New Router Configuration, Router Firmware Update, Parental Controls and OpenDNS installation The word 'open' in OpenDNS does not mean open internet. It is a service which 'opens' the standard DNS function into a filtering/ accountability service. See page 10.



*Whole home protection, see pg. 13

This guide uses a Netgear WNR1000V3 but it should apply to other models and other brands



We start out assuming you are connected to your router either by a ethernet wire or wifi

First, find the ip address of your router by: 1. going to your start button,

- 2. Clicking the run option
- 3. Type 'cmd' into the run window and clicking 'ok'

```
Administrator: Command Prompt
   Media State . . . . . . . . . : Media disconnected
Connection-specific DNS Suffix . :
Wireless LAN adapter Wireless Network Connection 2:
   Media State . . . . . . . . . . . Media disconnected
Connection-specific DNS Suffix . :
Wireless LAN adapter Wireless Network Connection:
   Connection-specific DNS Suffix .:
Link-local IPv6 Address . . . . : fe80::4026:8688:3069:175e%17

        IPv4 Address
        192.168.1.2

        Subnet Mask
        255.255.255.0

        Default Gateway
        192.168.1.1

                                                                             Ethernet adapter Local Area Connection:
   Media State . . . . . . . . . : Media disconnected
Connection-specific DNS Suffix . : dialogic.com
Tunnel adapter isatap.{D0ED1186-A7A2-4AE3-B134-06F442F37FE8}:
   Connection-specific DNS Suffix .:
Link-local IPv6 Address .... : fe80::5efe:192.168.1.2%19
    Default Gateway . . . . . . . . . .
Tunnel adapter isatap.{D2A13BD4-CF9D-4BAC-BD5B-B8D955F53527}:
   Media State . . . . . . . . . . Media disconnected Connection-specific DNS Suffix . :
Tunnel adapter isatap.{C6D2687D-1D48-43DE-975D-FD2A0C37342D}:
   Media State . . . . . . . . . : Media disconnected Connection-specific DNS Suffix . :
Tunnel adapter isatap.dialogic.com:
   Media State . . . . . . . . . . Media disconnected Connection-specific DNS Suffix . :
Tunnel adapter Teredo Tunneling Pseudo-Interface:
   Media State . . . . . . . . . . . . Media disconnected
Connection-specific DNS Suffix . :
C:\Users\jokken\Desktop>i
```

A black command line window will open. At the prompt type the command 'ipconfig' and hit <enter>. Find your router's IP address on the line that says 'Default Gateway'. Here it is 192.168.1.1.

| tm e ^r ADVANCED | 오 · ර 命公 (3) |
|--|---|
| Windows Security Image: Constraint of the server 192.168.1.1 is asking for your user name and password. The server reports that it is from NETGEAR WNR1000v3. Warning: Your user name and password will be sent using basic authentication on a connection that isn't secure. Image: Ima | Router Configuration Utility. |
| | AbvanceD Vindows Security The server 192.168.1.1 is asking for your user name and password. The server reports that it is from NET GEAR WNR1000v3. Warming: Your user name and password will be sent using basic authentication on a connection that isn't secure. iiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiii |

Open a web browser and navigate to that address using the 'http://' prefix. In this example we typed 'http://192.168.1.1' and hit <enter>. You will need to enter a username and password, hopefully you have this written somewhere or your router's manual will tell you. (you are now on a webpage in your router)

| NETGEAR | genie | Firmware Versit V1.0.2.62_60.0.87N | on NA |
|---|--|---|----------|
| BASIC | ADVANCED | Auto | - |
| ADVANCED Home | Set Password | | |
| Setup Wizard | j | Apply > XCancel | |
| WPS Wizard | D | | |
| ▶ Setup | Old Password | •••••• | |
| ► Security | Set Password | | |
| ▼Administration | Repeat New Password | •••••• | |
| Router Status Logs Attached Devices Backup Settings Set Password Router Update | Charles Password Recovery Security Question #11* Answer*: Security Question #2*: Answer*: * = required information Last time password was recovered: Help Center | /hat is your oldest sister's first name? //hat is your youngest brother's first name? //hat is your your youngest brother's first name? //hat is your your your your your your your your | |
| | | | |
| | | | |
| Help & Support Docum | entation Online Support Router FAQ | SEARCH HELP Enter Search Item GO | |

Let's step thru a typical router configuration. You'll see configuration option menu on the left. Yours will likely be different, but first we suggest you find the option to change your router's configuration webpage password. The default password isn't too secure but often has never been changed. You can skip this step if you know this has already been changed. Remember this password. When you click 'Apply', you may need to re-login with your new password.

| NETGEAR WNR1000v3 | : g | Cogout Firmware Version V1.0.2.62_60.0.87NA |
|----------------------|------------|---|
| BASIC | | ADVANCED Auto |
| Home | •) | Wireless Settings |
| Internet | • | Apply > Cancel |
| Wireless | | |
| Attached Devices | • | Wireless Network |
| Parental Controls | • | Enable Wireless Isolation |
| Guest Network | | Name (SSID): |
| | | Region: |
| | | Channel: |
| | | Mode: Up to 150 Mbps V |
| | | Security Options None • WPA2-PSK [AES] • WPA-PSK [TKIP] + WPA2-PSK [AES] Security Options (WPA2-PSK) Passphrase: (8-63 characters or 64 hex digits) |

Next, we suggest you find the option to set or change your wifi connect password/key/passphrase. By default you may have no connect passphrase, or the connect passphrase is something very hard to remember. You can skip this step if you know this has already been changed. Make this passphrase something hard to guess but easy for you to remember. When you click 'Apply' your router will restart, (it may take a few minutes). If you're currently connected via wifi you'll lose your connection and you'll need to re-connect with your new passphrase. You will also need to re-login to the router config webpage.

| | enie | Logout Firmware Version V1.0.2.62_60.0.87NA |
|------------------------|---|---|
| BASIC | ADVANCED | Auto |
| ADVANCED Home | Router Upgrade | |
| Setup Wizard | Check for new version from the Internet. | Check |
| WPS Wizard | Locate and select the upgrade file on your hard disk. | |
| ► Setup | Browse | |
| ► Security | | |
| ▼Administration | Upidau Cancer | |
| Router Status | | |
| Logs | | |
| Backup Settings | | |
| Set Password | | |
| Router Update | | |
| Advanced Setup | | |
| | | |
| | | |
| | | |
| | Help Center | Show/Hide Help Center |
| | | |
| | | |
| Help & Support Documer | ation Online Support Router FAQ | SEARCH HELP Enter Search Item GO |

Next, find the option to update the software version (called firmware) on your router. Here it is the Advanced->Administration->RouterUpdate page. Click the "Check Online" button. If a new version is found, then there are important security and safety improvements available, follow the steps to install the update. Afterwards, your router will restart. Again you may need to re-login.

| NETGEAR geni | e | | Schedule | |
|--|--|----------------------|---|---|
| BASIC | ADVANCED | | ۹ | _ |
| Home Internet Wireless Attached Devices Parental Controls Guest Network | Internet Image: Constraint of the second | Attached Devices : 2 | Days To Block: ✓ Every day ✓ Sunday ✓ Monday ✓ Tuesday ✓ Thursday ✓ Thursday ✓ Saturday | |
| Help & Support Documentation Online | e Support Roufer FAQ | | Time Of Day To Block: (use 24-hour clock) ✓ All Day Start Blocking: 0 End Blocking: 0 Hour 0 Min Apply Cancel | - |

Get to know all your router options well, especially the parental control options. When you buy a new router make sure the box says it has parental controls. In the scheduling settings you can set the time of day to disable the internet. ie dinner time and/or 10pm. And the time of day to enable the internet, ie 7am. You can also select different options by day so you can turn off the internet all day on Sunday. Please leave the router configuration page open until we use it on page 14 of this guide.

Now we start to configure **OpenDNS**



Go to <u>www.opendns.com</u>. OpenDNS was recently purchased by a bigger company, CISCO. CISCO still offers the same product under its CISCO Umbrella brand. Click the "Personal" products area.



PROTECT EVERY DEVICE IN YOUR HOME, INSTANTLY. OPENDNS SETTINGS APPLY TO EVERY DEVICE — laptops, smartphones, tablets, DVRs, game consoles, TVs, literally anything

FYI: DNS = domain naming system/service

all browsing for webpages are routed thru a DNS server everyone's ISP provides their router with 2 DNS servers to use OpenDNS replaces the ISP's DNS servers with their own! this allows control and monitoring over what is browsed/viewed

Then choose "OpenDNS HOME VIP". this is their product for both **filtering and accountability**.

Call +1-877-811-2367



Tell us about yourself

| Already have an OpenE | DNS account? Sig | n in O | |
|--|------------------|---------------|-------------|
| New Customers: All fields are required. | | | |
| First Name: | | Last Name: | |
| Company Name: | | Phone Number: | |
| Email: | | Zip: | |
| Country: | Select Country • | | |
| | | | SEE PRICING |

Next, you will need to create an account and setup a yearly payment plan. For Company Name put something like "Home". You may notice that you are asked to create an account both for CISCO Umbrella as well as your OpenDNS dashboard. It is OK to use the same username (email address) and password for both.

| | Your current IP is 68.196.62.201. | (<u>Sign out</u>) |
|--|--|---|
| OpenDNS / dashboard | A OpenDNS.com all Dashboard P Co | |
| A Thanks for choosing OpenDNSI service better for everyone by c | Looking for productive ways to pass the time? Plea ontributing your votes on <u>Domain Tagging</u> . It's e | se join our active community to help make the OpenDNS asy and all it takes is a few clicks — <u>start today!</u> |
| Welcome, | | Global System Status: Online |
| Personal networks | ≫ [⊄] Stats & Log No networks have | s John Settings stats. 0 networks (<u>Add network</u>) |
| Manage this organization 💌 Plan: OpenDNS VIP | Here Stats & Log No networks have | S Settings stats. 0 networks (<u>Add network</u>) |
| Alert: This organization has n | o networks assigned to it. <u>Add a network</u> to t | ake advantage of your paid subscription features! |
| OpenDNS Blog Automating Umbrella U by Dima Kumets (April 3 As a product manager, co | Ising Kaseva 10, 2014) Inferences are incredible opportunities to talk to cu | Share OpenDNS New! Spread the word about OpenDNS: Twitter stomers Facebook |
| Support: Knowledge | Base CacheCheck System Status Forun | <u>ms</u> News & Notes: <u>OpenDNS Blog</u> ඛ |
| The | OpenDNS nameservers are 208.67.222.22 | 22 and 208.67.220.220. |

After your account is created you will be brought to your Dashboard screen. Write down the IP addresses for the OpenDNS servers listed at the bottom of the screen. 208.67.222.222 and 208.67.220.220.

| NETGEA WNR1000v3 | r genie | Logout Firmware Version V1.0.2.62_60.0.87NA |
|---------------------|--|---|
| BASIC | ADVANCED | Auto |
| Home | Internet Setup | |
| Internet | Apply N X Canc | el Test 🕨 |
| Wireless | •) | |
| Attached Devices | Does your Internet connection require a login? | |
| Parental Controls | V Yes | |
| Guest Network | | |
| Guest Network | Gateway IP Address | 68 .196 .48 .1 |
| | Domain Name Server (DNS) Address | |
| | O Get Automatically from ISP | |
| | Use These DNS Servers | |
| | Primary DNS | 208 . 67 . 222 . 222 |
| | Secondary DNS | 208 . 67 . 222 . 220 |
| | Router MAC Address | |
| | Use Default Address | |
| | O Use Computer MAC Address | |
| | O Use This MAC Address | C4:04:15:3B:53:13 |
| | 🕐 Help Center | Show/Hide Help Cente |
| | | |
| | | |
| Help & Support | Documentation Online Surport Router FAO | SEARCH HELP Enter Search Item |

Back on your router configuration website find the page where you setup your internet connection and DNS. Select the option to use your own DNS servers. Enter the two OpenDNS server IP addresses that you wrote down. Hit apply. Your router may report it needs to restart.

*The changes we are making here, on your router, protect any device connecting to the internet thru you home wifi or ethernet wires. (note: this does not include devices which can use alternately cellular data (cellular 3G/4G is an outside network).

| | Your current IP is 68.19 | 6.62.201. | (Sign out) |
|---|--|---|--|
| nDNS dashboard | + OpenDNS.com | nl: Dashboard 🗩 Community | |
| | HOME | SETTINGS MY ACCOUNT | SUPPORT TELL A FRIEND |
| A Thanks for choosing OpenDNS! I service better for everyone by c | Looking for productive wa ontributing your votes on | ys to pass the time? Please join our ac Domain Tagging. It's easy and all it | tive community to help make the OpenDNS takes is a few clicks — start today! |
| | | | |
| Welcome, | | | Global System Status: Online |
| Personal networks | | | 🤌 Settings |
| | | No networks have stats. | 0 networks (<u>Add network</u>) |
| | | ⊯ Stats & Logs | Settings |
| Manage this organization ¥ Plan: OpenONS VIP | | No networks have stats. | 0 networks (<u>Add network</u>) |
| Alert: This organization has n | o networks assigned to | it. <u>Add a network</u> to take advanta | ge of your paid subscription features! |
| | | | 01 |
| Automating Umbrella U | sing Kaseya | | New! Spread the word about OpenDNS: |
| by Dima Kumets (April 3 As a product manager, co | 0, 2014) nferences are incredible o | pportunities to talk to customers | C Twitter |
| and partners face-to-face. | This year's | | in LinkedIn |
| | | | |

Next we need to configure your dashboard. Click "Add network" under your organization. Also, it would be good to write down and save your network's IP address (the internet address given to your router by your ISP) displayed on the top of your screen. Here our current IP is 68.196.62.201.



You will be brought to the Settings tab. Add your network to your organization. Here we add our network to the Home organization.



You will see a pop up screen asking to give this network a name. Using something like "Home" again will work. Keep "Yes it is dynamic" checked. And we will cover the OpenDNS Updater software later in slide 22.

| | Your current IP | 15 08.190.02.201. | (<u>Si</u> | |
|--|---|--|-------------|--|
| | 🛧 OpenDNS. | com 🕕 Dashboard 🗩 Community | | |
| OnenDNS (doct | board | • | | |
| | HOME | STATS SETTINGS MY ACCOUNT SUPPORT TELL & FRIEND | | |
| | - Home | | | |
| Settings for: home | e (68.196.62.201) | ✓ Add/manage networks | | |
| | | | | |
| Web Content Filtering | Web Content Filteri | ng | | |
| Security | | | | |
| Customization | Choose your filterin | g level | | |
| Stats and Logs | | | | |
| Advanced Settings | Whitelist Only Enabling this feature will block all websites except those listed below under your "Never block" individual domains. | | | |
| Users can contact you | High | Protects against all adult-related sites, illegal activity, social | | |
| four users can contact you | 0 | networking sites, video sharing sites, and general time-wasters. | | |
| directly from the block page if | | 26 categories in this group - View - Customize | | |
| up as an email in your inbox. | ○ Moderate | Protects against all adult-related sites and illegal activity. | | |
| | 0 | 13 categories in this group - View - Customize | | |
| Note about DNS forwarding | | Protects against nornography | | |
| If you are forwarding requests | | Protects against pornography. | | |
| to OpenDNS, domain blocking 4 categories in this group - <u>View</u> - <u>Customize</u> may not work properly if the domain's address is in your None Nothing blocked. | | | | |
| | | | | |
| orwarder's cache. | ○ Custom | Choose the categories you want to block. | | |
| Check a domain | | | | |
| Find out whether it would be | APPLY | | | |
| olocked, and why. | | | | |
| Support Articles | | | | |

If there are domains you want to make sure are always blocked (or always allowed)

regardless of the categories blocked above, you can add them below.

You will be taken to the screen where you can set your filtering level to High or Moderate. Also, you can set whitelisted (never blocked websites) and blacklisted (always blocked websites, like hulu, netflix, youtube and facebook). Click 'Apply', wait 3 minutes for the settings to become active. Test your filtering by going to sites you want to be blocked.

Manage individual domains

Always block 🗸

ADD DOMAIN

| | Your current IP is 68.196.62.201. | (<u>Sign ov</u> |
|---|--|---|
| OpenDNS dashboard | HOME STATS SETTINGS MY ACCOUNT S | UPPORT TELL A FRIEND |
| Settings for: hom | ne (68.196.62.201) | Add/manage networks |
| Web Content Filtering Security Customization Stats and Logs Advanced Settings | Stats and Logs PenDNS gives you the choice to turn on (or off) data we will stop logging your DNS lookups on a go-forward this choice: there will be no data from that point forward APPLY Purge DNS data This button simply deletes all the DNS data we have for this it as a way of resetting your stats to zero. PURGE MY DATA! | e collection. If you disable this feature, d basis. Your charts and stats will reflect ard. |
| Support: <u>Kn</u> | owledge Base CacheCheck System Status Forums News & Connect: S in S The OpenDNS nameservers are 208,67,222,222 and 208.67.2 | Notes: <u>OpenDNS Blog</u> D |

Under the 'Stats and Logs' section of the settings, check the box to 'Enable stats and logs' and click 'Apply'.

| | | Your current IP in 196.62.201. | | (<u>Sign out</u>) | | |
|----|----------------|---|-----------------|---------------------|--|--|
| | | 🚓 OpenDNS.ci n 🗩 illi Dashboard 🗇 Community | | | | |
| Up | enD | | TELL & ERIEND | | | |
| | | | | | | |
| | Dom | ains | | | | |
| | Domair | ns V for home (68.196.62.201) V from 2014-04-29 to 2014-05-06 | or choose a sir | ngle day Apply | | |
| | Filter: | View only requests that were blocked | | | | |
| | RANK | DOMAIN | REASON | REQUESTS | | |
| | 1 | www.guns.com | Weapons | 5 | | |
| | | This domain is categorized as Weapons, which you blocked. You can <u>make an exception for this</u> <u>domain</u> or <u>unblock this entire category</u> . | | | | |
| | 2 | ib.adnxs.com | Adware | 2 | | |
| | 3 | www | Lewd | 1 | | |
| | | Support: Knowledge Base CacheCheck System Status Forums News & Notes: Or | penDNS Blog | | | |
| | Connect: 📴 🖬 🛃 | | | | | |
| | | The OpenDNS nameservers are 208.67.222.222 and 208.67.220.220. | | | | |
| | | | | | | |

Now, under the 'Stats' tab you will be able to view a wide range of information regarding what web sites were visited, or were attempted to be visited, via your router. These lists have a delay, it may take a day for all recent activity to appear. It is suggested to scan through your families activity, or blocked activity, every week or so.

Get to know this Control Panel so you are comfortable changing **filter settings** and so you are able to easily view/filter **accountability data** (websites that were browsed for).

Almost everything is done now.

| One final thing: | | | | |
|-------------------------|--------------------------|----------------|--|--|
| | U OpenDNS Updater v2.2.1 | - u x | | |
| | OpenDNS account | | | |
| | | Change account | | |
| | - Network to update | | | |
| | home | Change network | | |
| | - IP address | | | |
| | Using OpenDNS? | | | |
| | Yes | | | |
| | Last updated | | | |
| | Less than a minute ago. | Update now | | |
| | About this program | Settings | | |

Sometimes your ISP may change your network's IP address (the address we previously saw at the top of the dashboard, 68.196.62.201). This is the network you added to your organization). If your ISP changes this, OpenDNS will no longer be monitoring the correct network. A piece of software will watch for this and automatically change the network under your organization if this does happen. Install this "OpenDNS-Updater" software on your most often used computer.



Near the bottom of the main 'Settings' window click the option to download the OpenDNS-Updater. Installing this is an important step. Download and save the installer to a folder location you know.



Navigate to where you saved the OpenDNS-Updater installer and double-click it to start the installation. When complete enter in your OpenDNS account information to connect it to your account/network (this may have been automatically done already). After this you can just leave this small program, it runs in the background and automatically starts on reboot.



OpenDNS setup is COMPLETE!