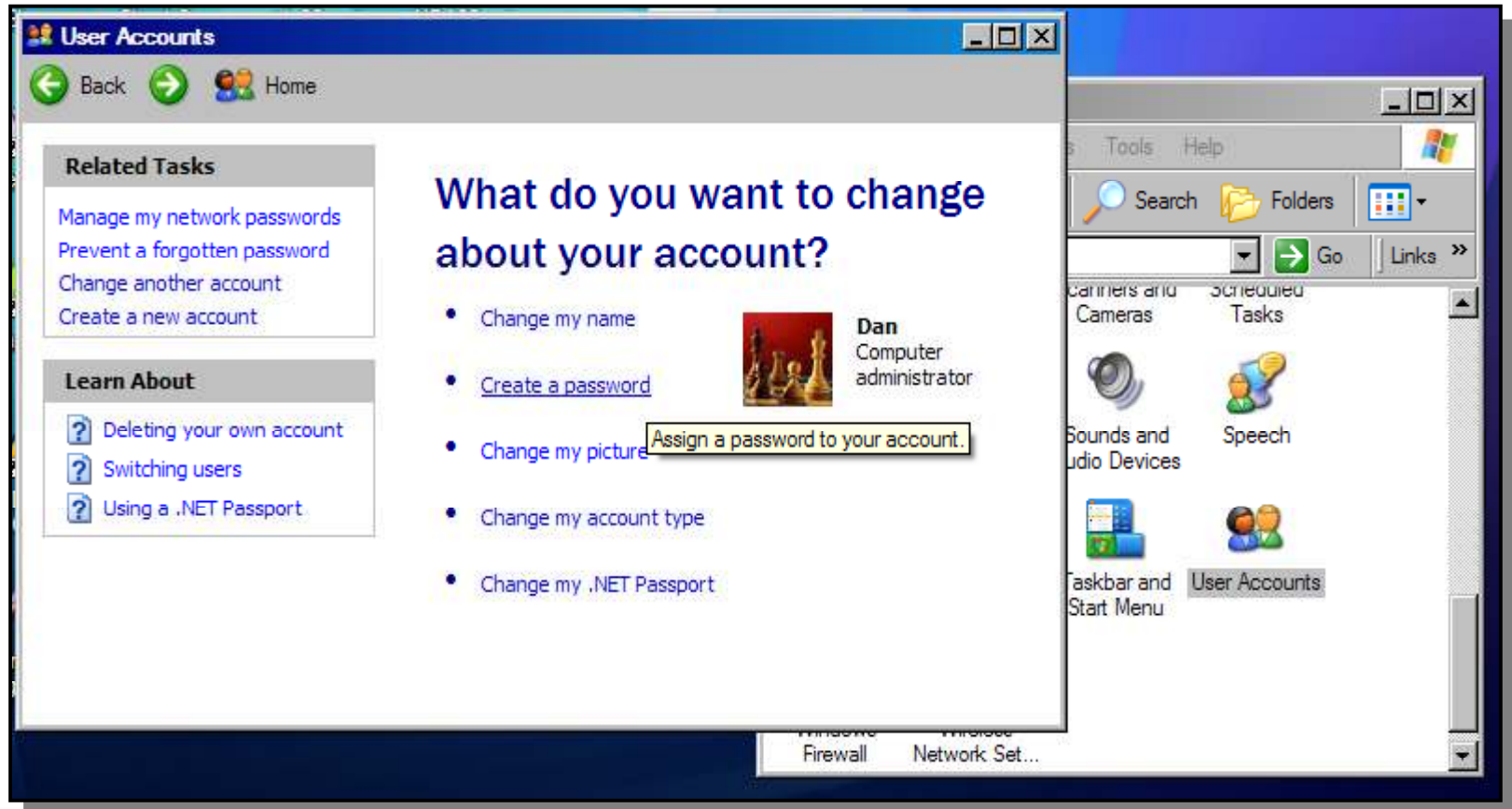
- Tip: Write down the name of this host computer.



# Add password to your account (if none yet)



**Control Panel ...**  
**User Accounts ...**  
**Create a password**



# Optional: Enable Auto Login for the Host



Remove  
Check  
mark

User Name	Group
Administrator	Administrators
ASPNET	Users
Dan	Administrators
Guest	Guests

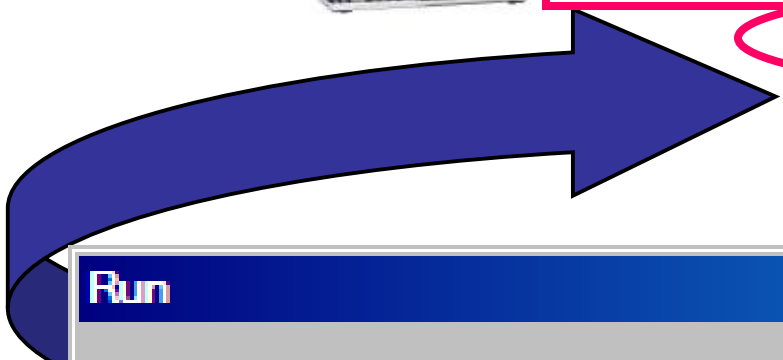
Select the user account from the list (the account to which you want to automatically logon). **Uncheck** 'Users must enter a user name and password to use this computer' option, and click Ok. Type the user account password and complete the process.

Run

Type the name of a program, Internet resource, and Windows command.

Open:

OK



# Optional: Enable Auto Login for Host – help site

Ramesh's site  
Troubleshooting Windows®

Search | Donate | Disclaimer | Feedback

XP Tips - Page 1 / Page 2 / Page 3 / Internet Explorer FAQ / Feedback / Donations

Configure Windows XP to Automatically Login

Ads by Google  
Auto Logon XP

<http://windowsxp.mvps.org/Autologon.htm>

account. You can still configure Windows XP to automatically login using these methods:

## Method 1



Click Start, Run and type **CONTROL USERPASSWORDS2**, and click Ok. Select the user account from the list (the account to which you want to automatically logon). Uncheck *Users must enter a user name and password to use this computer* option, and click Ok. Type the user account password and complete the process.

For Windows XP Home, don't try to auto-login as the built-in Administrator, as you'll receive an error message.

## Method 2: Using TweakUI

### Why is My PC so Slow?

Run our Free Optimize scan to diagnose common PC problems.

[www.pcpitstop.com/free](http://www.pcpitstop.com/free)

[Advertise on this site](#)

### Bookmark

[Stumble!](#)

[DELICIOUS](#)

[ADD SPURL](#)

# Optional: Upgrade Client to version 6



<http://support.microsoft.com/kb/925876>

Microsoft Windows Update - Microsoft Internet Explorer

Address: <http://www.update.microsoft.com/windowsupdate/v6/default.aspx?ln=en-us>

Windows Update

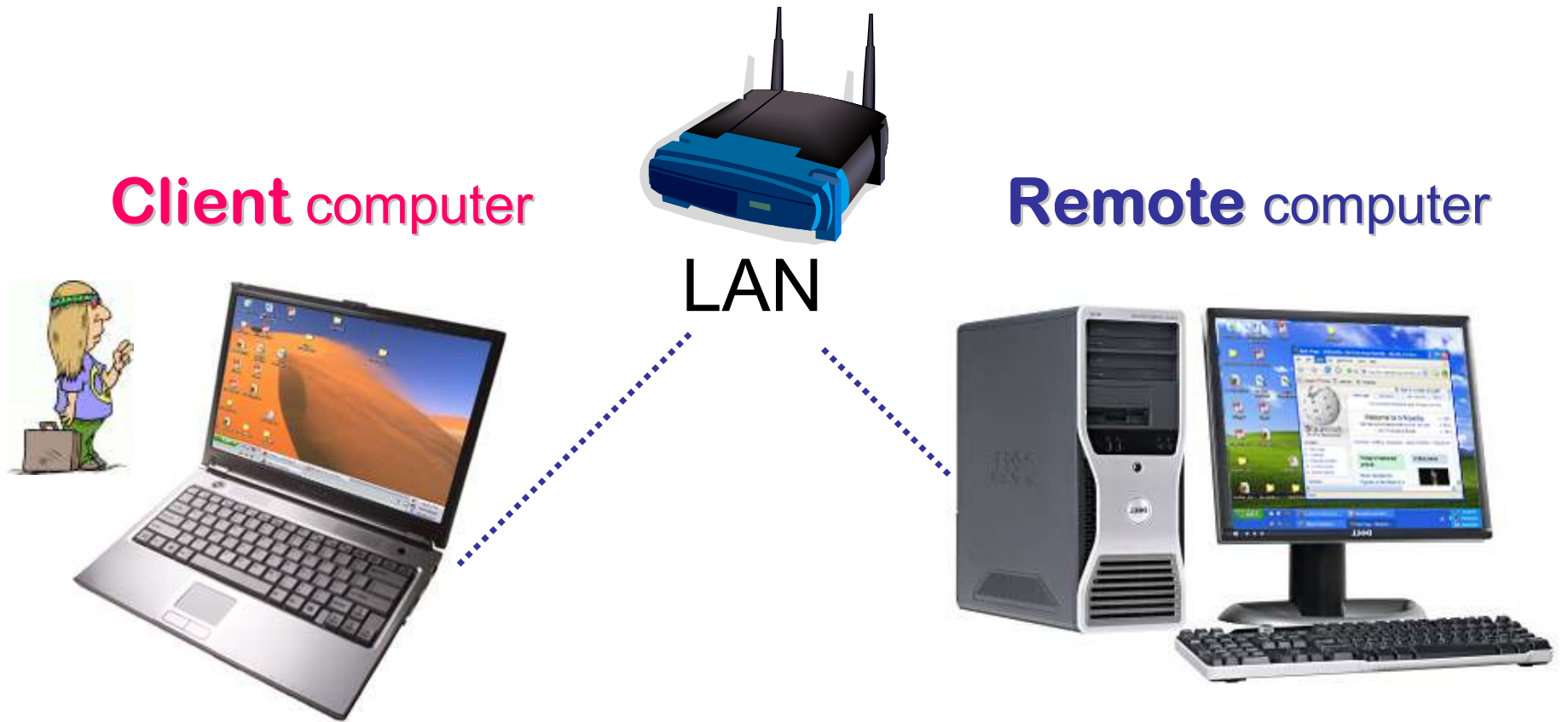
Optional software updates

Microsoft Windows XP

- Root Certificates Update
- Update for Microsoft Core XML Services (MSXML) 6.0 Service Pack 1 (KB934268)
- Windows Internet Explorer 7.0 for Windows XP
- Windows Media Player 11
- Microsoft .NET Framework 3.0: x86 (KB928416)
- Remote Desktop Connection (Terminal Services Client 6.0) for Windows XP (KB925876)  
Download size: 1.5 MB , less than 1 minute  
This version of Remote Desktop Connection (Terminal Services Client 6.0) can be installed on client computers running Windows XP Service Pack 2. It can be used to connect to terminal servers or remote desktops running earlier versions of Windows, but the new features are available only when the remote computer is running Windows Vista or Windows Server 2008.

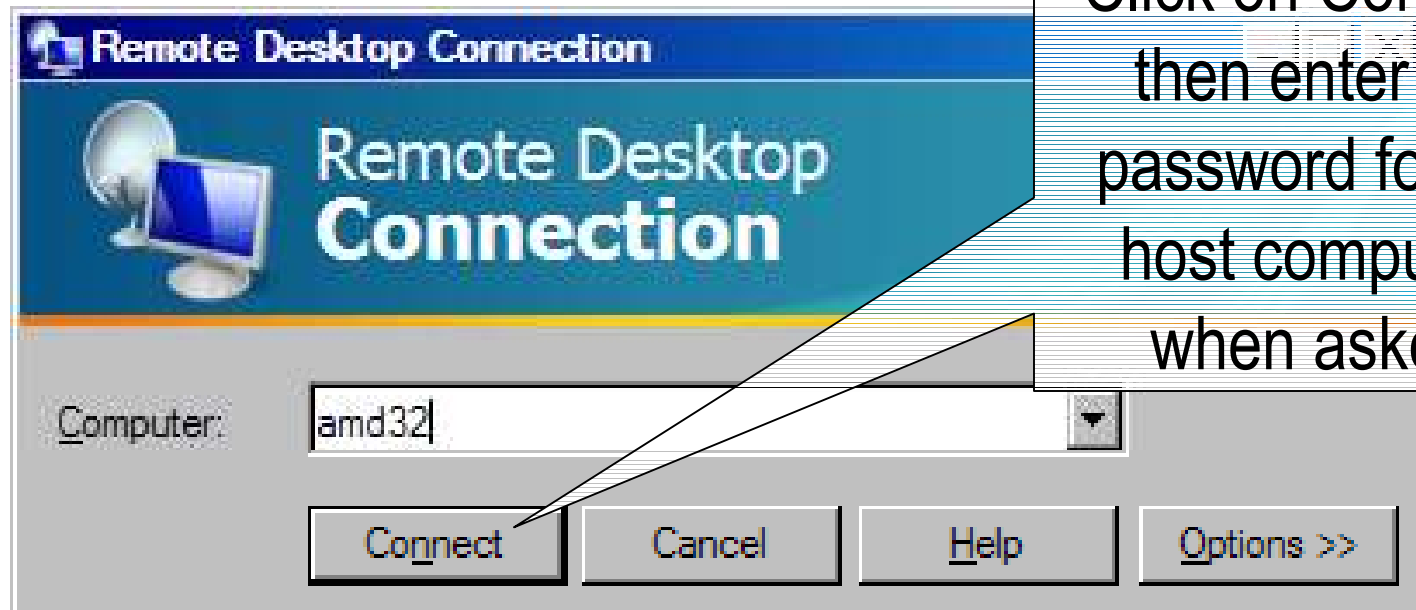
1. Start ... Help and Support ... Windows Update
2. Choose the Custom (rather than Express) installer. If Terminal Services Client 6.0 is in the list of Software, Optional choices, install it.

# Basic case: connect over LAN





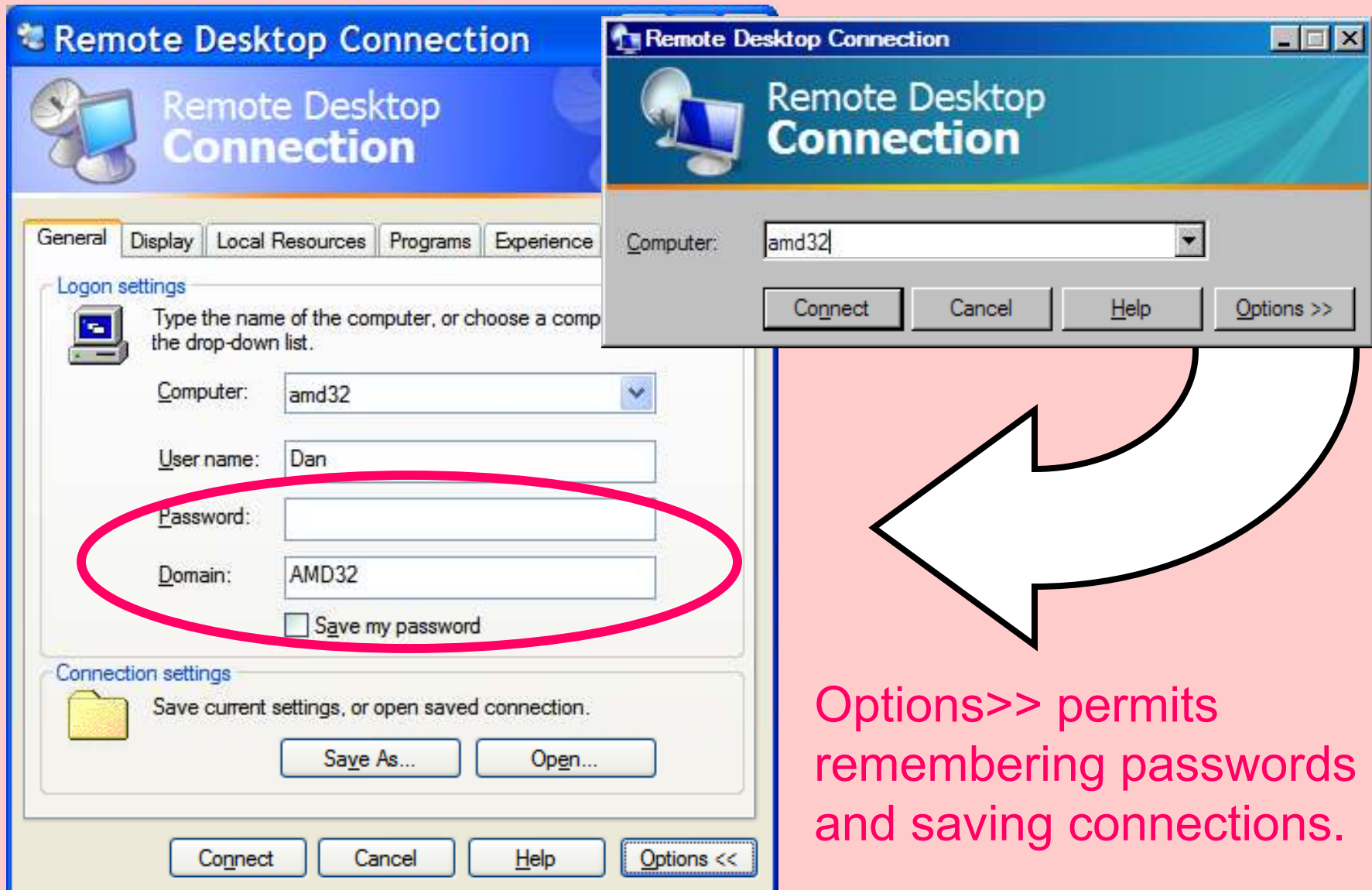
## To Connect via Host Name (for LAN only)



Click on Connect, then enter the password for the host computer, when asked.

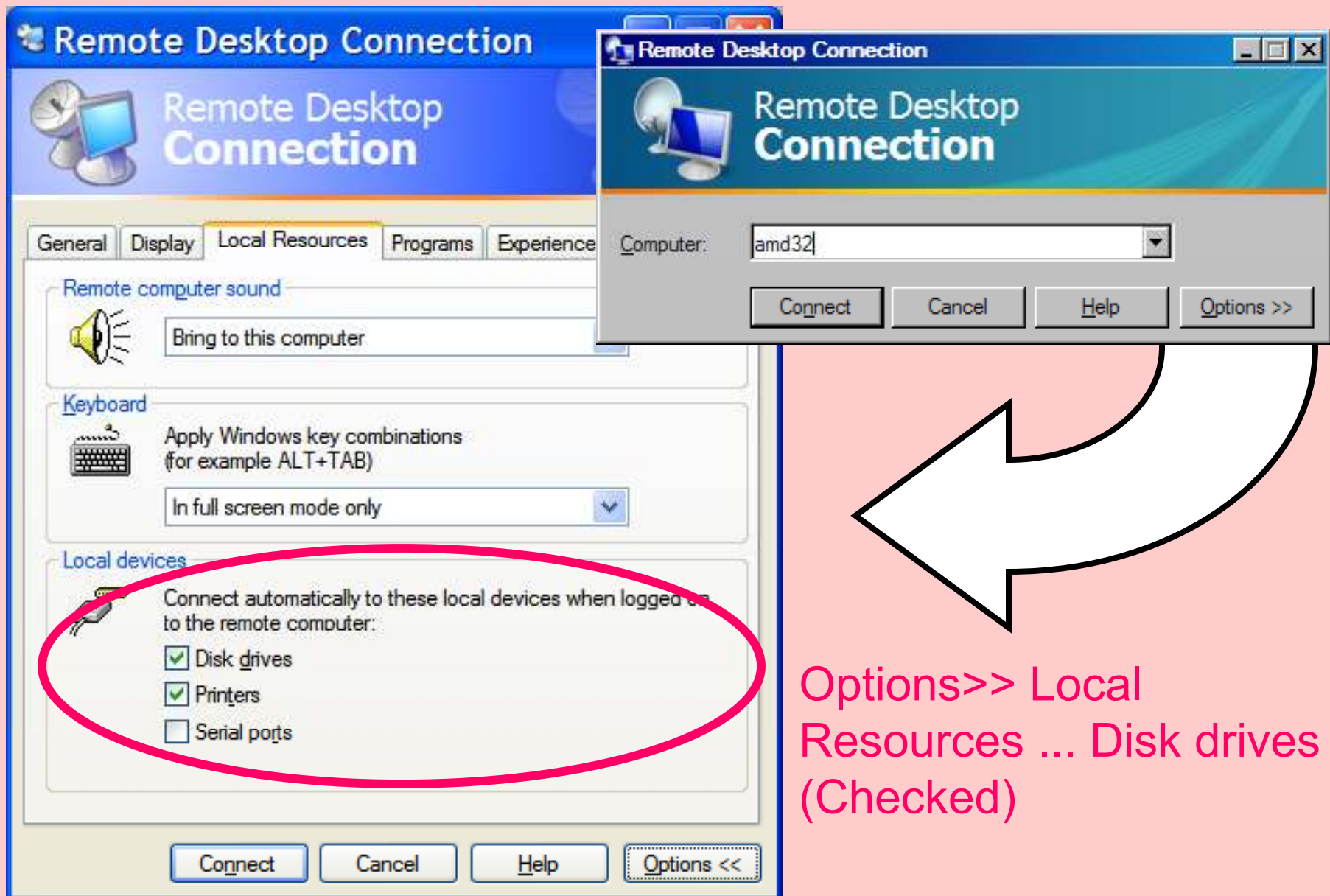
Start ... All Programs ... Accessories ... Communications ...  
Remote Desktop Connection

# Save Remote Connection on Client

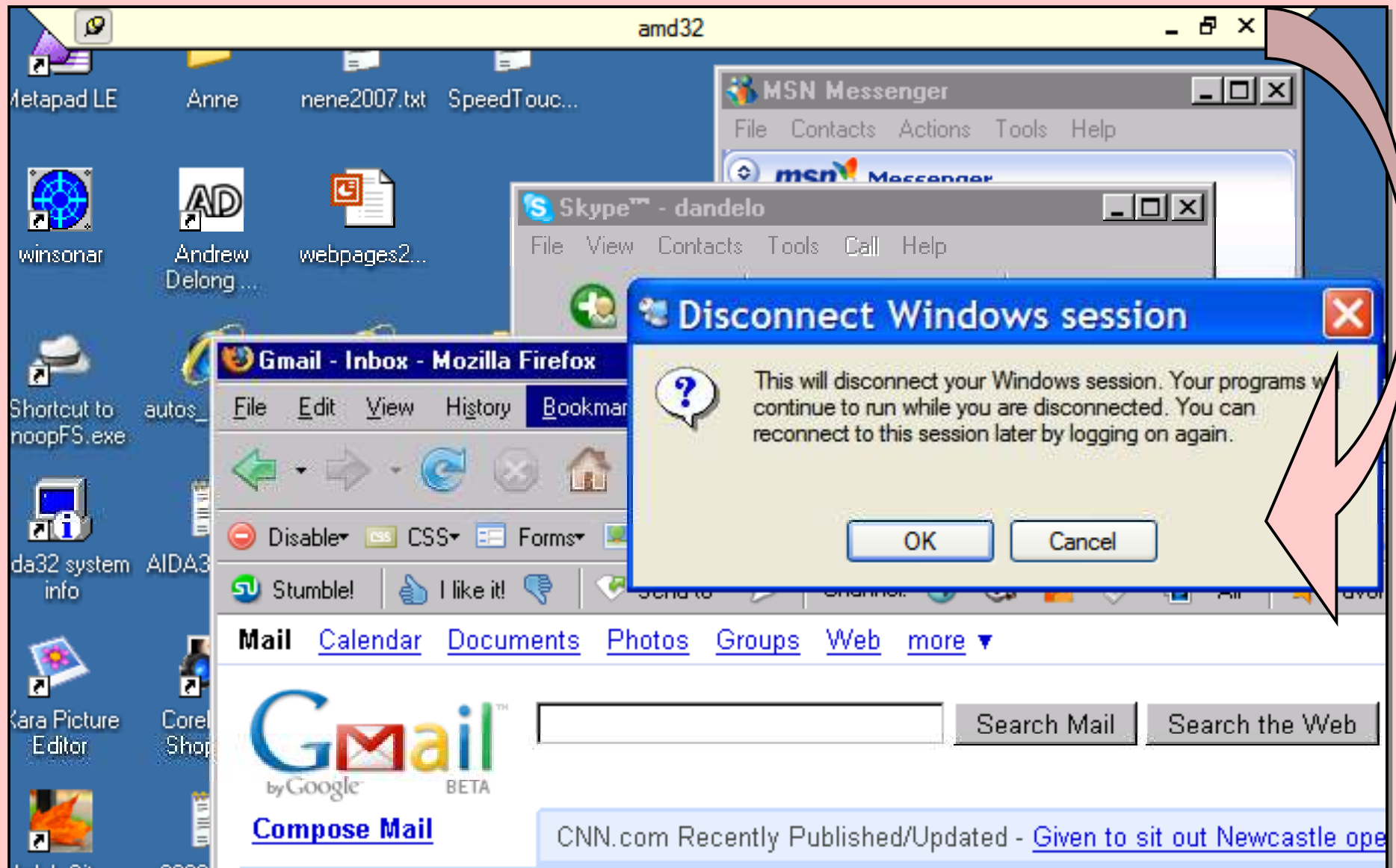


Options>> permits remembering passwords and saving connections.

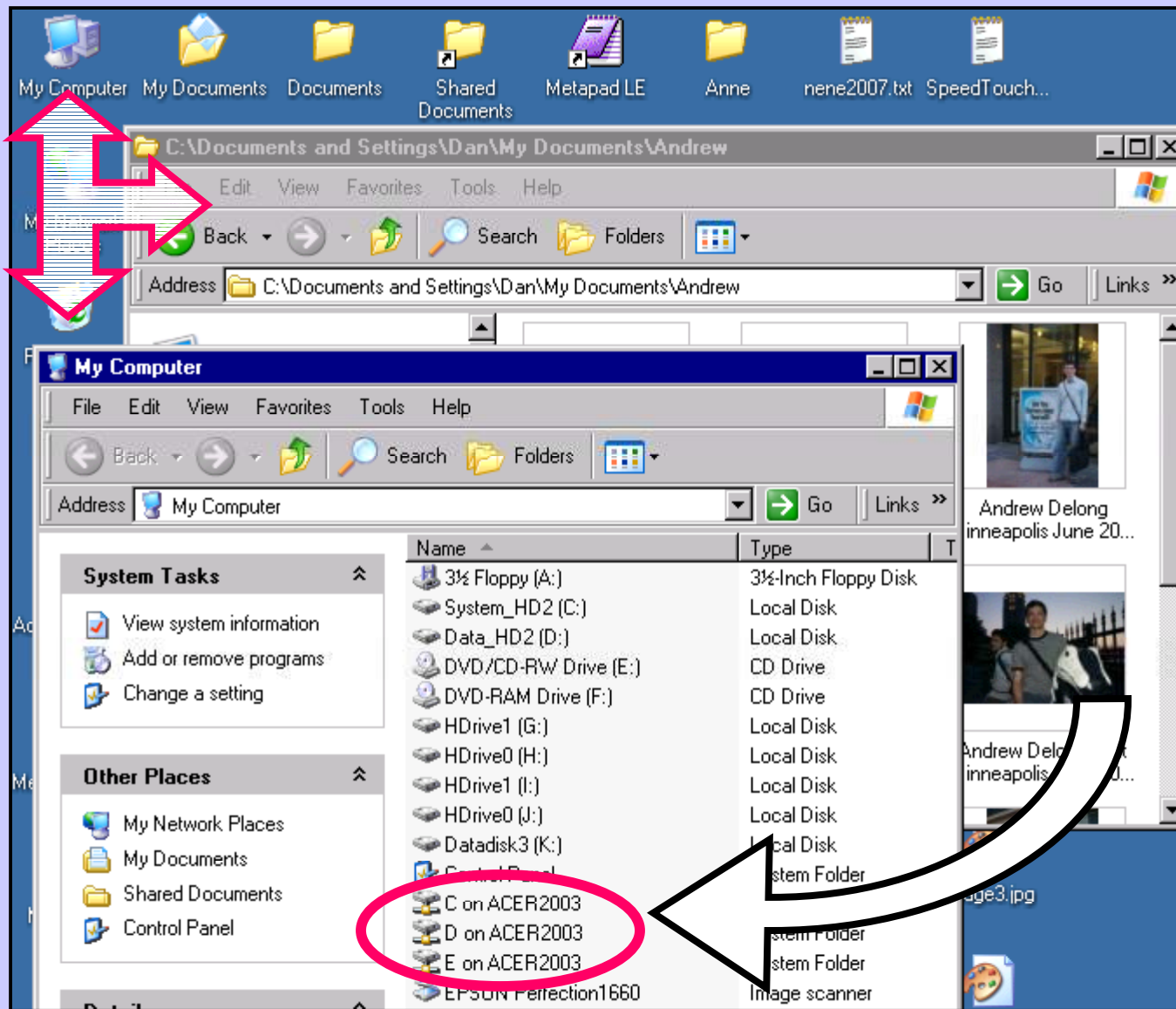
# Share Hard Drives between Host and Client



# Desktop Appears on Client



# Drag 'n Drop files between Host and Client



Open My Computer on the host (remote) desktop to see drives on both the host and the client. Drag files from one window to the other.

# Remote (Host) machine while under control



During the remote session, the host computer's desktop changes back to the login screen. A user at this computer may kill the session by logging in with the password, or by shutting down the computer.



# Possible LAN Issue:

Software Firewalls on remote machine may block incoming connection



Symantec

## Program Alert

 **Low Risk**

Microsoft Generic Host Process for Win32 Services is attempting to listen for connections from other computers.

[Hide Details](#)

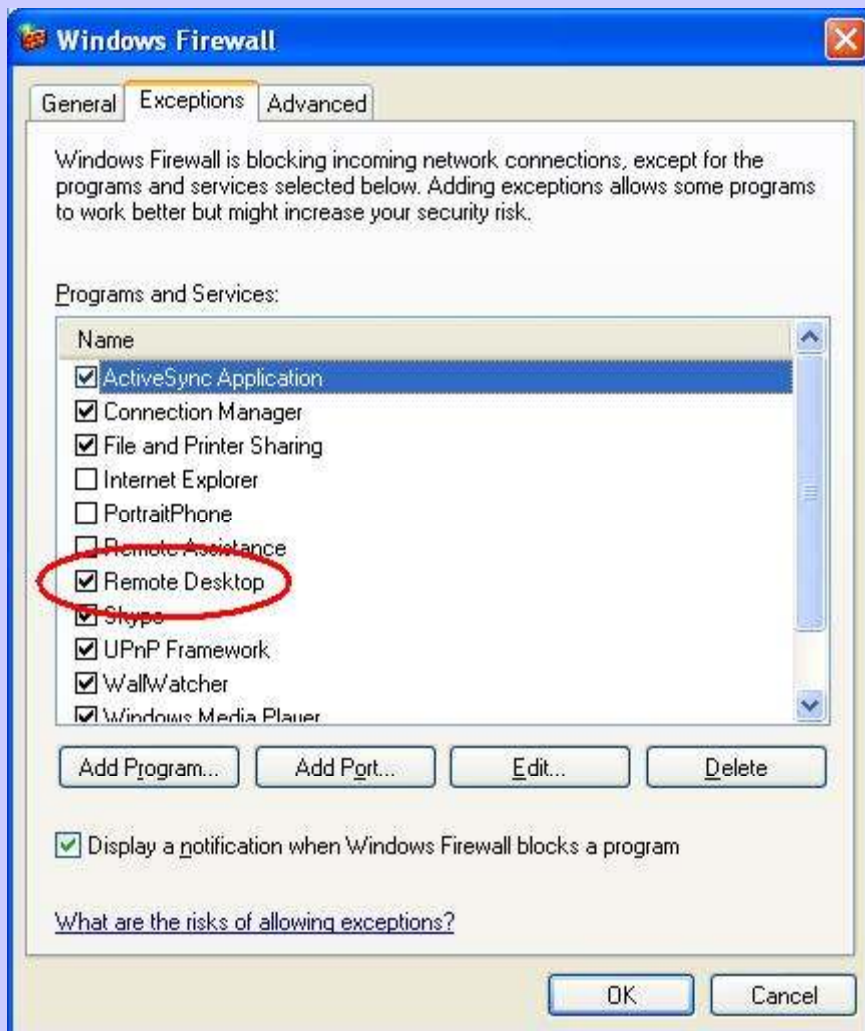
<b>Path:</b>	C:\WINDOWS\system32\
<b>Date/Time:</b>	8/2/2007 5:01 PM
<b>Local Address:</b>	All local network adapters : 3389
<b>Protocol:</b>	TCP (Inbound)

**What do you want to do:**

Always allow connections to this program on all ports (recommended)

OK

# Possible LAN Issue: Windows Firewall



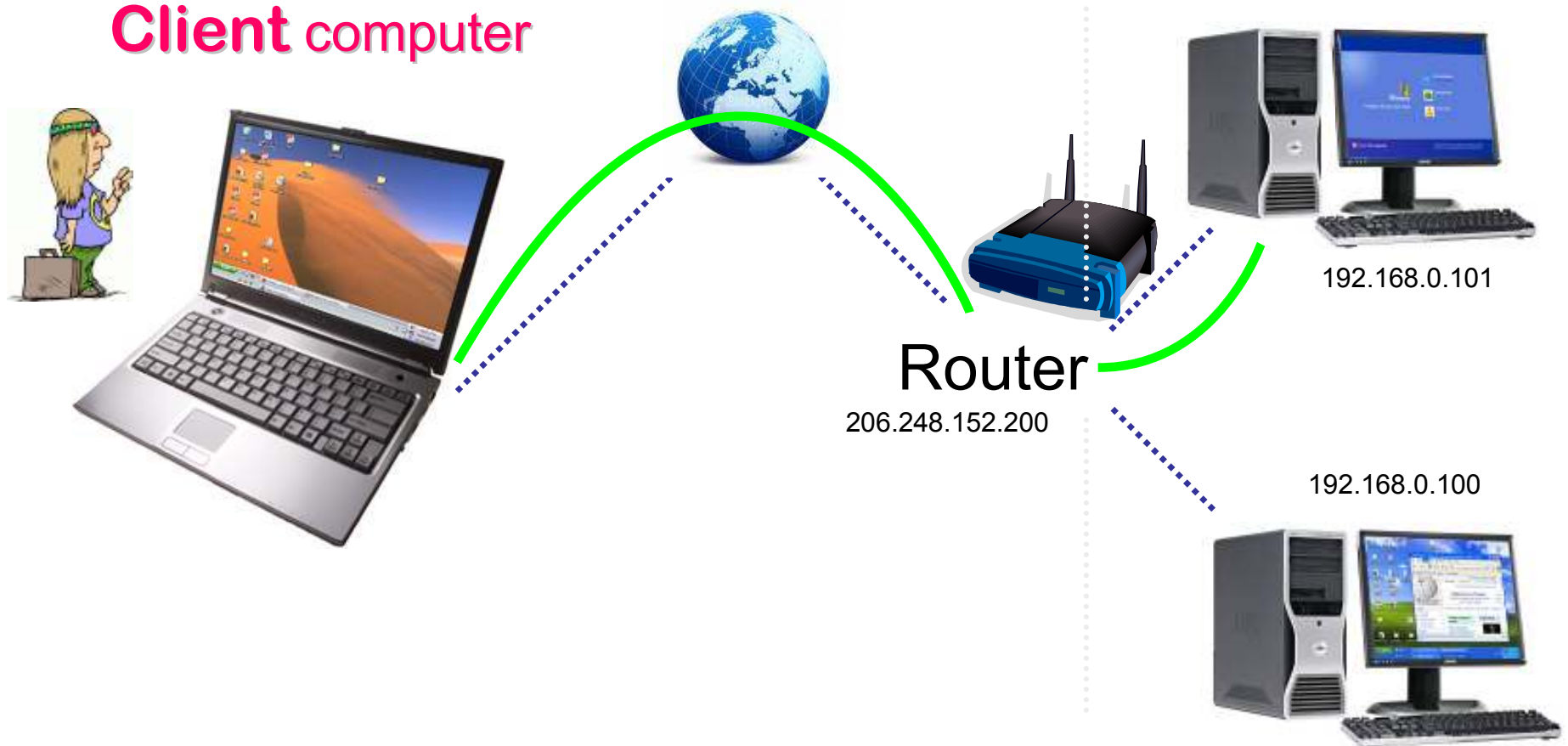
Add 'Remote Desktop' to the list of Programs and Services that are **Exceptions**, so it will not be blocked.

**Firewall** is found in Control Panel.

# Harder case: connect across internet, through firewall

Remote computers

Client computer

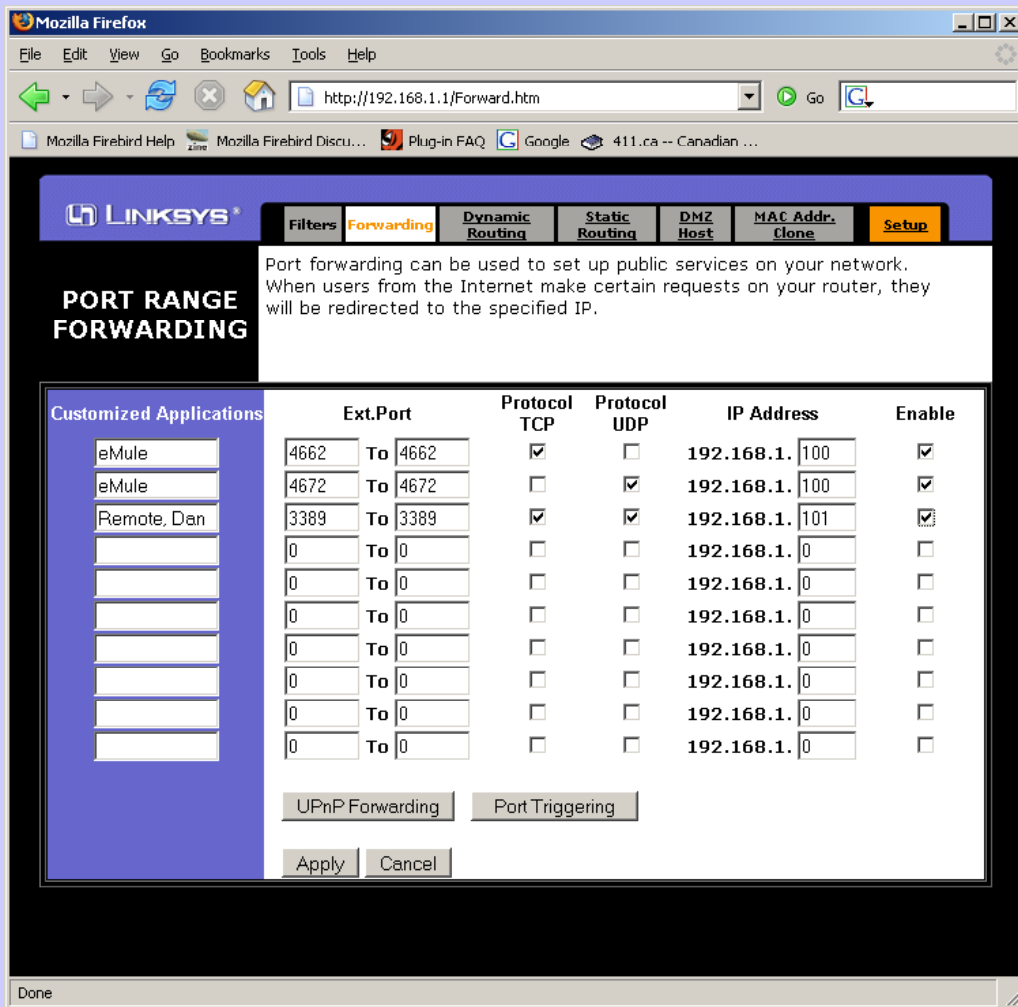


# Forward Remote Desktop default port (3389) to target machine's IP



Find out how to do port forwarding on the firewall that is directly connected to your ISP (usually a router).

We show example for Linksys. D-link is similar via 192.168.0.1



LINKSYS

Filters **Forwarding** Dynamic Routing Static Routing DMZ Host MAC Addr. Clone Setup

PORT RANGE FORWARDING

Port forwarding can be used to set up public services on your network. When users from the Internet make certain requests on your router, they will be redirected to the specified IP.

Customized Applications	Ext.Port		Protocol	Protocol	IP Address		Enable
		To	TCP	UDP			
eMule	4662	To 4662	<input checked="" type="checkbox"/>	<input type="checkbox"/>	192.168.1.	100	<input checked="" type="checkbox"/>
eMule	4672	To 4672	<input type="checkbox"/>	<input checked="" type="checkbox"/>	192.168.1.	100	<input checked="" type="checkbox"/>
Remote, Dan	3389	To 3389	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	192.168.1.	101	<input checked="" type="checkbox"/>
	0	To 0	<input type="checkbox"/>	<input type="checkbox"/>	192.168.1.	0	<input type="checkbox"/>
	0	To 0	<input type="checkbox"/>	<input type="checkbox"/>	192.168.1.	0	<input type="checkbox"/>
	0	To 0	<input type="checkbox"/>	<input type="checkbox"/>	192.168.1.	0	<input type="checkbox"/>
	0	To 0	<input type="checkbox"/>	<input type="checkbox"/>	192.168.1.	0	<input type="checkbox"/>
	0	To 0	<input type="checkbox"/>	<input type="checkbox"/>	192.168.1.	0	<input type="checkbox"/>
	0	To 0	<input type="checkbox"/>	<input type="checkbox"/>	192.168.1.	0	<input type="checkbox"/>
	0	To 0	<input type="checkbox"/>	<input type="checkbox"/>	192.168.1.	0	<input type="checkbox"/>
	0	To 0	<input type="checkbox"/>	<input type="checkbox"/>	192.168.1.	0	<input type="checkbox"/>

UPnP Forwarding Port Triggering

Apply Cancel

# Forwarding port 3389 to host at 192.168.1.101

PORT RANGE FORWARDING	When users from the Internet make certain requests on your router, they will be redirected to the specified IP.						
	Customized Applications	Ext.Port		Protocol TCP	Protocol UDP	IP Address	Enable
eMule	4662	To	4662	<input checked="" type="checkbox"/>	<input type="checkbox"/>	192.168.1.100	<input checked="" type="checkbox"/>
eMule	4672	To	4672	<input type="checkbox"/>	<input checked="" type="checkbox"/>	192.168.1.100	<input checked="" type="checkbox"/>
Remote, Dan	3389	To	3389	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	192.168.1.101	<input checked="" type="checkbox"/>
	0	To	0	<input type="checkbox"/>	<input type="checkbox"/>	192.168.1.0	<input type="checkbox"/>

Tip: The local IP address of the host computer on the LAN may change if the router reboots. To avoid this possibility, some users assign a static IP to the host computer, within their LAN (Local Area Network).

# DLink Forwarding port 3389 to host at 192.168.1.101

**D-Link**  
Building Networks for People

**AirPlus Xtreme G™**  
High-Speed 2.4GHz Wireless Router

DI-624

Virtual Server

Virtual Server is used to allow Internet users access to LAN services.

Enabled  Disabled

Name:

Private IP:

Protocol Type:  or both (TCP and UDP)

Private Port:

Public Port:

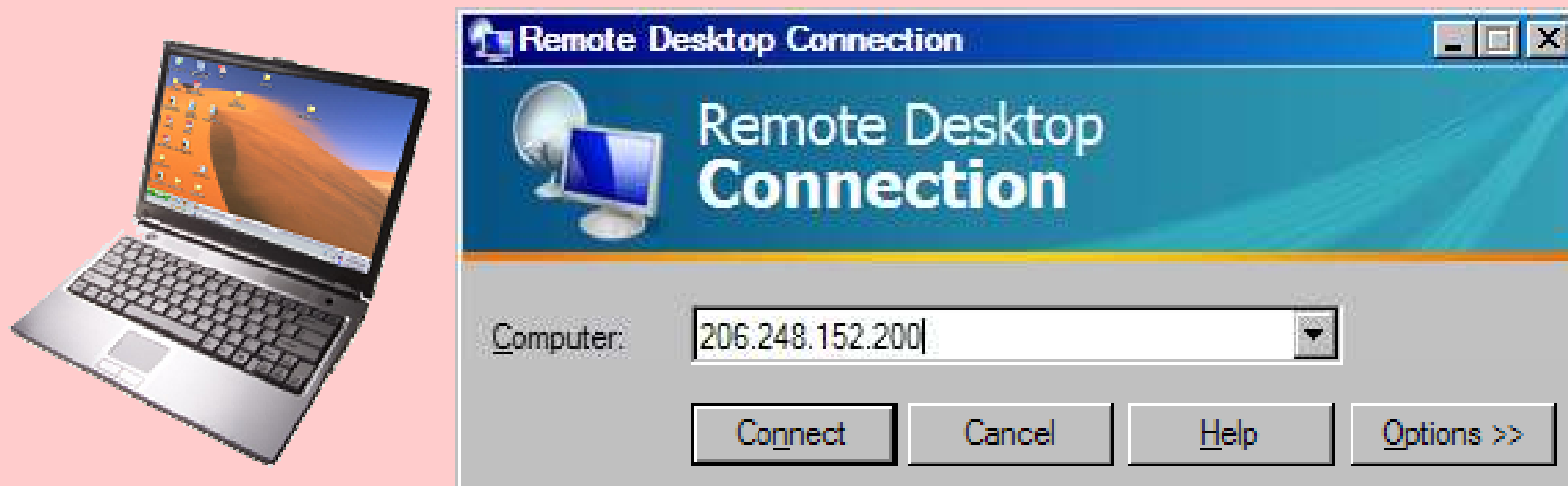
Schedule:  Always

From time  :  AM to  :  AM  
day  to

Virtual Servers List

Name	Private IP	Protocol	Schedule	
<input type="checkbox"/> Virtual Server FTP	0.0.0.0	TCP 21/21	always	
<input type="checkbox"/> Virtual Server HTTP	0.0.0.0	TCP 80/80	always	
<input type="checkbox"/> Virtual Server HTTPS	0.0.0.0	TCP 443/443	always	

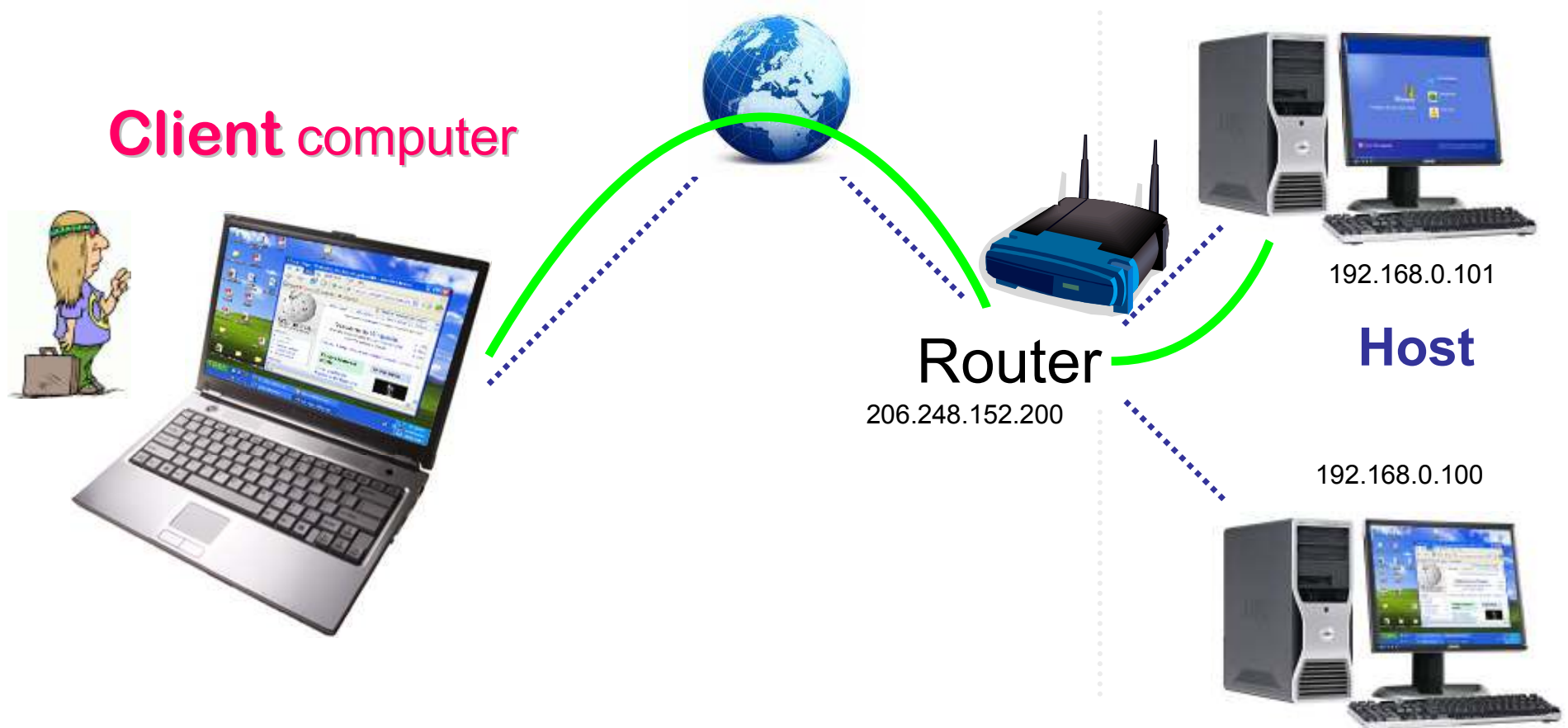
# Connect to your router's current IP address



Start ... All Programs ... Accessories ... Communications  
... Remote Desktop Connection

The router's Internet IP address (WAN address) is reported by its administrative interface, under the Status tab (or DDNS tab). Or, go to an Internet site, such as:  
<http://www.ipchicken.com/> or <http://whatismyip.org/> or  
<http://whatismyip.com/>

# Client's request on port 3389 gets forwarded to desired machine within the LAN



# Part 3: Dealing with Dynamic IP addresses

1. Unless you have made arrangements with your ISP to provide a static IP whenever your modem connects to their service, your Internet IP will often change.
2. Static IPs cost an additional \$2 to \$4 per month.
3. DynDNS.com is a free Internet service that alleviates this problem.

# DynDNS – free Internet IP aliasing

The screenshot shows a Windows Internet Explorer browser window displaying the DynDNS website. The address bar shows the URL <http://www.dyndns.com/services/dns/dyndns/>. The browser's title bar reads "DynDNS: Dynamic DNS - free ddns, dynamic DNS service - Windows Internet Explorer".

The website's header features the DynDNS logo on the left and a login section on the right with fields for "User:" and "Pass:" and a "Login" button. Below the login section are links for "Lost Password?" and "Create Account". A yellow navigation bar contains links for "About", "Services", "Account", "Support", and "News".

The main content area is titled "Dynamic DNS<sup>SM</sup>". It contains two paragraphs of text: "The free Dynamic DNS service allows you to alias a dynamic IP address to a static hostname in any of the [many domains](#) we offer, allowing your computer to be more easily accessed from various locations on the Internet. We provide this service, for up to five (5) hostnames, free to the Internet community." and "The Dynamic DNS service is ideal for a home website, file server, or just to keep a pointer back to your home PC so you can access those important documents while you're at work. Using one of the available third-party [update clients](#) you can keep your hostname always pointing to your IP address, no matter how often your ISP changes it. No more fumbling to find that piece of paper where you wrote down your IP address, or e-mailing all your friends every time it changes. Just tell them to visit [yourname.dyndns.org](http://yourname.dyndns.org) instead!".

On the right side of the main content area, there is a blue box titled "Actions" containing two yellow buttons: "Create Hosts" and "Manage Hosts".

A left-hand sidebar menu lists various services: "Services", "DNS Services", "Custom DNS", "Secondary DNS", "Recursive DNS", "Dynamic DNS", "Features", "Available Domains", "FAQs", "How-To", "TLD DNS", "Domain Registration", "SSL Certificates", "Mail Services", "Network Monitoring", and "Web Redirection".

At the bottom of the page, there is a "More Info:" section with a bullet point: "• [Features](#) - a basic overview of the features offered by this service".

The browser's status bar at the bottom shows "Internet" and a zoom level of "100%".

# DynDNS – Create an Account

**My Account**  
Create Account  
Login  
Lost Password?

**Search DynDNS**  
[Search]

## Create Your DynDNS Account

Please complete the form to create your DynDNS Account.

It is strongly recommended that you verify this page with the [DynDNS](#) site. You should currently verify this page with us.

**User Information**

Username:	<input type="text" value="jane.dobson"/>	Intentionally to reserve one account of being used by the e-mail address provider.
E-mail Address:	<input type="text" value="jane.dobson@btopenworld.com"/>	
Confirm E-mail Address:	<input type="text" value="jane.dobson@btopenworld.com"/>	
Password:	<input type="password" value=""/>	Your password needs to be more than 8 characters and cannot be the same as your username. We will check to ensure that it is a complex word, or can otherwise be easily guessed.
Confirm Password:	<input type="password" value=""/>	

**About You (optional)**

Providing this information will help us to better understand our customers, and tailor future offerings more accurately for your needs. Thanks for your input!

How did you hear about us?

We will use your account information to generate feedback on your e-mail address.

**Terms of Service**

Please read the [privacy policy \(PDF\)](#) and [accept to our](#) [creating your account](#). Also acknowledge that this may not have one (1) free account. And that options of multiple free accounts will result in the deletion of all of your accounts.

**Policy Last Modified: February 6, 2008**

**1. ACKNOWLEDGMENT AND ACCEPTANCE OF TERMS OF SERVICE**

All services provided by Dynamic Network Services, Inc. ("DNS") are provided to you ("Member") under the Terms and Conditions set forth in the Acceptable Use Policy ("AUP") and any other operating rules and policies set forth by DynDNS. The AUP comprises the entire agreement between:

My Member and DynDNS and constitutes all our agreements.

Between the parties regarding the subject matter contained herein.

**BY COMPLETING THE REGISTRATION PROCESS AND CHECKING:**

I agree to the AUP.  
 I will verify e-mails via (1) IP.  
 I will verify e-mails via (2) IP.  
 I will verify e-mails via (3) IP.

**Mailing Lists (optional)**

DynDNS maintains a number of mailing lists designed to keep our users informed about product announcements, client development, our company activities, and our current status. Please use the checkboxes below to alter your subscription preferences. Your subscription preferences may be changed at any time through the [ACCOUNT SETTINGS](#) page.

product news  
 price releases  
 service status

**Next Step**

After you click "Create Account", we will create your account and send you an email to the address you provided. Please follow the instructions in that e-mail to confirm your account. You will have to confirm your account within 48 hours or we will automatically delete your account. It is not recommended to create more than one account.

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1. During account creation you will provide a username, a valid e-mail address, and you will create a password.
2. You agree to their terms and agree not to create more than one DynDNS account.
3. You may opt out of getting their newsletters, etc.
4. You must answer the confirmation e-mail within 48 hours.

# Add Dynamic DNS Host Service

The screenshot shows the DynDNS website interface. At the top, the DynDNS logo is on the left, and the user is logged in as 'dtdejong'. Navigation links include 'My Services', 'My Cart', 'Settings', and 'Log Out'. A yellow navigation bar contains 'About', 'Services', 'Account', 'Support', and 'News'. The left sidebar is titled 'My Account' and includes sections for 'My Services', 'My Zones', 'My Hosts', 'Account Settings', 'Billing', and 'My Cart'. The 'My Hosts' section is expanded, showing 'Add Host Services' highlighted with a red arrow. The main content area is titled 'Add Host Services' and is divided into several sections: 'DNS Services', 'WebHop Services', 'Network Services', and 'SSL Certificates'. The 'DNS Services' section is circled in red and contains two columns: 'Dynamic DNS' with a link 'Add Dynamic DNS Host' and 'More Info...', and 'Static DNS' with a link 'Add Static DNS Host' and 'More Info...'. The 'WebHop Services' section contains 'WebHop' and 'MyWebHop' with their respective 'Add' links and 'More Info...' links. The 'Network Services' section contains 'Network Monitoring' with an 'Add Network Monitoring' link and 'More Info...'. The 'SSL Certificates' section contains 'SSL Certificates' with an 'Add SSL Certificate' link and 'More Info...'. At the bottom, there is a search bar for DynDNS and a footer with copyright information.

1. Add Host Service
2. Add Dynamic DNS Host

# Add Dynamic DNS Host Service

## Part 2

**DynDNS** Logged In User: dtdejong  
[My Services](#) - [My Cart](#) - [Settings](#) - [Log Out](#)

About Services Account Support News

**Services**

- DNS Services
  - Custom DNS
  - Secondary DNS
  - Recursive DNS
  - Dynamic DNS**
    - Features
    - Available Domains
    - FAQs
    - How-To
  - Static DNS
  - TLD DNS
- Domain Registration
- SSL Certificates
- Mail Services
- Network Monitoring
- Web Redirection
- Account Upgrades
- Pricing

**My Cart** 0 items

Search DynDNS  
  
Search

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Create Hosts

# Add Dynamic DNS Host Service

## Part 3


**DynDNS** Logged In User: dttdelong  
[My Services](#) - [My Cart](#) - [Settings](#) - [Log Out](#)

[About](#) [Services](#) [Account](#) [Support](#) [News](#)

**My Account**

**My Services**

- Account Upgrades
- MailHop Outbound
- Recursive DNS
- SLA
- Premier Support
- My Zones
  - Add Zone Services
- My Hosts
  - Add Host Services
  - Dynamic DNS
  - Static DNS
  - WebHop
  - MyWebHop
  - Network Monitoring
  - SSL Certificates
- Renew Services
  - Auto Renew Settings
  - Sync Expirations
- Account Settings
- Billing

**My Cart**   
[0 items](#)

**Search DynDNS**

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### New Dynamic DNS<sup>SM</sup> Host

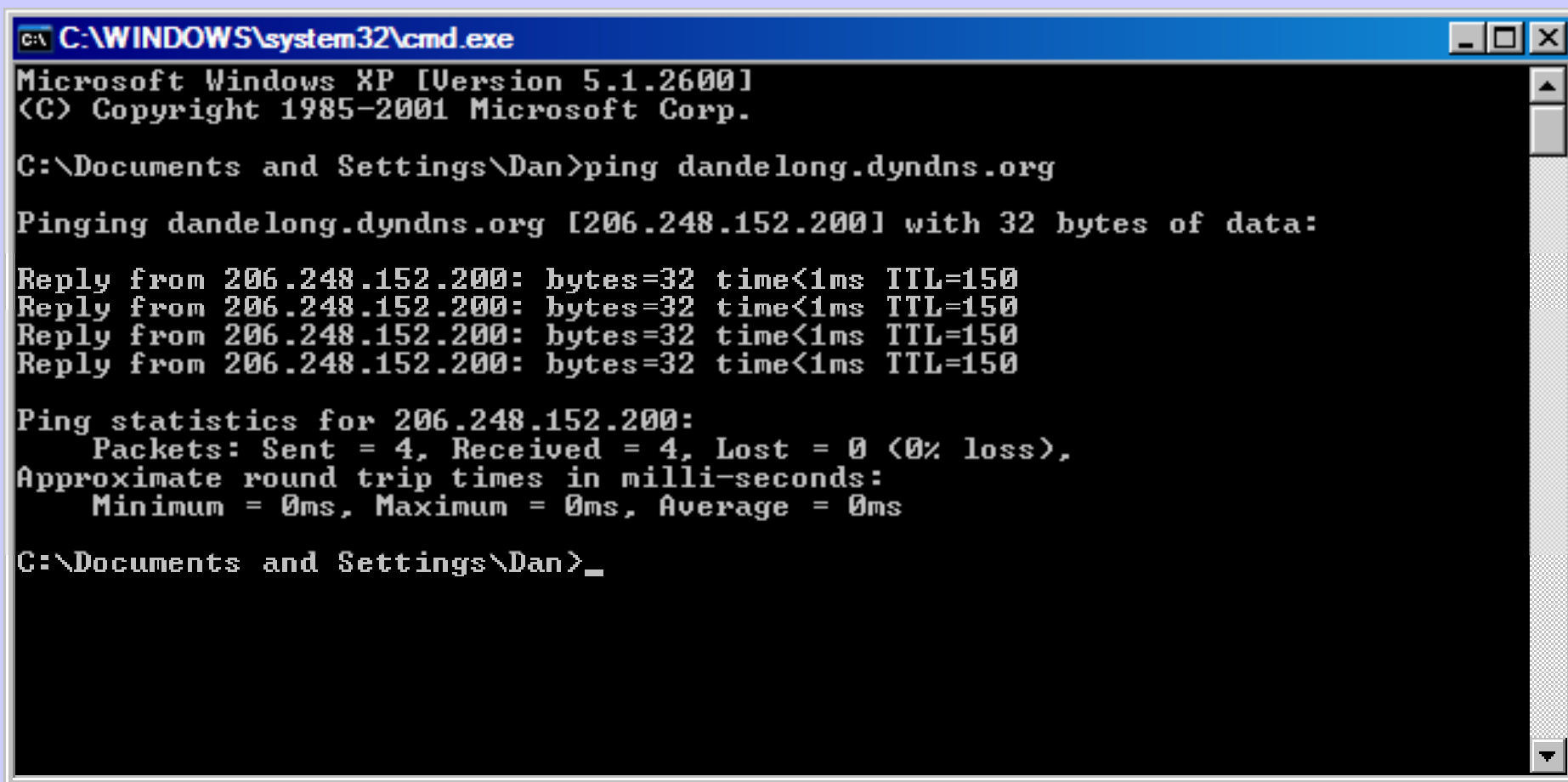
Hostname:	<input type="text" value="danelong"/>	<input type="text" value="dyndns.org"/>
IP Address:	<input type="text" value="206.248.152.200"/>	
Enable Wildcard:	<input checked="" type="checkbox"/>	
Mail Exchanger (optional):	<input type="text"/>	<input type="checkbox"/> Backup MX?

### New Dynamic DNS<sup>SM</sup> Host

Hostname:	<input type="text" value="danelong"/>	<input type="text" value="dyndns.org"/>
IP Address:	<input type="text" value="206.248.152.200"/>	
Enable Wildcard:	<input checked="" type="checkbox"/>	
Mail Exchanger (optional):	<input type="text"/>	<input type="checkbox"/> Backup MX?

# Verify new hostname resolves to your router's IP

Start ... run ... cmd.exe ... ping username.domain.org



```
C:\WINDOWS\system32\cmd.exe
Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.

C:\Documents and Settings\Dan>ping dandelong.dyndns.org

Pinging dandelong.dyndns.org [206.248.152.200] with 32 bytes of data:

Reply from 206.248.152.200: bytes=32 time<1ms TTL=150
Reply from 206.248.152.200: bytes=32 time<1ms TTL=150
Reply from 206.248.152.200: bytes=32 time<1ms TTL=150
Reply from 206.248.152.200: bytes=32 time<1ms TTL=150

Ping statistics for 206.248.152.200:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\Documents and Settings\Dan>_
```

# Install 'dynamic dns update client' on the target machine

The image is a composite of three screenshots illustrating the installation and configuration of the DynDNS Updater. The top screenshot shows the DynDNS website with a 'Windows Update Client' link highlighted. The middle screenshot shows the Windows Update Client window with the 'DynDNS Updater' link highlighted. The bottom screenshot shows the DynDNS Updater application interface with the 'Info' tab selected, displaying general information about the client's status and configuration.

**Windows Update Client**

<b>Name</b>	DynDNS Updater
<b>Version</b>	v3.1.0.15s
<b>Download</b>	<a href="#">Download Now!</a>
<b>Last Modified</b>	September 17, 2006

**DynDNS Updater**

**General Information**

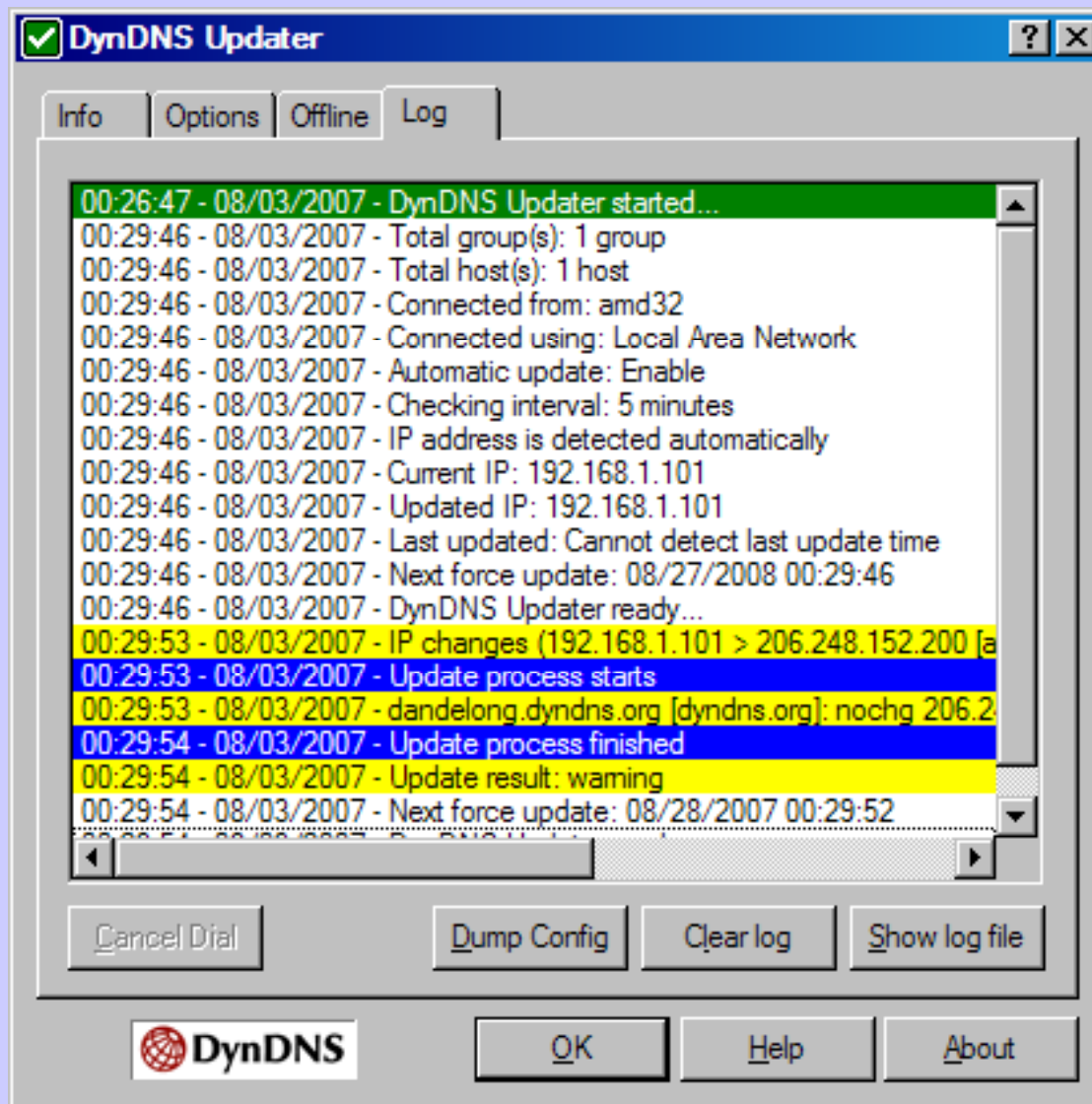
- Total group(s): 1 group
- Total host(s): 1 host
- Connection type: Local Area Network
- Automatic update: Disable
- Checking interval: Not applicable
- Last updated: 46 seconds ago
- Next force update: 06/14/2005 22:51:37

Current IP: 140.186.38.56  
Updated IP: 140.186.38.56

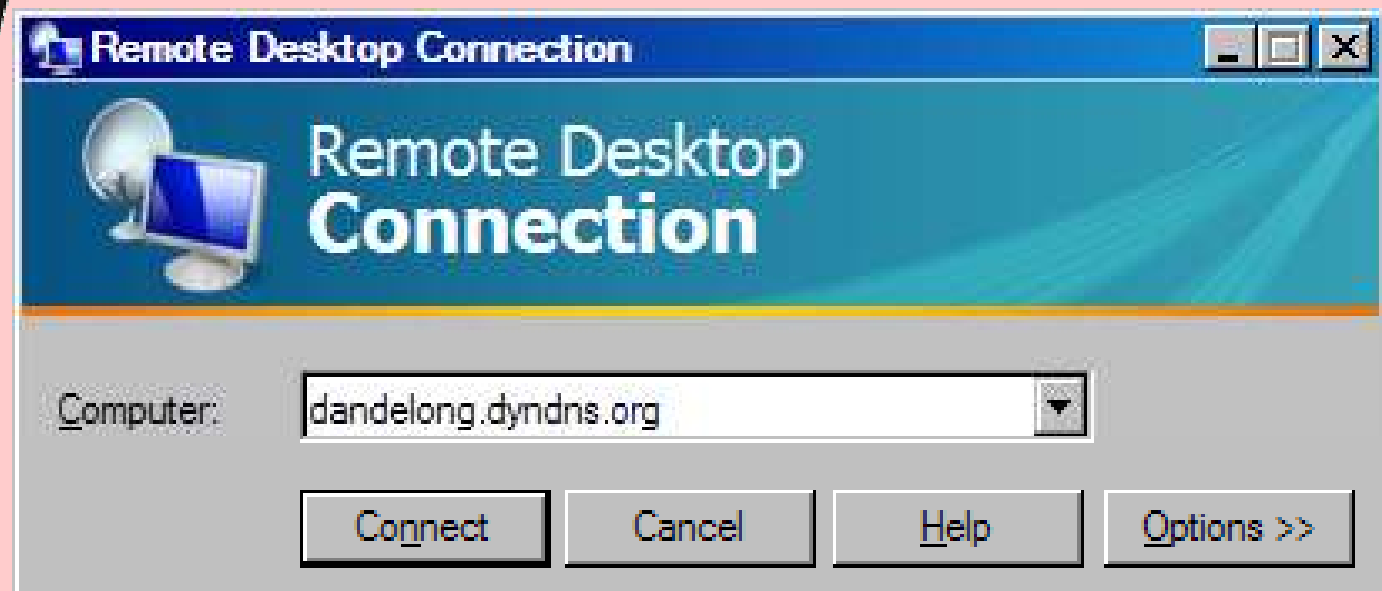
Buttons: Force Update, Settings..., OK, Help, About

Run this updater as a service rather than a web application when given the choice during installation.

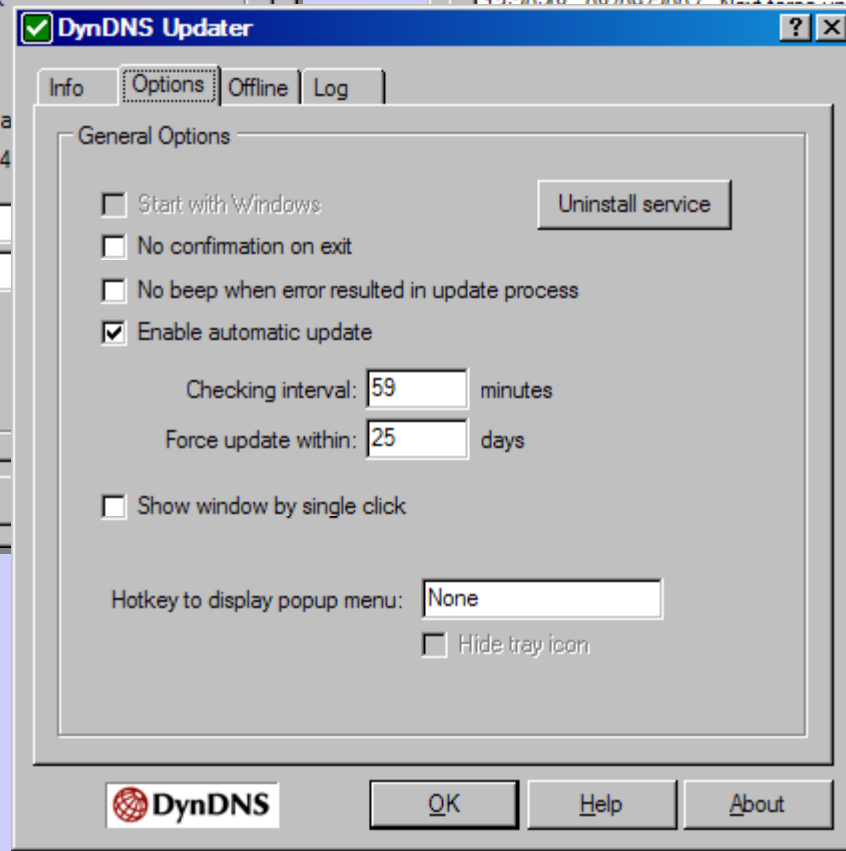
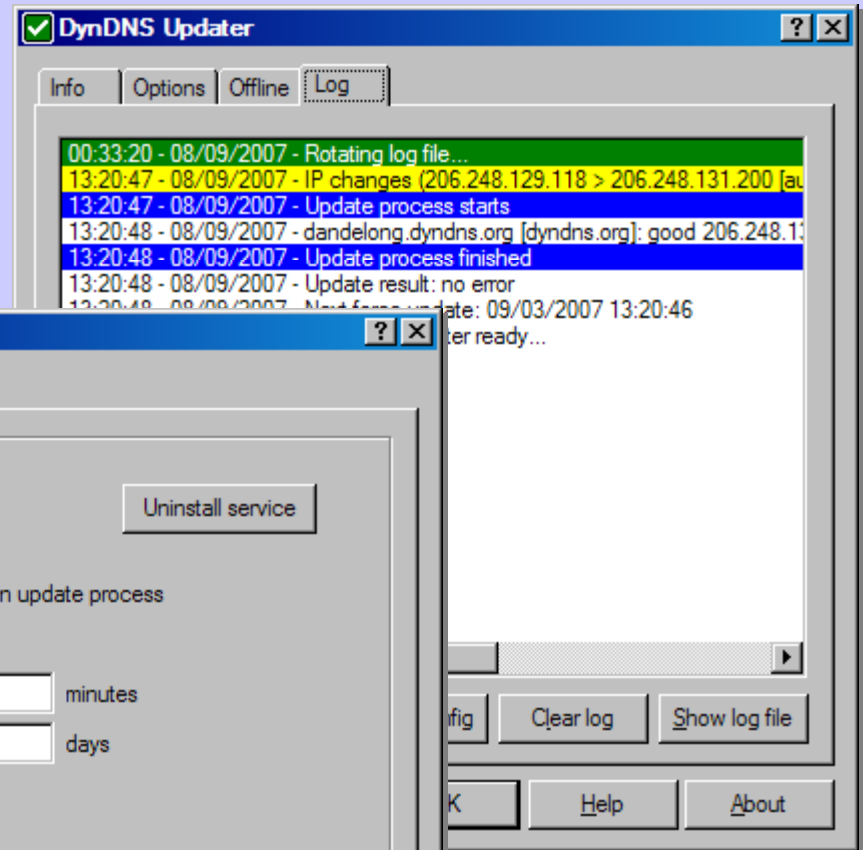
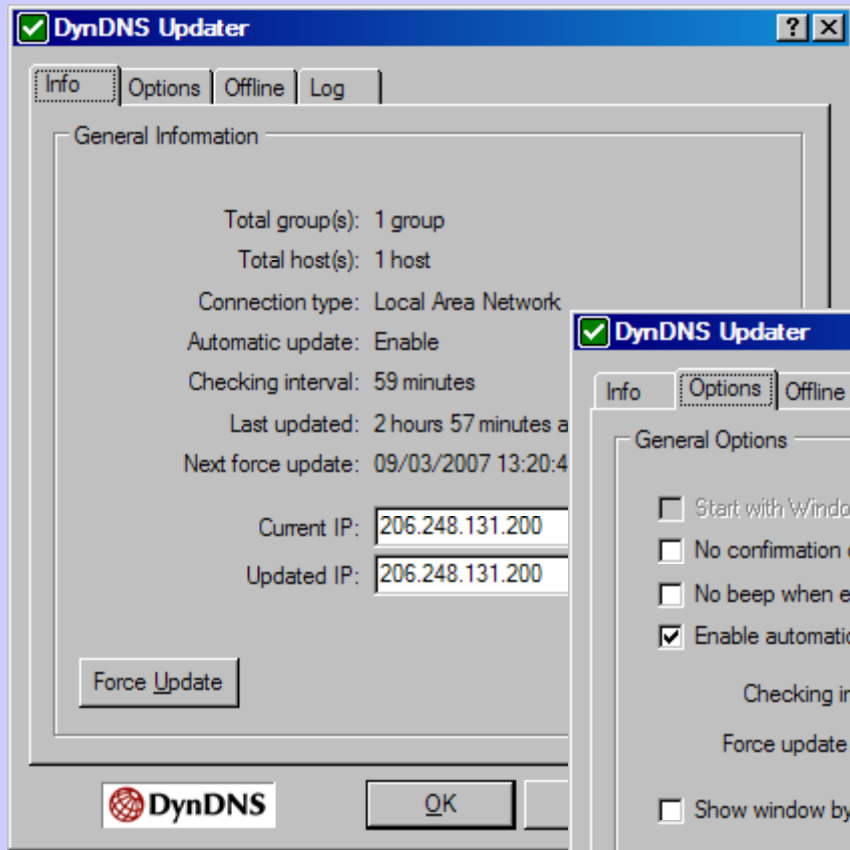
# Verify that Dynamic DNS client sent correct IP



# Connect using your new DNS name instead of IP address



# DynDNS Updater



## Setting a fixed IP address on a computer

- To make sure the computer to which you want to connect has a fixed IP address, right click on My Network Places ... View Network Connections ... Local area Connection and right click for Properties ... General.
- Then select Internet Protocol(TCP/IP) from the list and click the Properties button. Select Use the following IP address, type the IP address manually, and press the tab key to move to the subnet mask field to let it populate itself.
- Enter the IP address of the router into both the Default Gateway field and the Preferred DNS server field (usually 192.168.1.1 for Linksys). Then press OK.

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## **Set Up Remote Desktop Web Connection with Windows XP**

<http://www.microsoft.com/windowsxp/using/mobility/getstarted/remotedesktopintro.mspx>

[http://www.microsoft.com/windowsxp/using/networking/expert/northrup\\_03may16.mspx](http://www.microsoft.com/windowsxp/using/networking/expert/northrup_03may16.mspx)

<http://empoweringsoho.files.wordpress.com/2007/06/lambv-remotedesktop.pdf>

## **What is my Internet IP address (on the Host Computer)**

<http://www.whatismyip.org/>

<http://www.whatismyip.com/>

[http://www.whatismyip.net/cgi-bin/your\\_ip\\_is.cgi](http://www.whatismyip.net/cgi-bin/your_ip_is.cgi)

## **Remote Desktop (Terminal Service Client 6 – most recent, version 5 on older installs below)**

<http://support.microsoft.com/kb/925876#appliedto>

## **Download version 5 client software – Windows XP Remote Desktop Connection software [XPSP2 5.1.2600.2180] file is MSRDPCLI.EXE which is the same as on the SP2 CD**

<http://www.microsoft.com/windowsxp/downloads/tools/rdclientdl.mspx>

**XP Automatic Logon** <http://windowsxp.mvps.org/Autologon.htm>

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## **Setting up Remote Desktop How To (complete and complex)**

<http://theillustratednetwork.mvps.org/RemoteDesktop/RemoteDesktopSetupandTroubleshooting.html>

## **Microsoft TechNet - Establishing a Remote Desktop Session**

<http://technet.microsoft.com/en-us/library/bb457106.aspx>

## **Microsoft - Starting a Remote Desktop Session**

<http://www.microsoft.com/windowsxp/using/mobility/getstarted/starteremote.msp>

## **Free Dynamic DNS Aliasing (to connect to your host computer with the same host name at all times)**

<http://www.dyndns.com/> or <http://www.no-ip.com/>

## **PC Config is a \$30 program to forward ports without entering the router's configuration.**

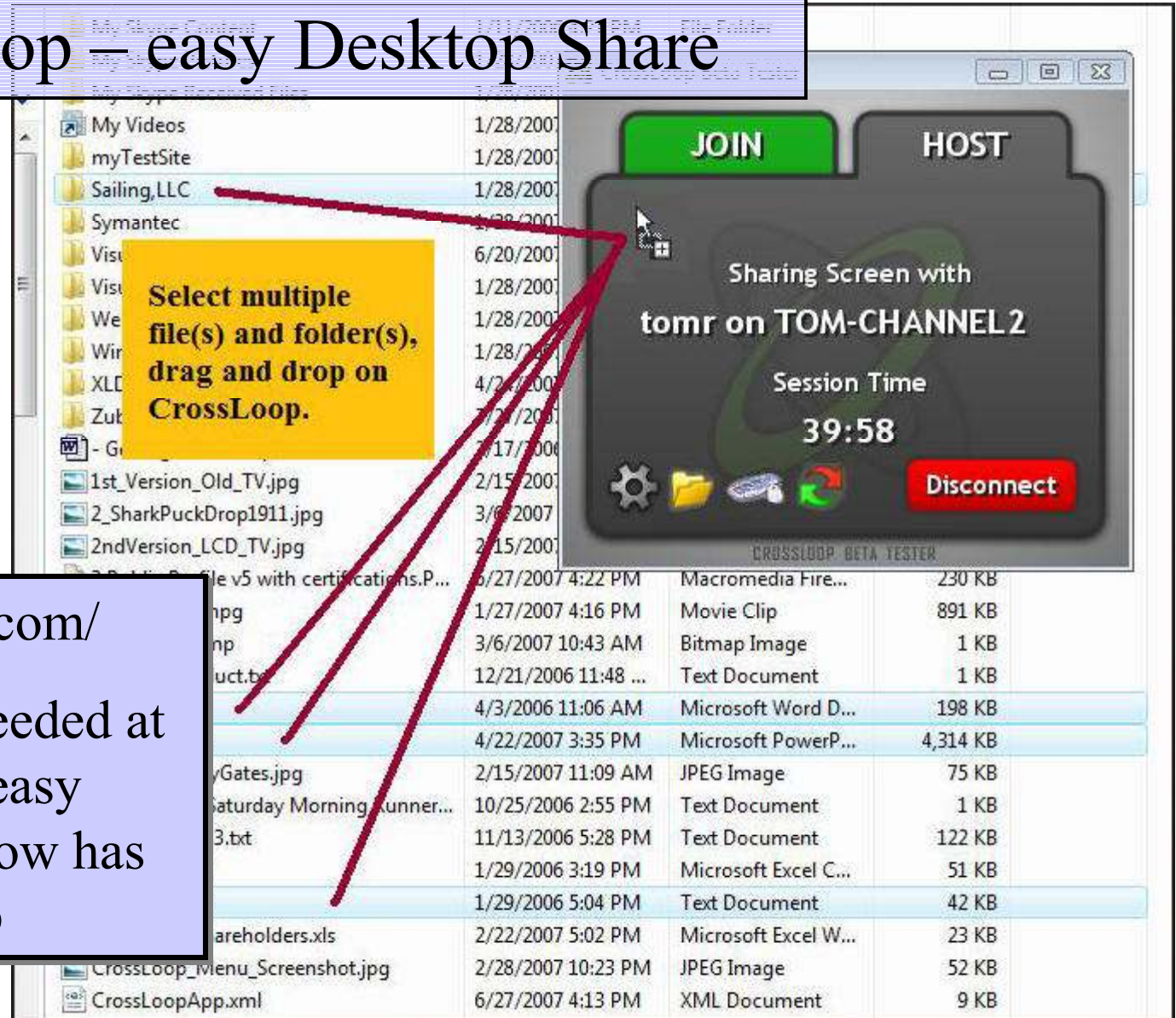
<https://portforward.com/store/pfconfig.cgi>

## **Set up Static IP on Host computer in case the router's DHCP changes it:**

<http://www.portforward.com/networking/static-xp.htm>

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- CrossLoop – easy Desktop Share



<http://crossloop.com/>

Free, operator needed at each computer, easy install, secure, now has file drag-'n-drop