

# ANTAMEDIA BANDWIDTH MANAGER







# **Bandwidth Manager**

Antamedia Bandwidth Manager is a Windows PC gateway software which helps you control and limit Internet usage, including download and upload rate, for every computer in your network. Computers can be limited with specified time and quota per session, day time when access is allowed and set to logout after inactivity. Software includes statistics and reporting with many useful features.



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## **1** Introduction

## **1.1** What is Antamedia Bandwidth Manager?

Antamedia Bandwidth Manager is a Windows PC gateway software which helps you control and limit Internet usage, including download and upload rate, for every computer in your network. Computers can be limited with specified time and quota per session, day time when access is allowed and set to logout after inactivity. Our bandwidth shaper is suitable for various purposes: - Home or neighborhood Internet sharing, user connection limitation, blocking child sensitive URLs

based on keywords - Company Internet sharing, limitation, tracking what employees are visiting, and blocking sensitive content, desired non-work related websites etc.

- Internet and game cafes where every computer can have different download and upload rates. No additional Client software installations are required

Bandwidth Manager doesn't require any proprietary hardware so you can use any standard PC with two network cards. It's hardware independent and you can use any type of Access Points, Routers, Switches and other equipment. You can use it with WiFi, WiMax, LAN, Cable, DSL, Satellite and other type of network connections. Software includes statistics and reporting with many useful features.

## **1.2** How Can It Help You ?

#### **Bandwidth Manager Benefits**

Antamedia Bandwidth Manager has advanced architecture which allows both, simple and very large networks. You can install it on one computer and start controlling computers from your network. As your network grows, you do not need to change anything. Everything is routed through the same computer which saves deployment time and maintenance. With use of Bandwidth Manager software you can control computer Internet access based on MAC, IP address or both, limit bandwidth quota, daily bandwidth quota, upload and download speed, usage time, daily usage time etc.

#### Defined Internet Access for Known and Unknown Users

If you offer Internet access to walk-in customers (unknown users), Bandwidth Manager helps you configure separate limitations for such users. By enabling Autologin, you can allow access for unknown computers on the network, with separate connection parameters. Advantage of our solution is very high customization of User accounts which allows creating limited or unlimited accounts. Among classic features like time and bandwidth quota limits, you can configure daily time limit, number of daily logins, number of simultaneous logins with aggregation which is very practical when offering free WiFi Internet. In addition, it's very easy to offer paid Internet access with higher speeds, quota or unlimited daily or monthly access.

#### **Control Employee Internet Use**

It is strongly recommended that you produce a company policy on Internet usage, ensuring that within it you include your policy on employee monitoring. That way employees know both what they can and cannot do and what you may be doing to observe them. Bandwidth Manager software have incorporated monitoring within actual control of what can be accessed. Software does not trap or record emails since they has raised more technical legal issues than accessing networks or websites.



Instead it simply records what computer and user accessed, what website, as that removes any challenge on the basis of "intercepting private communication". From software you will be able to block access to sites and achieve the basic aim, which is reducing the time and bandwidth wasted on "web surfing". Beside blocked access to sites, you can go further and set banned keywords within URLs, for example automatically blocking any website with "sex" or "porn" in the URL. Rather than presenting your employees with a blank screen, you

can also set Bandwidth Manager to auto-redirect certain URLS to more work friendly sites. Alternatively you can display your Internet usage policy as a blunt reminder, or perhaps a request form, so if necessary the user can ask for an exception for that specific site.

#### Offer WiFi Services in Your Hotel, Coffee Shop, Restaurant

Offering high-speed wireless Internet services in one hotel will only help you increase occupancy and improve tenant and guest satisfaction. Furthermore, it will also represent additional source of revenue for your business. With the use of Antamedia Bandwidth Manager software in your WiFi Hotel, you will be able to:

- control and monitor access to the Internet for all computers, both wired and wireless in your guest rooms

- provide reliable wireless Internet access in your restaurant, lobby and conference rooms, which makes it ideal for seminars and meetings

- maintain secure access to the Internet resources outside the hotel, like on golf courses or by the hotel pools.

#### Serve Walk-in Laptop Customers in Your Cyber Cafe

If you run an Internet Cafe or Gaming Center, a great profit booster can be a wireless network. Many people use their own laptop for everyday job or on vacation to stay in touch with family and friends. Even in non-working hours of your primary business, your customers will be able to use your services and generate profit. Best of all, it's automated, there are no maintenance fee for computers, licenses for software and OS.

#### **Can Be Used in Various Locations**

Flexible architecture makes it suitable for different locations like Internet Cafe, Cyber Cafe, Resorts, Hotels, Motels, enterprises that provide Internet access to guests, Hospitals, Universities, Schools or other education institutions, Coffee Shops, Shopping Molls.



## 2 Requirements

In order to control wireless users, Bandwidth Manager software has to be set up on a gateway computer in your network. For minimal configuration you need 3 devices:

- Bandwidth Manager gateway PC
- Internet modem/router
- Wi-Fi device for providing access to users (Wi-Fi router or access point)

System requirements for Bandwidth Manager gateway PC:

We strongly encourage you to install Bandwidth Manager on SSD drive because it can significantly improve software performance.

CPU: 2 gigahertz (GHz) or faster 64-bit (x64) processor

**RAM**: 4 gigabyte (GB)

**NIC**: 2 network interface cards, for maximum performance we recommend using Intel PRO/1000 (EXPI9400PTBLK) network adapters

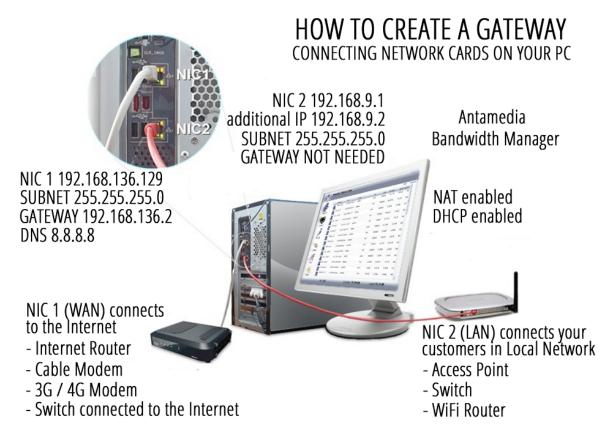
**OS**: Windows Server 2003, Server 2008, Server 2012, Sever 2016, XP, Vista, Windows 7, Windows 8.1, Windows 10

Most modern computers have one network card built in, the other one you will need to purchase and install to computer's PCI slot.



Please connect one network card to the Internet router and other one to Wi-Fi device that your customers will use to access Bandwidth Manager. If you plan to use a Wi-Fi router to provide access for customers, please connect it to server PC using LAN (not WAN) port.





Note that 2 network cards on the Bandwidth Manager server cannot be bridged, the Internal network has to operate in different IP range than External network. Please refer to the diagrams for the example IP settings.

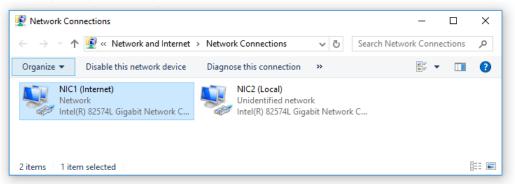


## 2.1 Network Adapters Setup

Here are detailed step by step instructions how to set gateway computer network adapters to work with Bandwidth Manager NAT and support use of DNS WEB FILTER:

✓ **Static IP addresses** for network connection used for to the Internet router/modem.

- It is recommended to set same IP address that is already assigned dynamically by router.
- To see which IP NIC1 has currently assigned, go to Windows Control Panel Network and Sharing Center screen
- Click on Change adapter settings link and double click on the NIC (Internet) network adapter



• From General tab press on Details button.

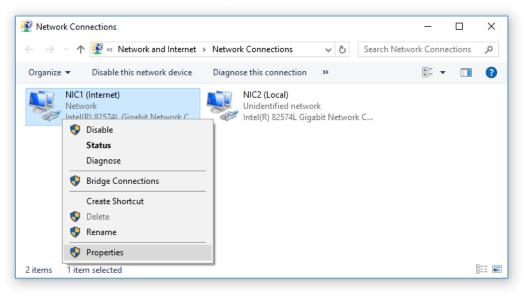
🔋 NIC1 (Internet)	Status		×
General			
Connection			-
IPv4 Connectiv	/ity:	Internet	
IPv6 Connectiv	/ity:	No network access	
Media State:		Enabled	
Duration:		02:34:52	
Speed:		1.0 Gbps	
Details	]		
Activity			-
	Sent —	Received	
Bytes:	259,572	1,049,533	
Properties	Disable	Diagnose	
		Close	



• Here you will see all current network connection details that you need to set as static

Network Connection Details $ imes$		
Network Connection Details:		
Property	Value	
Connection-specific DN		
Description	Intel(R) 82574L Gigabit Network Connect	
Physical Address	00-0C-29-68-7E-AF	
DHCP Enabled	No	
IPv4 Address	192.168.136.129	
IPv4 Subnet Mask	255.255.255.0	
IPv4 Default Gateway	192.168.136.2	
IPv4 DNS Servers	8.8.8.8	
	8.8.4.4	
IPv4 WINS Server		
NetBIOS over Tcpip En	Yes	
Link-local IPv6 Address	fe80::6853:2b35:a975:acd3%5	
IPv6 Default Gateway		
IPv6 DNS Server		
<	>	
	Close	
	Close	

- After that go to Windows Control Panel Network and Sharing Center screen.
- Click on Change adapter settings link.
- Right-click on NIC1 (Internet) and select Properties from menu.





• Select Internet Protocol Version 4 (TCP/IPv4) and click Properties button.

III NIC1 (Internet) Properties	×
Networking Sharing	
Connect using:	
Intel(R) 82574L Gigabit Network Connection	
Configure	
This connection uses the following items:	
Install Uninstall Properties	
Description Transmission Control Protocol/Internet Protocol. The default wide area network protocol that provides communication across diverse interconnected networks. OK Cancel	

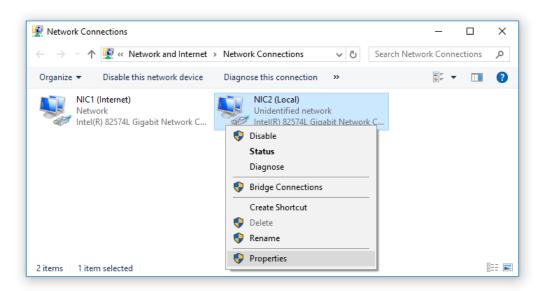
• Click Use the following IP address radio button and enter details that you get from ipconfig previously

Internet Protocol Version 4 (TCP/IPv4) Properties					
Internet Protocol Version 4 (TCP/IPv4) Properties					
General					
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.					
Obtain an IP address automatical	у				
• Use the following IP address:					
IP address:	192 . 168 . 136 . 129				
Subnet mask: 255 . 255 . 255 . 0					
Default gateway:	192.168.136.2				
Obtain DNS server address autom	natically				
• Use the following DNS server addresses:					
Preferred DNS server:	8.8.8.8				
Alternate DNS server:	8.8.4.4				
Validate settings upon exit	Advanced				
	OK Cancel				

- Enter IP address (e.g. 192.168.136.129), Subnet mask same as in Network Connection Details
- IP address of the default gateway (IP of the Internet router)



- Enter DNS addresses such as Google (8.8.8.8, 8.8.4.4)**Static IP address** is should be set for **NIC2**, the network card used for communication with the client computers.
- To set static IP address for NIC2, go to Windows Control Panel Network and Sharing Center screen
- Click on Change adapter settings link and make right-click on NIC2 (Local) and select Properties from menu.



• Select Internet Protocol Version 4 (TCP/IPv4) and click Properties button.

NIC2 (Local) Properties	Х		
Networking Sharing			
Connect using:			
Intel(R) 82574L Gigabit Network Connection #2			
Configure			
This connection uses the following items:			
Client for Microsoft Networks	^		
File and Printer Sharing for Microsoft Networks			
🗹 🏪 Antamedia HotSpot LightWeight Filter			
QoS Packet Scheduler			
Internet Protocol Version 4 (TCP/IPv4)			
Microsoft Network Adapter Multiplexor Protocol     Microsoft LLDP Protocol Driver			
	Ť		
Install Uninstall Properties			
Description			
Transmission Control Protocol/Internet Protocol. The default wide area network protocol that provides communication across diverse interconnected networks.			
OK Cance	el		



• Click on Use the following IP address and set IP address (e.g. 192.168.9.1) and Subnet mask (e.g. 255.255.255.0) but not Gateway IP. Then press on Advanced ...

Internet Protocol Version 4 (TCP/IPv4) Properties				
General				
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.				
Obtain an IP address automatical	у			
• Use the following IP address:				
IP address:	192.168.9.1			
Subnet mask: 255 . 255 . 255 . 0				
Default gateway:				
Obtain DNS server address automatically				
Use the following DNS server addresses:				
Preferred DNS server:				
Alternate DNS server:				
Validate settings upon exit Advanced				
	OK Cancel	]		

• From Advanced tab press on Add.. and add virtual IP address needed for DNS WEB Filter. Be sure that it is in same IP range with IP address and with same Subnet Mask (e.g. 192.168.9.2) and Subnet mask (e.g. 255.255.255.0)

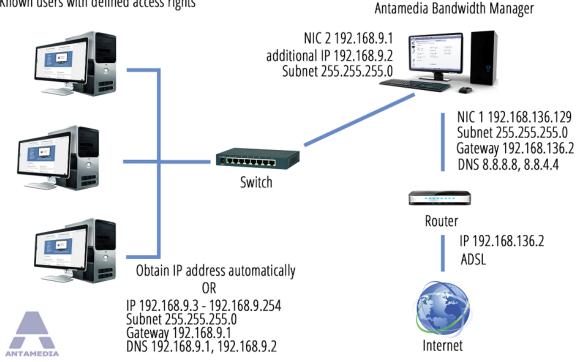
Advanced	TCP/IP Se	ettings		×
IP Setting	s DNS	WINS		
IP add	Iresses			
IP a	address		Subnet mask	
192	2.168.9.1		255.255.255.0	
		Add	Edit	Remove
Defa	TCP/IP Ad	ldress		×
Ga	IP address	: 19	2.168.9.2	
	Subnet ma	isk: 25	5.255.255.0	
			Add	Cancel
Au	tomatic me	tric		
Inter	face metric:			
			OK	Cancel



#### **Network Topology Examples\_2** 2.2

Here you can see couple network topology examples that can give you better insight into how you should set switches, access points and routers on local network in order to control it from Bandwidth Manager gateway PC.

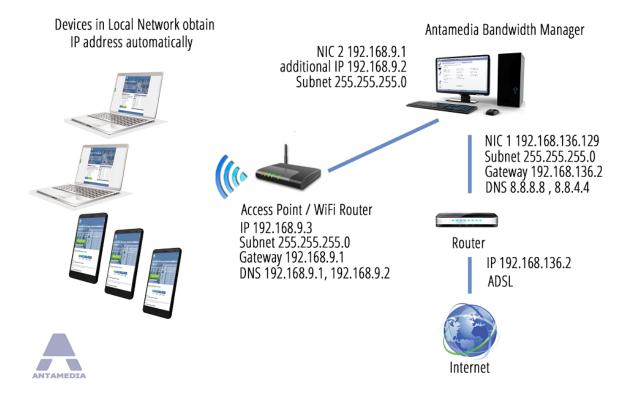
#### NETWORK TOPOLOGY EXAMPLE FOR DNS WEB FILTER SETUP



Known users with defined access rights

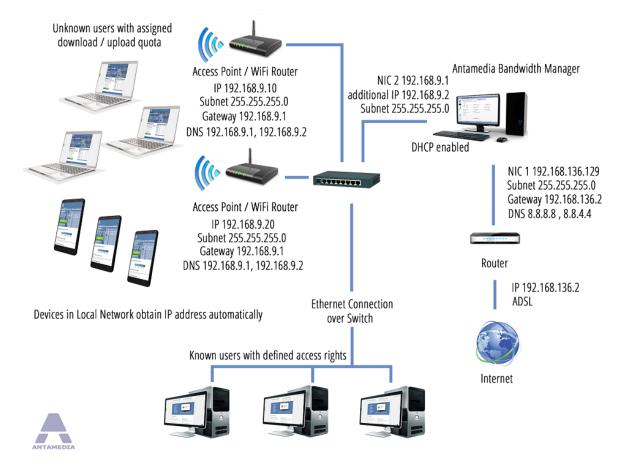


#### NETWORK TOPOLOGY EXAMPLE FOR DNS WEB FILTER SETUP





#### NETWORK TOPOLOGY EXAMPLE FOR DNS WEB FILTER SETUP





**Bandwidth Manager Setup** 

## **3** Bandwidth Manager Setup

## 3.1 Pre-installation Steps

Before installing Antamedia Bandwidth Manager software, please ensure that following conditions are met:

✓ Windows account on which software will be installed and used must has **administrative** privileges.

✓ Windows **User Account Control** is set to Never Notify level.

- Go to Windows Control Panel User Accounts screen
- Click on Change User Account Control settings link
- Move the slider to Never Notify level and click OK
- Restart the computer to apply changes
- ✓ Windows Smart Screen is turned off.
- Go to Windows Control Panel Security and Maintenance screen.
- Click on Change Windows Smart Screen settings
- In new window select "Don't do anything (turn off Windows Smart Screen)" and press on OK
- Restart the computer to apply changes

#### ✓ Windows **Defender exclusions** are set.

- Go to Windows Control Panel Windows Defender and click on Settings.
- Exclusion section press on "Add an exclusion" to exclude C:\Antamedia folder.
- Restart the computer to apply changes
- ✓ Microsoft Security Essentials should not block it (Windows 7):.
- Go to Windows Control Panel and start Microsoft Security Essentials click on Settings.
- From "Excluded files and locations" panel press on browse and select C:\Antamedia folder.
- Press on Add and Save changes button
- ✓ Antamedia Bandwidth Manager software can be used to set computer as gateway using Bandwidth Manager NAT.

Beside that, computer may be set as gateway using Windows Connection Sharing and Windows Routing and remote access. For additional information's about the Windows configuration and setup be free to consult our technical support.

✓ There are no applications running on gateway PC that are using port 78, 80, 81, 82, 443, 463, 614, 12010, 1700, 1812, 1813 (IIS, proxy software).



Bandwidth Manager Setup

## **3.2 Software Installation**

Once when pre-installations steps are done you can proceed with Bandwidth Manager software installation. As soon you start Bandwidth Manager software installer on computer you will get notification "**Reboot Required**"

Antamedia Bandwidth Manager V4	X	
Preparing to install		
>>>> Reboot Required <<<<		
Installer has updated your system. To proceed:		
1. Please click the Reboot button		
<ol><li>Set C:\Antamedia not to be scanned by Antivirus as some incorrectly blocks our software. We guarantee it's clean</li></ol>		
3. Run Installer again and complete installation		
Reboot		

After that start Bandwidth Manager installer if it is not started automatically. Select "**I accept terms** in the license agreement" and press on Next

ement between you ensor. By installing, se to be bound by the terms of this tall, copy or otherwise use neans the person, he Licensee must accept
he Licensee must accept
<ul> <li>License in the form of a ticensee and will d the type of license(s)</li> </ul>
er programs of the d to Licensee, together Documentation" means nd "online"), if any,
Next
ut le



New window will give you option to choose between **Express Install**, **Custom Install** or **Uninstall**. We recommend you to select **Express Install** and press on **Next**.

Antamedia Bandwidth Manage	r V4
Please choose type of installation	
Express Installation (Recommended) Install software in default paths	Next
Custom Installation Let me choose what and where to install	Next
<b>Uninstall</b> Uninstall Antamedia Bandwidth Manager and Database Server	Next

During **Bandwidth Manager installation** process you will be informed about current installation of required drivers, Database Server and creating of required files. **Reboot** is required when process in completed.

Antamedia Bandwidth Manager V4	×
Completing installation	
Installation log	
Installing Installing driver Bandwidth Manager access granted in the Windows Firewall	
Antamedia Bandwidth Manager has been installed to: C:\Antamedia\Bandwidth Manager\	
Configuring database	
Antamedia Database Server has been installed to: C:\Antamedia\DBServer\ Please reboot	
Reboot	
	-



Bandwidth Manager Setup

### 3.3 Setup Wizard

After reboot login on Bandwidth Manager. As soon it is started you will get Setup Wizard that will guide you through basic setup.

1	Setup Wizard	X
	Please spend a minute to quickly configure most important options through this wizard	
	No thanks, do not show wizard again	
	Let's start !	

If you select :No thanks, do not show wizard again" and press on Close button, you will need to go to **Setup - Network** tab and to set manually network adapters and autostart. Then press on **Save** and **Start** button.

ANTAMEDIA	Bandwidth	Manager is read	iy.				a a a a a a a a a a a a a a a a a a a
	API Network	License Database	Options	Whitelists	URL Tracking	IP/Port Filtering	Service
DEVICES				teway in your net ctivate Bandwidth Managemen			Bandwidth Manager V4.
USERS			Bandwidth Manag	ger	Your Networ	Maximur 3	
DNS WEB FILTER	Internet	Connected to the Int Network Interface 1 Internet 192.168.136.129 Enable NAT (Internet	~	Connected to your netwo Network Interface 2 Local 192.168.9.1	ork	200 DNS Red 8.8.8.8 Redirect	Sec
			Start	Stop		PDF	Need Help ? Learn how to configure in Setup Guide
		Users 0		Download 0	КВ	Upload <b>0</b>	КВ



If you click on **Lets Start !** button, you will get ability to set upload and download limit for the accounts. Press Next to continue.

1	Setup Wizard	X
STEP		ad and upload rate, maximum bandwidth . Values can be changed later
±.,	Download 512 \$ Kb (Kbits) *	Quota <b>500.00</b> MB · Unlimited quota
	Upload 256  \$ Kb (Kbits)	Time
		Next

From new window you get instructions what are computer requirements and how to set i as gateway on network. Press Next to continue.

/	Setup Wizard	×
step 2	Your computer running Bandwidth Manager should have two network cards. Please configure network interfaces.	
	Enable autostart and configure inactivity logout to disconnect inactive devices. If you need help with configuration, please go to www.antamedia.com and contact our staff.	
	Back Next	



This windows show information about selected network interfaces. Press Next to continue.

/	Setup Wizard	_		-		×
STEP	Configure conn	ection paran	neters for com	puters in	your network.	
2	Bandwidth Manager		Your Network	Configure	e DHCP server as	
3	IP:	192, 168, 9, 1		IP from:	192, 168, 9, 2	
	DNS:	8.8.8.8		To:	192.168.9.254	
				DNS:	8.8.8.8	
				Gateway:	192.168.9.1	
				Modify it t	o extend range as you need	·
	Back		Next			

Last window give Final notes regarding setup of Bandwidth Manager software. Press on Close Wizard to stop it.

1	Setup Wizard	×
	Final Notes	
	Bandwidth Manager is a gateway software - there are no dient side installations. It doesn't show traffic per application - instead it focuses and provides very flexible control of bandwidth and time used by user devices like mobile phones, desktops, laptops, tablets etc. You can configure download and upload rate per user computer, bandwidth quota and time available, expiration date, maximum number of logins, pause between logins, with additional daily limits of quota, time and number of sessions. Example scenarios:	
	- Limit employees access in your company	
	<ul> <li>Configure download and upload for each device in the network that tries to access Internet</li> <li>Block URL keywords inapropriate for children and access to websites will result with RESTRICTED page</li> </ul>	
	<ul> <li>Companies can monitor websites that employees visit in working hours Thank you for using our software.</li> </ul>	
	Back Close Wizard	



Bandwidth Manager Setup

Be sure that network connections are properly selected from Network and press on **Start** 

	Bandwidth Ma	anager is ready.					
DEVICES	API Network	License Database	Options	Whitelists	URL Tracking	IP/Port Filtering	Service
		etup this compu	nd press Start to activate				Bandwidth Manager V4.
USERS		В	andwidth Manager		Your Network	3	
DNS WEB FILTER		onnected to the Intern etwork Interface 1 Iternet 12. 168. 136. 129 Deable NAT (Internet Sho	V Netw Local	nected to your networ work Interface 2	1	DNS Red 8.8.8.8 Redirect	Sec
SETUP		5	Start	Stop		PDE	Need Help ? Learn how to configure in Setup Guide
_		Users 0		Download 0	(B	Upload <b>0</b>	КВ



After that go to **DNS WEB FILTER** panel. From**Blacklist** tab select desired **Category** and press on **Save & Activate** button.

Here is required to set your Virtual IP address (e.g. **192.168.9.2**) then **Enable** and **Start** it.

	Bandwidth Manager is re	eady.	
6	DNS Blacklists	Whitelist Restricted Page	
Solution of the	Categories	Search for URL	
DEVICES	abortion	Search Download Updates	
	ads		
	adult	Search in all categories	
	aggressive alcohol	Total: 789	
ALL AND A REAL	alconor	URL	
USERS	🗌 arjel	1stchoice.org	
	<ul> <li>artnudes</li> <li>associations religieuses</li> </ul>	aaacpc.com	
	associations_religiouses     astrology	aaacpc.org	
	audio-video	aaalifeservices.com	
	bank	aaapregnancyclinic.com	
	banking beerliguorinfo	aaawomen.org	
STATISTICS	beerliguorsale	aacpc.org	
	bitcoin	aalc1.tripod.com	
	blog books	aapcc-pa.org	
	catalogue-biu-toulouse	aastrawomenscenter.com	
DNS WEB FILTER	celebrity	ababysbreath.org	
	cellphones chat	abbapregnancy.org	
		abbapregnancychoice.org	
	childcare	abbapregnancyhelp.org	
	cleaning	abeaconofhope.com	
	clothing contraception	abortbypill.com	
SETUP		abortion-and-bible.com	
	culinary		
$\square$	dating ddos	Add URL to Whitelist Save & Activate	
		•	
LOGOUT			
	Users 0	Download O KB Upload O KB	
	USEIS U		



Bandwidth Manager Setup

Then go to **DNS** tab and set your Virtual IP address (e.g. **192.168.9.2**) then **Enable DNS Web Filter** and **Start** it.

				a X
ANTAMEDIA				
	DNS Blacklists	Whitelist Restricted Page		
E	DNS Web Filter		la	
DEVICES				
	Integrated DNS server uses blacki similar websites that decreases pro	sts to filter HTTP and HTTPS traffic. Use it to block a ductivity. Over 100 bladdist categories helps you to	dult websites, gambling or alcohol, or prevent acce fine tune Web Filter to your needs.	ss to social networks and
USERS	Virtual IP on LAN NIC	DNS Port	Please select where to redirect block	ked websites
	192.168.9.2	53	<ul> <li>Redirect to Restricted Page</li> </ul>	
	This is virtual IP address configure It is required to enable DNS Web F	d on the LAN NIC. Filter.	Redirect to URL	
STATISTICS			Redirect to IP	
STATISTICS	Source DNS 8.8.8.8	Exclude IP or IP Range 1.0.0.0-1.1.1.1		
	8.8.4.4	1.0.0.0-1.1.1.1		
DNS WEB FILTER				
		START / STOP		DNS Web Filter quick setup Watch Video
SETUP		DNS server is running		
LOGOUT			PDE- T	Need Help ? Learn how to configure in Setup Guide
_	Users <b>0</b>	Download	d <b>O KB</b> Upload (	D KB



**Devices Panel** 

## **4** Devices Panel

As soon as computer connects to your Access Point (or switch in case of wired connection) and type any web URL address, computer will access to Bandwidth Manager network based on the software configuration.

Computers that have account configured in software will be controlled based on **User** settings, while computers without an account will be controlled based on settings configured on **Users - Autologin** page.

Main screen shows the most important details of connected computers: IP and MAC address, time, quota, download and upload rate and inactivity timeout. Bottom status line shows number of connected computers as users and current total download and upload rate represented in KB/sec, and these values are continuously updated. On top status bar software displays important messages, like users login and logout, so you can always see what's happening on your Bandwidth Manager.

	Computer 192.168	.9.3 auto logged in				-	ē
	IP	MAC	Time	Quota	Download	Upload	Inactivity ^
-	192.168.9.10	00-0C-29-31-8B-C8	Unlimited	Unlimited	1764 KB	37 KB	200
DEVICES	192.168.9.3	00-0C-29-72-07-45	Unlimited	Unlimited	218 KB	15 KB	200
USERS							**
STATISTICS							
SETUP							
LOGOUT	Create User	Stop Device	Add to Whitelist		S	et Download / Uplo	→ ad Speed
	Users	2	Download 1	1981 KB	Uplo	ad 52 KB	



From the main screen represented on picture below, you can choose one of the options:

CONNECTIONS	Displays (logged in) computers and their current status
USERS	Network interface which connects Bandwidth Manager to your client network
STATISTICS	Contains log, statistics and reports, visited URLs and connection log showing who
	is trying to login in your network
<b>DNS WEB FILTER</b>	Integrated DNS server uses blacklists to filter HTTP and HTTPS traffic.
SETUP	Administrator configuration options
LOGOUT	Lock Bandwidth Manager software to prevent unauthorized activity. Bandwidth
	Manager continues traffic control after employee or administrator logout.

From the main screen you can automatically **Create User** based on current Autologin session, **Stop Device**, **Add to Whitelist** or **Set Download / Upload Speed** for active session.

If you prefer smaller computer icons, you can switch to compact view and display more computers on screen. Option is located in Bandwidth Manager - Setup - Options - Options page.

Inactivity field is showing remaining time until automatic logout. Inactivity is optional for every account and default number of seconds can be specified in Bandwidth Manager - Network page.



## 5.1 Users Configuration

Configure login parameters for known **Users** on your network from Bandwidth Manager Users panel. To define User configure IP address, MAC, or both.

IP address	Specify user computer IP address that will be used for login.
MAC	Specify user computer MAC address that will be used for login.
Download	Set maximum download speed that computer can download from the Internet. Download speed is represented in: KBytes, Kbits, MBytes or Mbits
Upload	Set maximum upload speed that computer can upload to the Internet.
Quota	Set bandwidth quota that computer can download or upload from the Internet. In the right dropdown menu select if quota is represented in: Bytes, KB, MB, GB or TB
Unlimited quota	Unlimited Quota checkbox enabled means that bandwidth quota is not limited for computer.
Time	Limitation how much time computer can spend on the Internet via Bandwidth Manager.
Unlimited time	Unlimited Time checkbox enabled means time that computer time on the Internet is not limited from Bandwidth Manager.
Description	Enter description for this computer.
Allow login in time interval	Tick this option to enable computers autologin only in selected time interval.
Pause between logins	Use it to set time limit between two logins from same computer.
Expire	This option defines user expiration date. Set computer user expiration date in the field or untick option if you want to disable account expiration.
Bandwidth quota daily limit	Specify how much Internet bandwidth computer can use per day. When daily limit exceed, computer will be logged out automatically.
Limit daily time usage	e Specify how much time computer can be loged per day. When daily limit exceed, computer will be logged our automatically. Next day, autologin for computer will be enabled again.
Limit number of daily logins	Specify how many times daily computer can login to Bandwidth Manager.
Inactivity timeout	Use it to enable automatic logout if client do not use Internet bandwidth for specified time period.
Active	With this option you specify does computer user account can be used for access or not.

When you finish configuring login parameters for known user press on **Add User** button to save it and add to Users list.



**Remove User** To remove user from User list, select user and press on **Remove User** button. **Clear & New User** Press on this button to reset setup user computer fields for new configurations.

					N N
ANTAMEDIA					
DEVICES			۔ با know. Each user device		h quota, time, download and upload rates, daily ver download rate, pause between sessions etc).
USERS USERS STATISTICS ONS WEB FLITER	IP 192.168.9.3 192.168.9.4 192.168.9.5 192.168.9.6	MAC C 1A-FD-35-C0-A9-98 M 90-98-A7-65-AF-5A F 71-2F-8A-8D-91-21 E 01-29-3F-AD-9E-92 A	Front desk Back desk	IP Address         192.168.9.6         MAC         01-29-3F-AD-9E-92         Download         512 <>         KB (KBytes) ∨         Upload         512 <>         KB (KBytes) ∨         Quota         S00.00 <>         PIB ∨         ✓ Unlimited quota         Time         2 <>       h       0 <>       min       0 <>       set         ✓ Unlimited time         Description         Accounting	Allow login in time interval 00:00
		Users 0		Download <b>0 KB</b>	Upload <b>O KB</b>



## 5.2 Autologin Configuration

From Bandwidth Manager - Users - Autologin panel you can configure default settings, these will be used when unknown computers connect to the Internet trough the software.

Enable Autologin	Tick this option to enable autologin for unknown computers, otherwise only computers with account will be able to connect.
Download	Set maximum download speed that computer can download from the Internet. Download speed is represented in: KBytes, Kbits, MBytes or Mbits
Upload	Set maximum upload speed that computer can upload to the Internet.
Quota	Set bandwidth quota that computer can download or upload from the Internet. In the right dropdown menu select if quota is represented in: Bytes, KB, MB, GB or TB
Unlimited quota	Unlimited Quota checkbox enabled means that bandwidth quota is not limited for computer.
Time	Limitation how much time computer can spend on the Internet via Bandwidth Manager.
Unlimited time	Unlimited Time checkbox enabled means time that computer time on the Internet is not limited from Bandwidth Manager.
Inactivity timeout	Use it to enable automatic logout if client do not use Internet bandwidth for specified time period.
Allow login in time interval	Tick this option to enable computers autologin only in selected time interval.
Pause between logins	Use it to set time limit between two logins from same computer.
Disable access in days from first login	Use this option to set for how many days from first login user will be possible to access to Internet over Bandwidth Manager.
Bandwidth quota daily limit	Specify how much Internet bandwidth computer can use per day. When daily limit exceed, computer will be logged out automatically.
Limit daily time usage	e Specify how much time computer can be loged per day. When daily limit exceed, computer will be logged our automatically. Next day, autologin for computer will be enabled again.
Limit number of daily logins	Specify how many times daily computer can login to Bandwidth Manager.



	Bandwidth Manager is re	eady.		8
	Users	Autologin	Autologin Sessions	
DEVICES	Please configure autologin paramete (lower speed, less available bandwic	ers for unknown user devices on your ne ath, daily limit). Enable autologin to activ	twork. These are for example ate option, or disable if you o	e guests that should be limited with different access rights nly wish to allow known user devices to access the Internet.
	Enable Autologin  Download	Allow login in tir	ne interval	Bandwidth quota daiy limit
USERS	64 ↓         KB (KBytes) ∨           Upload         32 ↓	00:00 ≎	23:59 🗘	100.00 ≎ MB ✓
STATISTICS	Quota	5 ≎ min	in from first login	0 ≎ h 10 ≎ min
DNS WEB FILTER	✓ Unlimited quota          Time         2 ≎ h       0 ≎ min       0		n on ni strogin	J V Logino
	✓ Unlimited time	_		
SETUP	<ul> <li>Inactivity timeout</li> </ul>			
R		Save		
LOGOUT				
	Users <b>0</b>	C	ownload <b>0 KB</b>	Upload <b>0 KB</b>



## 5.3 Autologin Sessions

From Bandwidth Manager - Users - Autologin Sessions panel you can see a list of all user devices that were automatically logged-in. A user device in this list may access the Internet as long quota, time or some other parameters meet autologin criteria.

Expired user can not access Internet until you delete it from the list or until it's re-enabled automatically using the options bellow.

Delete Selected	Delete selected autologin user from the list.
Delete all	Delete all autologin users from the list.
Re-enable expired user	Specify after how much time expired user will be automatically
after _ days and _ minutes	enabled.

AMEDIA	Joinputer 192	.168.9.3 auto logg	cum		
	Jsers	Autologin		Autologin Sessions	
EVICES	This a a list of all us meet autologin crite	er devices that were automatic erias. Expired user can not acce	ally logged-in. A user ss Internet until you	device in this list may access the Internet a delete it from the list or until it's re-enabled	is long as quota, time and other parameters automatically using the option below.
2.4.	IP	MAC	Time	Quota Last Used	Expires
	192.168.9.3	00-0C-29-72-07-45	Unlimited	Unlimited 11/11/2017 4:22:41 PM	11/14/2017 4:17:39 PM
	192.168.9.10	00-0C-29-31-8B-C8	Unlimited	Unlimited 11/11/2017 4:22:04 PM	11/14/2017 4:22:04 PM
TISTICS					
ETUP					
GOUT	Delete select	ed Delete all		Re-enable expired user after 3	Image: object of the second

## 5.4 Disconnecting From The Internet

Bandwidth Manager user will be disconnected from the Internet automatically when left time or bandwidth quota expires.

If you enable option **Inactivity timeout** from Setup - Network page, session will be automatically closed and user disconnected after specified time period.



## 6 Network Setup

Network Setup page shows the following options:

Network Interface 1	Network interface which connects to your Internet router, modem, 3G-4G modem etc.
Network Interface 2	Network interface which connects Bandwidth Manager to your client network
Autostart HotSpot	Automatically starts Bandwidth Manager control when program starts
Maximum users	Maximum number of users connected at the same time
Inactivity logout	Automatically disconnects a user after specified time of inactivity
DNS Redirector	Redirect devices and computers from local network to Internet based on DNS
Start	Press Start button to activate Bandwidth Manager control
Stop	Press Stop button to deactivate Bandwidth Manager control
Save	Save network settings



The first step in setting up the Bandwidth Manager is sharing Internet connection. This step is required in order to allow all customers in your network to access the Internet.

**Network Setup** 

There are several ways to share the Internet connection. It can be done by:

- Using Antamedia Bandwidth Manager **NAT** (Network Address Translation).
- Using Microsoft Internet Connection Sharing available in Windows operating system
- Using Routing and Remote Access available in Windows Server editions

After you configure Internet sharing, please select **Network Interface** which connects your network to the Bandwidth Manager. On the selected network interface Bandwidth manager will activate portal control. By changing the network interface, **IP address** will be automatically filled in. Please enable **Autostart** and press on the **Save** button to store your settings.

The last option to configure is **DNS redirector.** Please type here one of the DNS addresses specified by your Internet service provider, or any other working DNS server. This option helps in cases when customer has incorrectly configured DNS address. Bandwidth Manager will redirect client to the correct address and DNS query will be resolved.

The last step is clicking on **Start** button for activating Bandwidth Manager engine. From that moment your customers access to Internet is limited and done based on configuration over Bandwidth Manager.

If you have issues with access to Internet from local network, please check pre-installation steps [13]



**DNS Web Filter** 

## 7 DNS Web Filter

## 7.1 DNS Filter Setup

DNS Web Filter use blacklist to filter HTTP and HTTPS Traffic. Beside many already predefined sites in blacklist, you can add manually your own URL's.

From DNS Web Filter - DNS page is required to set following options:

Virtual IP on LAN NIC	This is virtual IP address configured on the LAN NIC. It is required to enable DNS WEB Filter.
DNS port	DNS Port over which filter is working
Source DNS	Source DNS can be predefined with default values 8.8.8.8 and 8.8.4.4
Exclude IP or IP Range	Specify IP or IP range for which filter will be excluded.

	DNS Blacklists Whitelist	Restricted Page	
DEVICES	DNS Web Filter Integrated DNS server uses blacklists to filter HTTP and HTT similar websites that decreases productivity. Over 100 black		
USERS			
USERS	Virtual IP on LAN NIC DNS Port 192.168.9.2 53	Please select	where to redirect blocked websites
	This is virtual IP address configured on the LAN NIC.	Redirect to R	-
CF1	It is required to enable DNS Web Filter.	Redirect to L	
STATISTICS	Source DNS Exclude IP or IP F	Redirect to I	P
	8.8.8.8 8.8.4.4		
DNS WEB FILTER			
SETUP		le DNS Web Filter	DNS Web Filter quick setup Watch Video
	DNS serv	er is running	Need Help ? Learn how to configure in Setup Guide
	Users <b>0</b>	Download <b>0 KB</b>	Upload <b>0 KB</b>



**DNS Web Filter** 

Please select where to redirect blocked website:

<b>Redirect to Restricted</b>	Enabling of this option will redirect user with blocked content to
page	Restricted Page
Redirect to URL	Enabling this option will give you field to specify URL address of web site where user will be redirtected
Redirect to IP	Enabling this option will give you field to specify IP address to which user will be redirtected

To activate it select **Enable DNS Web Filter** and press on **Start/Stop** button.

If you have issues in setup and configuration of **DNS Web Filter** you can **Watch Video** or to get detailed instructions in the PDF **Setup Guide**.



**DNS Web Filter** 

### 7.2 Blacklist

From Blacklist page you will set Categories and sites that will be blocked for your users.

Step 1: Press on **Download Updates** button to get latest blacklist package. Step 2: Select **Categories** that you want to block. Step 3: Press on **Save & Activate** button

In case that some URL should be whitelisted, press on **Add URL to Whitelist Search** filed is useful in case that you need to find site which is blocked by mistake

	Bandwidth Manager is re	eady.	F X
	DNS Blacklists	Whitelist Restricted Page	
DEVICES	Categories	Search for URL Search Download Updates	
214 <sup>2</sup> 91 2	□ ads □ adult	Search in all categories	
VICE MAN	<ul> <li>aggressive</li> <li>alcohol</li> <li>antispyware</li> </ul>	Total: 789	
USERS	arjel	URL A	
STATISTICS STATISTICS DISS WEB FILTER	artnudes associations_religieuses astrology audio-video bank banking beerliquorinfo beerliquorinfo beerliquorinfo books catalogue-biu-toulouse celebrity celebrity celiphones chat child childcare cleaning dothing	aaacpc.com aaacpc.org aaalfeservices.com aaagregnancydinic.com aaawomen.org aaawomen.org aacpc.org aalc1.tripod.com aacpc.org aalc1.tripod.com aabaysbreath.org abbapregnancy.org abbapregnancy.org abbapregnancy.choice.org abbapregnancy.choice.org abbapregnancy.choice.org abbapregnancy.choice.org	
SETUP	contraception	abortbypil.com	
LOGOUT	☐ culinary ☐ dating ☐ ddos	Add URL to Whitelist     Save & Activate	
	Users 0	Download O KB Upload O KB	_



**DNS Web Filter** 

### 7.3 Whitelist

From DNS Web Filter - Whitelist tab page you can see a list of Whitelisted sites from Blacklist. Using **Search** filed you can easy find any web site address that you add to this list.

Management over the whitelist is done using available set of options:

Update List	Network interface which connects to your Internet router, modem, 3G-4G modem etc.
Add new URL to Whitelist Delete URL	Network interface which connects Bandwidth Manager to your client network Automatically starts Bandwidth Manager control when program starts
Save & Activate	Maximum number of users connected at the same time

	Bandwidth Manager is ready.	e X
	DNS Blacklists Whitelist Restricted Page	
DEVICES	Search for URL	
	Total: 2	
USERS	disney.com	
STATISTICS		
DNS WEB FILTER		
Ą		
SETUP	Update List Add new URL to Whitelist Delete URL Save & Activate	
LOGOUT		
	Users 0 Download 0 KB Upload 0 KB	



**DNS Web Filter** 

# 7.4 Restricted Page

From Bandwidth Manager DNS Web Filter - Restricted page you can set and modify restricted page code.

ANTAMEDIA	Bandwidth Manager is rea	dy.			a X
	DNS Blacklists	Whitelist	Restricted Page		
DEVICES		r when user tries to acces	s restricted area. If you wish to customize th	is page, please enter html code,	
	define port and press Save button.				
USERS	<meta <br="" http-equiv="Content-Type"/> <style type="text/css"> .style1 (font-family: Arial, Tahoma, se </style>  <body>cbr&gt;cbr&gt;cbr&gt;cbr&gt;</body>				
STATISTICS	vid width="14%"> <img cen<="" src="http:&lt;br&gt;&lt;div align=" th=""/> <th>//%SERVERIP%/bandwid</th> <th></th> <th></th> <th></th>	//%SERVERIP%/bandwid			
DNS WEB FILTER	THIS IS A RESTRICTED AREA ! ADMINISTRATOR HAS DISABLED < ACCESS TO THIS PAGE.				
	</th <th></th> <th></th> <th></th> <th></th>				
SETUP			Save		
LOGOUT					
	Users <b>0</b>		Download <b>0 KB</b>	Upload <b>0 KB</b>	



#### **Database Server**

# 8 Database Server

**Antamedia Database Server** is additional application that stores software database files (including: users, statistic reports, action log database etc.). Database Server installer is included in the Bandwidth Manager installer which is available for download from Antamedia web site download page (www.antamedia.com/download).

Database server can be installed on the same computer as Antamedia Bandwidth Manager or some other computer. For small installations (100 simultaneous users) Database Server can be located on the same computer, assuming that such computer is fast enough to handle all tasks. Please use Task Manager to monitor system resources and CPU usage. When idle, Bandwidth Manager and Database Server doesn't show any significant CPU usage. However, with large number of concurrent users, Bandwidth Manager and Database Server might reach 40-50% of CPU usage, and this is a sign to move Database Server to other computer.

Upon installing Database Server, Installer will start ADBConfigurator (Antamedia Database Configurator) which will perform maintenance, update and add new database tables, stored procedures, triggers etc.

**Recommendation**: To keep your database safe, please use UPS (Uninterruptible power supply) on a computer where Database Server is installed. In case of power issues, database will remain intact. Power problems might lead to corrupted database and cause downtime. You can learn more about UPS in Wikipedia: http://en.wikipedia.org/wiki/Uninterruptible\_power\_supply

🇊 Database Server				×
	Session	Address	Process	Created On
	🔏 Administrator:3	192.168.9.1	10SERVER:5508	11/11/2017 1:59:31 PM
Tasks	*			
💘 Stop Server				
Server Details	*			
ADBSERVER Database Server				
Mode: Application IP Address: All Addresses Port: 12010				
Version: 2.11 Build 1 Licensed Sessions: 4096				
Config Folder: C:\Antamedia\DBServer\				
Large File Support: No	Up Time: 1 Hour, 23 Minutes,	6 Seconds Session	ns: 1 Connected	d: 1



### 8.1 Connecting With Database Server

On the first run of Antamedia Bandwidth Manager, setup Wizard will configure **Database Server IP address**, and you will not need to modify anything on this page. If you have installed Database Server on other computer, please configure correct IP address.

Database settings page contains following options:

DBServer IP Address	IP address of the computer where Database Server has been installed. This IP is usually the same as Internet Cafe IP address or it use local host IP address 127.0.0.1
DBServer Port	Port used by Database Server. Default port is 12010*.
DBServer Username	Database Server username. Default username is Administrator*.
DBServer Password	Database Server Password. Default password is EDBDefault*
DBServer Compression	If Internet Cafe is connected to the Database Server through the Internet it is recommended to use higher compression to get a faster response from the database. When running on the same computer, default compression setting (6) is recommended.

Save & Reconnect Save settings and reconnect software to the Database Server

	Bandwidth Ma	anager is ready.					e X
	API Network	License	Options	Whitelists	URL Tracking	IP/Port Filtering	Service
DEVICES		e Settings	(option b)	Vinicaso	Voice indexing		
USERS	DBServer IP Add 192,168.9.1	ress DBServer Administra					
	DBServer Port 12010	DBServer					
STATISTICS	DBServer Compro						
DNS WEB FILTER							
2	(	Save & Reconnect					
SETUP							
LOGOUT							
	-	Users <b>0</b>	-	Download <b>0</b>	КВ	Upload <b>0 K</b>	В



Options

# 9 Options

From Bandwidth Manager - Setup - Options - Options page should be set following:

Display small laptop icons	With this option choose the size of laptop icons located in main server screen.
Improve performance by minimizing Bandwidth Manager	Enable function to minimize Bandwidth Manager software after specified time period of inactivity.
Software Priority	Choose level of software priority between Normal and Hight
Time display format	Choose time format that is shown in the HotSpot software: HH:MM (2:35), Hh:Mm (2h 35m), Hh:Mmin (2h 35min), M m (155m), M min (155 min)
Quota display format	Choose quota format that can be shown in: bytes, KB, MB, GB , TB, PB
Bandwidth display format	Choose download and upload speed display format: KB (KBytes), Kb (Kbits), MB (Mbytes), Mb (Mbits)

ANTAMEDIA	Bandwidth Ma	anager is ready	y.				
-	API Network	License	Options	Whitelists	URL Tracking	IP/Port Filtering	Service
DEVICES			options	2	1	(.	
	Options	Autologin					
	Options						
USERS					Main	Administrator Passwo	
STATISTICS	Improve	small laptop icons performance by minimizir 50 \$ seconds of operat				Administrator Passwo	
	Software Pri High		Quota display format Adaptive ~				
DNS WEB FILTER	Time display	format B	andwidth display format				
SETUP	HH:MM (2:	35) v k Save	@ (KBytes) ~				
LOGOUT							
		Users 0		Download <b>0</b>	VD		7D
		Users U		Dowilload U	ND	Upload <b>0 I</b>	ND



**Administrator Password** 

# **10** Administrator Password

Default Administrator login password is blank. Option to define new Administrator password is located on the Bandwidth Manager - Setup - Options - Options page. Type new password in **Main Administrator password** field and press **Save** button .

•••••		
	Save	
Please c	onfirm	×
adminp	ass	
	OK Can	col

Confirm Administrator password in new pop-up menu and press **OK** button.



#### Autologin

# **11** Autologin

Autologin option is used to allow Internet usage for specified computers based on IP and MAC address, VOIP etc. Autologin will be activated automatically when computer try to access to the Internet through the Bandwidth Manager server. Under the **Bandwidth** Manager - Setup - Options - Autologin tab specify ports that will trigger user autologin.

Tick **Enable Autologin** option on **Users - Autologin** tab to allow autologin.

\* Bandwidth Manager software restart is required after enabling or disabling autologin feature

	Bandwidth Manage	r is ready.						J.
	API License Network Databa			Whitelists	URL Tracking	IP/Port Filtering	Service	
100 March 100	Network Databa	option:	5	whitelists	UKL Tracking	IP/Port Hitering	Service	
DEVICES	Options Autolo	gin						
	Autologin por							
USERS	Please specify ports that	will trigger user autologin						
- FT	Port 25 \$	Port	80 HTT					
STATISTICS	Description (optional)		21 FTP					
			25 SMT 53 DNS					
			110 POP					
	Add		443 SSL					
DNS WEB FILTER	Remove							
SETUP	Save							
LOGOUT	I would like to add ports	automatically						
_	Users	0		Download <b>0</b>	КВ	Upload <b>O</b> I	КВ	



# **12 Whitelists**

Whitelist is used to specify the computers which should pass through the software without authentication. Such computers are not listed at the **Connections** page, and their usage is not tracked. Whitelist can be used, for example, to let your IP cameras communicate without login procedure. You can also whitelist some of the computers which should be accessed remotely. Bandwidth Manager uses IP whitelist and MAC whitelist to define which computers are allowed to pass-through without authentication.

#### **12.1 MAC Whitelist**

Antamedia Bandwidth Manager software gives you ability to specify MAC addresses of computers which should pass through the software without authentication. MAC address is a unique identifier attached to most forms of networking equipment.

To add new computer that should pass without authentication type MAC address in **Add MAC address to whitelist** and press **Add** button. To remove computer from whitelist select it with the left mouse click from the whitelist and press **Remove** button. When you finish, please press **Save** button.

	Bandwidth Manager is ready.					F X
DEVICES	API License Network Database	Options	Whitelists	URL Tracking	IP/Port Filtering	Service
USERS	MAC Whitelist IP Whitelist Ho MAC Whitelist Please specify MAC addresses of computer MAC address is a unique identifier attached	ost Whitelist rs which should pass thro d to most forms of netwo	ugh the Bandwidth Mana; rking equipment.	ger without authentificat	on.	
STATISTICS	Add MAC to whitelist 102-A5-F7-E6-D9-3A Description (optional) Back office computer	MAC Address 02-A5-F7-E6-D9-3A	Description Back office con	nputer		
DNS WEB FILTER	Add Remove Save					
SETUP						
LOGOUT	Users 0		Download <b>0</b>	KB	Upload <b>0 K</b>	В



### **12.2 IP Whitelist**

This type of whitelist is useful if computers in your network have static IP address. To add computer IP address that should pass to the Internet without authentication, please type computer IP address in **Add IP address** field and press **Add** button. To remove computer from the whitelist, please select computer IP address in the whitelist using left mouse click and press **Remove** button. When you finish, please press **Save** button.

	Bandwidth Manager is ready.						J X
DEVICES	API License Network Database MAC Whitelist IP Whitelist Ho	Options bst Whitelist	Whitelists	URL Tracking	IP/Port Filtering	Service	
USERS	IP Whitelist Please specify IP addresses of computers of	which should pass through	n the Bandwidth Manage	r without authentification	۱.		
STATISTICS	Add IP to whitelist Description (optional)	IP Address ▶ 192.168.9.253	Description Tablet				
DNS WEB FILTER	Add Remove Save						
SETUP	Save						
LOGOUT	Users <b>0</b>		Download <b>0 I</b>	KB	Upload O F	(B	



### **12.3 Host Whitelist**

Host whitelist helps you to allow access to specified websites without authentication. This feature can be used in advertising purposes, where you can allow the access to some websites without authentication. For example your website which is located on the remote web hosting company. You can specify the host IP address or the host name like: 100.200.50.1 or www.mywebsite.com

In the Setup - Whitelist - Host Whitelist page you can see two different ways to add website to the whitelist:

Add host IP to whitelist - If you know website IP address (like 100.200.50.1)

Add host URL to whitelist - If you know website URL address (like www.mywebsite.com)

Press **Add** button to add host IP or host name, or press **Remove** button to remove host IP or URL address selected in the whitelist. When you finish, please press **Save** button.

ANTAMEDIA	Bandwidth M	lanager is read	ly.					a X
	API Network	License Database	Options	Whitelists	URL Tracking	IP/Port Filtering	Service	
DEVICES	MAC Whitelist	IP Whitelist	Host Whitelist					
USERS	Host Wh Please specify	web sites which can be	accessed by customers with	hout authentification. You	can type host IP or ho	ist name,		
	Add host IP to	100.200.50.1 or www.	mywebsite.com	HOST			7	
STATISTICS	Add Host URL	to whitelist	104.28.6.116	www.antamed				
DNS WEB FILTER	Add		104.28.7.116	www.antamed	la.com			
SETUP	Save	8						
		Users 0		Download <b>0</b>	КВ	Upload <b>0</b>	КВ	_



# 13 URL Tracking

**URL Tracking** feature helps you to track web pages which your customers visit on the Internet. By default, Bandwidth Manager will track \*.htm, \*.html, \*.asp, \*.php, \*.txt files, but you can modify the list or add new extensions. We do not recommend tracking graphic files (like \*.jpg, \*.gif ...) since this significantly increases the processing. Using URL tracking you can also track the web pages which include specified keyword.

To add new a new keyword or extension, please type it in the **Add keyword or extension** field and press **Add** button. To remove keyword or extension from the list, please select it from the list using left mouse click and press **Remove** button. When you finish, please press **Save** button.

After enabling or disabling URL tracking option, Antamedia Bandwidth Manager should be restarted.

	Bandwidth Ma	anager is ready					a a a a a a a a a a a a a a a a a a a
DEVICES	API Network	License Database	Options	Whitelists	URL Tracking	IP/Port Filtering	Service
USERS	URL Trac	king pages that customers vis	it on Internet, please def	ine which pages you like t	to log. Please restart sof	tware after enabling/dis	abling of this option.
STATISTICS	Add keyword or	-	Keyword / Extension .html .htm .asp .php				
DNS WEB FILTER	Add		.txt ▶ .shtml				
	Save						
		Users <b>0</b>		Download <b>0</b> I	КВ	Upload <b>0 K</b>	В



**IP & Port Filtering** 

# **14 IP & Port Filtering**

Outgoing traffic is filtered with IP and blocking rules. To block access to some ftp server or SMTP you can define IP and port range. Define **Starting IP address**, **Ending IP address**, **Starting port** and **Ending port**. Use **Add** button to add IP/Port rule to the list. To remove specified rule from the list select it with left mouse click and press **Remove** button. Use **Save** button.

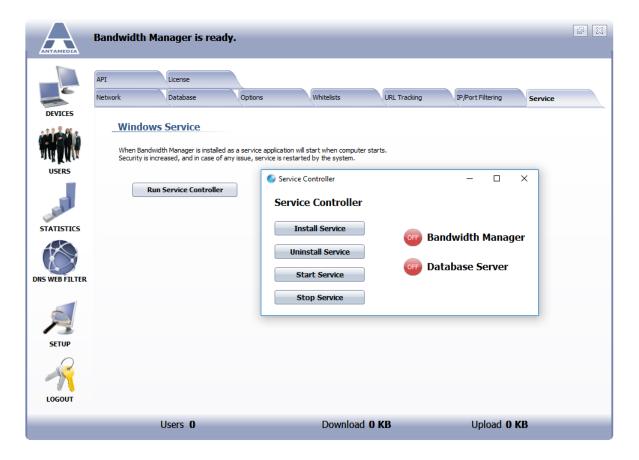
	Bandwidth Manager is re	ady.				a X
DEVICES	API License Network Database IP and PORT Filterin Outgoing traffic is filtered with IP a 'Add URL' option.		Whitelists ble to block specific ports (	URL Tracking like FTP, SMTP) in define	IP/Port Filtering	Service ebsite IP using
USERS STATISTICS	Starting IP address 192.168.0.2 Ending IP address 192.168.0.100 Starting port 80 $\diamondsuit$ Ending port 80 $\diamondsuit$	Starting address End	ing address Port f	from Port to		
SETUP COCOUT	Add Remove Save					
	Users 0		Download <b>0</b> k	(B	Upload <b>0 K</b>	В



# **15** Windows Service

Antamedia Bandwidth Manager has the ability to run as **Windows Service** which brings several benefits: application will start when computer starts, security is increased as there are no logged in users while application runs, Windows can control service and restart it if needed.

To run as a service, several changes will be done to your system: Bandwidth Manager will stop current logged in users and two applications will be installed as a service: Bandwidth Manager and Database Server. After you install and start the services, please confirm from any client device that Internet access works as usually. When running as a service, Bandwidth Manager graphical interface can be started on the same computer to manage the settings. The service will continue to work in the background.





# **16 API Integration**

Antamedia Bandwidth Manager can be easily integrated with the third-party software. This feature is located at Bandwidth Manager Setup - API page. Integration is done as a **HTTP GET query** and **XML response** which offer very short integration time. This feature allows you to perform actions in Bandwidth Manager from third-party software, such as user login, logout or user creation.

To put it simply, it works this way:

1. Your software should send a formatted query similar to URL you type in browser to see certain web page

- 2. Our software gets this query, parse it and execute the actions
- 3. Our software generate XML response with details and return it to your software
- 4. Your software parse XML and process the data

To activate this feature please **Enable Integration**, specify **port** (1082 by default), and **Secret PassPhrase**. Purpose of the PassPhrase is to protect from unauthorized usage while allowing you to use integration commands from different IP addresses.

The time is displayed in seconds, Quota, Download, Upload are in kilobytes. Other fields with 0 and 1 represent false and true. If you have specific integration requirements, please contact Antamedia.

	Bandwidth Ma	nager is ready						a X
DEVICES	Network API	Database License	Options	Whitelists	URL Tracking	IP/Port Filtering	Service	
	This feature allo	ws you to perform action	nager With Th s from third-party softwa onse. Secret PassPhrase	re. Integration is done a	s a HTTP GET query and	XML response. Please c	lick on	
USERS	Port 10082	Secret PassPhrase SECRETPASS						
STATISTICS DNS WEB FILTER	modify paramet	ters and see generated >	d below. Parameter %St ML document structure u (in KBytes). For specific	ising some XML reader. T	he simplest way to login	a computer is by passing	g	
SETUP	http://%SERV	ER%/login?ip=192.168.0	).58download=1008uplo	ad=50&pass=%PASS%	Y	Test		
			Save	e				
	ı	Users 0		Download <b>0</b>	КВ	Upload <b>0</b>	КВ	



**Statistics** 

# **17** Statistics

# 17.1 Log

Bandwidth Manager log shows actions and events initiated by Bandwidth Manager users, operator or software.

Log shows the following details:

- Level (Information, Warning, System Error), Date and Time, Description, Action (Login, Logout), IP and MAC

To display all the log items for specified time period, please select starting and ending date in the **From** and **To** fields and press **Show** button. If you like to show log for specific computer, please enter its account, IP or MAC address and press **Show** button.

	Bandwidth N	Manager is ready.	_		_	-	đ	X
	Log	URL Log	Connection Log	Statistics	Usage Reports			
DEVICES		dth Manager Log						
	This log shows From: 11/11/2017	To: V 11/11/2017	v Shov	ware. To search log, please def	ine date range, IP or N	IAC. Filter by IP	Filter by MAC	]
A KHI	Level	Date and Time	Description		Action	IP	MAC	~
USERS		tion 11/11/2017 1:37:01 PM				192.168.0.5	1.010	
	1.00	tion 11/11/2017 1:37:07 PM			-	192.168.0.5		
	1997	tion 11/11/2017 3:33:25 PM				192.168.9.3	00-0C-29-72-07-45	
	1.00	tion 11/11/2017 3:35:19 PM	User deleted			192.168.9.3	00-0C-29-72-07-45	
-	Informa	tion 11/11/2017 4:15:34 PM	User logged in		Login	192.168.9.4	00-0C-29-31-8B-C8	
STATISTICS	Informa	tion 11/11/2017 4:16:52 PM	User deleted		Del	192.168.9.5	71-2F-8A-8D-91-21	
	Informa	tion 11/11/2017 4:16:55 PM	User deleted		Del	192.168.9.6	01-29-3F-AD-9E-92	
	Informa	tion 11/11/2017 4:17:05 PM	User logged out		Logout	192.168.9.4	00-0C-29-31-8B-C8	
	Informa	tion 11/11/2017 4:17:39 PM	User logged in		Login	192.168.9.3	00-0C-29-72-07-45	
DNS WEB ETI TER	Informa	tion 11/11/2017 4:17:53 PM	User logged in		Login	192.168.9.4	00-0C-29-31-8B-C8	
DIS WEDTIETER	Informa	tion 11/11/2017 4:22:04 PM	User logged in		Login	192.168.9.10	00-0C-29-31-8B-C8	
	Informa	tion 11/11/2017 4:22:40 PM	User logged in		Login	192.168.9.3	00-0C-29-72-07-45	
	Informa	tion 11/11/2017 4:46:27 PM	User logged in		Login	192.168.9.10	00-0C-29-31-8B-C8	
	🕨 🛛 Informa	tion 11/11/2017 4:46:56 PM	User logged in		Login	192.168.9.3	00-0C-29-72-07-45	
SETUP								>
		Users 0		Download <b>0 KB</b>		Upload <b>0</b>	КВ	



**Statistics** 

### 17.2 URL Log

URL log page located in the Bandwidth Manager - Statistics - URL Log shows a list of the websites which your customers have visited. URL log is periodically saved to a hard drive (on each 1000 websites listed) and cleared, in order to keep good performance. If you like to check which pages your customers have visited on a specific day, please check the info in C:\Antamedia\Bandwidth Manager\Log folder. The files are named with the date and time when log was created.

	Log	URL Log	Connection Log	Statistics Usage Reports
EVICES	URL Log			
EVICES	Log of pages that m	atch filename extension ri	ules. URL log is stored on yo	our bard drive periodically
18 M 1	Log of pages that if	later mename extension re	lies. One log is stored on ye	du hard drive periodically.
	Show			
	5.10			
JSERS	Date	IP	MAC	URL
	11/11/2017 4:53	47 PM 192.168.9.10	00-0C-29-31-8B-C8	ib.adnxs.com/pxj?bidder=18&seg=378601&action=setuids('1040683372092679702',"
	11/11/2017 4:53:	47 PM 192.168.9.10	00-0C-29-31-8B-C8	ads.scorecardresearch.com/p?c1=9&c2=1000009&c3=2&cs_xi=UP8032c7a4-c6f8-11 e125510&rn=415627429
	11/11/2017 4:53	52 PM 192, 168, 9, 10	00-0C-29-31-8B-C8	www.msn.com/en-us/lifestyle?ocid=iehp
	11/11/2017 4:53	54 PM 192. 168. 9. 10	00-0C-29-31-8B-C8	pixel.advertising.com/ups/254/occ
TISTICS	11/11/2017 4:53	54 PM 192, 168, 9, 10	00-0C-29-31-8B-C8	cms.analytics.yahoo.com/cms?partner_id=MSFT
	11/11/2017 4:53	55 PM 192. 168.9. 10	00-0C-29-31-8B-C8	www.bizographics.com/collect/?fmt=gif&pid=7850
	11/11/2017 4:53	56 PM 192.168.9.10	00-0C-29-31-8B-C8	a.ctnsnet.com/ase/banner?act=imp&nid=2142538&aid=50347428&sid=38602314&cb TYzNzEwNQ&pguid=15f8a6c46ed24d6981db05786aef65ab
VEB FILTER	11/11/2017 4:53	56 PM 192.168.9.10	00-0C-29-31-8B-C8	a.ctnsnet.com/ase/banner?act=imp&nid=2142538&aid=50347420&sid=38602310&cb TYzNzEwMQ&pguid=1304fe27d3544ed1b5ed1693915a5a5f
	11/11/2017 4:53	56 PM 192.168.9.10	00-0C-29-31-8B-C8	ib.adnxs.com/seg?add=5018711:675000&t=1
	11/11/2017 4:53	56 PM 192. 168. 9. 10	00-0C-29-31-8B-C8	ib.adnxs.com/async_usersync?cbfn=AN_async_load
	11/11/2017 4:53	56 PM 192.168.9.10	00-0C-29-31-8B-C8	ib.adnxs.com/async_usersync_file
	11/11/2017 4:53	56 PM 192.168.9.10	00-0C-29-31-8B-C8	t.wayfair.com/a/vendor_sync/user?vendor_id=1&uid=8845969795437512179&t=1
	11/11/2017 4:53	56 PM 192, 168, 9, 10	00-0C-29-31-8B-C8	sync.search.spotxchange.com/partner?adv_id=7715&uid=8845969795437512179
SETUP	11/11/2017 4:53:	56 PM 192.168.9.10	00-0C-29-31-8B-C8	sync.search.spotxchange.com/partner?adv_id=7715&uid=8845969795437512179&_ =1&sync_id=89dd8e8f-c6f8-11e7-afb9-149736260006
$\bigcirc$	11/11/2017 4:53	56 PM 192.168.9.10	00-0C-29-31-8B-C8	s.amazon-adsystem.com/x/da2e6c890e6e3636
10	11/11/2017 4:53	56 PM 192. 168.9. 10	00-0C-29-31-8B-C8	ib.adnxs.com/setuid?entity=8&code=ff065a07-12dc-4f00-99f3-07a72475ed3d
3/3	11/11/2017 4:53	57 PM 192. 168. 9. 10	00-0C-29-31-8B-C8	s.amazon-adsystem.com/iu3?cm3ppd=1&d=dtb-pub&dl=an&dcc=t
DGOUT	11/11/2017 4:53:	57 PM 192.168.9.10		ib.adnxs.com/async_usersync?cbfn=AN_async_load



# **17.3** Connection Log

Connection log shows all the connection attempts to your Bandwidth Manager which can give you a realtime report who is trying to login to your network. It is a powerful tool which shows IP and MAC address and the port which remote computer is trying to access, it also shows successful logins list with details such as time, user's IP, language of the client browser, user's device type and initial URL accessed during login.

This log can be used to monitor your network, to detect if any hacking attempts are in progress, to identify a reason when a customer is having a problem to login.

In case when **Autologin** feature is enabled, **connection log** will show which connection was granted to login automatically, based on autologin settings. To activate this feature, please **Enable Connection Log**.

Lo	uru La	G Con	nection Log	Statistics	Usage Rep	orts	
			liection Log	Statistics	obuge hep		
No. of Lot of Lo	Connection Log						
EVICES	Connection Log						
	Connection log shows all cor connection was granted to lo			number and	date when attempt occure	d. If autologin is active i	t will show which
	connection was granted to i	ogin, based on autologin	opuons.				
	<ul> <li>Enable Connection Log</li> </ul>						
USERS	Date	MAC	IP	Port	User Autologin	^	
JSERS	11/11/2017 5:04:28 PM	00-0C-29-72-07-45	192.168.9.3	443			
	11/11/2017 5:04:28 PM	00-0C-29-72-07-45	192.168.9.3	443			
	11/11/2017 5:04:28 PM	00-0C-29-72-07-45	192.168.9.3	443			
	11/11/2017 5:04:28 PM	00-0C-29-72-07-45	192.168.9.3	443			
	11/11/2017 5:04:28 PM	00-0C-29-72-07-45	192.168.9.3	443			
ATISTICS	11/11/2017 5:04:35 PM	00-0C-29-72-07-45	192.168.9.3	443			
	11/11/2017 5:04:35 PM	00-0C-29-72-07-45	192.168.9.3	443			
	11/11/2017 5:04:35 PM	00-0C-29-72-07-45	192.168.9.3	443			
	11/11/2017 5:04:35 PM	00-0C-29-72-07-45	192.168.9.3	443			
NEB FILTER	11/11/2017 5:04:35 PM	00-0C-29-72-07-45	192.168.9.3	443			
VEDTIETER	11/11/2017 5:04:35 PM	00-0C-29-72-07-45	192.168.9.3	443			
	11/11/2017 5:04:35 PM	00-0C-29-72-07-45	192.168.9.3	443			
	11/11/2017 5:04:35 PM	00-0C-29-72-07-45	192.168.9.3	443			
	11/11/2017 5:04:40 PM	00-0C-29-72-07-45	192.168.9.3	443		==	
	11/11/2017 5:04:40 PM	00-0C-29-72-07-45	192.168.9.3	443	Login		
SETUP	11/11/2017 5:05:18 PM	00-50-56-C0-00-02	192.168.112.1	0			
52101	11/11/2017 5:05:18 PM	00-50-56-C0-00-02	192.168.112.1	0			
$\bigcirc$	11/11/2017 5:05:32 PM	00-50-56-C0-00-02	192.168.112.1	0			
10	11/11/2017 5:05:33 PM	00-50-56-C0-00-02	192.168.112.1	0			Save
1	11/11/2017 5:05:34 PM	00-50-56-C0-00-02	192.168.112.1	0			
e 🤘	11/11/2017 5:05:35 PM	00-50-56-C0-00-02	192.168.112.1				Clear



### **17.4 Statistics Report**

Statistic report is providing valuable data about your Bandwidth Manager operation. It will show you **total time usage**, **bandwidth**, **number of logins** for selected day or time period.

Statistical data is collected continuously, after each customer logout, so you can always enjoy fast report display on screen.

Statistics is available in Chart and Table mode. By default, statistics is displayed in chart mode, giving you a graphical overview of Bandwidth Manager activity. You can see, for example, time usage displayed in minutes, over the selected period displayed as days of the year.

Depending on the date range selected, you will see an activity in 24 hours for current day, or for a time period defined with the starting and the ending date in the **From** and **To** fields.

	Bandwidth Manager is ready	•							a X
DEVICES	Log URL Log Statistics	Conne	ection Lo	g	Statistics	Usage	Reports		
	Chart	Show	w Stats Month	Dav	Hour Usage Time	e Logins	Download	Upload	
USERS		► 2017	11	11	13	0:02	1	0.00 KB	0.00 KB
	Date Range	2017	11	11	15	0:02	1	53.90 KB	10.75 KB
	Today V	2017	11	11	17	0:18	3	138.72 KB	75.55 KB
STATISTICS ONS WEB FILTER	From 11/11/2017 ~ To 11/11/2017 ~								
SETUP									
	Users <b>0</b>				Download (	) КВ	Up	load O KB	
	03613 0				Download (		ΟÞ		



**Table mode** shows statistics in a condensed view on a daily basis. For each **year**, **month**, and **day**, you will see **usage time**, **number of logins**, **download** and **upload**.





**Statistics** 

### 17.5 Usage Report

Usage report is a session based report which precisely shows **who**, **when** and **how much** has used your Bandwidth Manager services.

Report details are: IP, MAC, Start time, End time, Usage time, Download and Upload

To display usage report for specified time period, please select the starting and the ending date in the **From** and **To** fields, or choose one of the predefined time periods (Today, Yesterday, Last 7 days etc.), and press **Show Usage Report** button. You can filter such report for a specified account, IP or MAC address.

From Report type are offered: Usage Log (shows all sessions and its details), Summary per MAC (get totals for the selected MAC address) and Summary per IP address (get totals for the selected IP address)

	Bandwid	ith Man	ager is ready.					
	Log		URL Log	Connection Log	Statistics	Usage Reports		
DEVICES	Usa	ge Rep	orts					
	Repo Usage	rt Type		~		<b>te Range</b> day ∽	From 11/11/2017 V	To 11/11/2017 V
MAN DAMA		-	Silver by MAC	•	10	uay 🔹	11/11/2017 *	11/11/2017 +
USERS	Filter I	DY IP	Filter by MAC	1	S	Show Usage Report		
			N40	Sharek Trans	E-d E-r	Linear Tree	Devertee d	Universit
	IP	2,168,9,4	MAC 00-0C-29-31-8B-C8	Start Time 11/11/2017 4:15:34 PM	End Time 11/11/2017 4:17:05 PM	Usage Time 0:02	Download 53.90 KB	Upload 10.75 KB
	1987	2.168.9.3	00-0C-29-72-07-45	11/11/2017 5:04:40 PM	11/11/2017 5: 19:07 PM	0:02	127.33 KB	67.89 KB
1	1000	2.168.9.3	00-0C-29-72-07-45	11/11/2017 5:29:25 PM	11/11/2017 5:32:48 PM	0:04		7.29 KB
STATISTICS	1.00	2.168.9.3	00-0C-29-72-07-45	11/11/2017 5:41:08 PM	11/11/2017 5:41:18 PM	0:01		0.38 KB
DNS WEB FILTER								
SETUP								
LOGOUT								
		U	sers 0		Download <b>0 KB</b>		Upload <b>0 KB</b>	

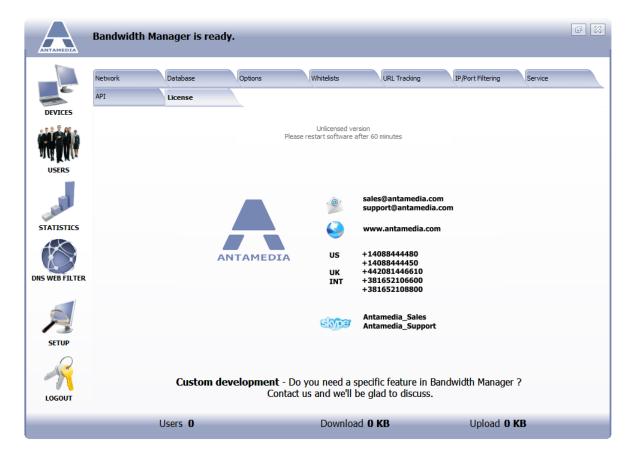


# **18** License

After ordering software from our site <u>http://www.antamedia.com/buy/bandwidth/</u> you will receive confirmation e-mail and informations about your Customer ID.

Go to Bandwidth Manager - Setup - License page. Click on Antamedia logo located in the center of the page

If you already installed Antamedia software you will not have to change any configuration. All your settings will remain there and the trial limits will be removed so you can enjoy all features without restrictions.





License

Fill in all required fields and click on 'Send Request' button

	Bandwidth Manager is re	eady.				
DEVICES	Network Database API License	Options	Whitelists	URL Tracking	IP/Port Filtering	Service
USERS		License Request	Unlicensed vers Please restart software af			
STATISTICS		and E-mail have to address for easier of	same details which you used match our database. You ca communication. When we rec ded E-mail and you'll be able	n provide us with addition eive your request, we'll s	al E-mail end you	
DNS WEB FILTER		Customer ID Owner name		iddress		
SETUP		Location name	Additio	nal E-mail (optional)		
R	Custom		e requested info and press '	·	anager	?
LOGOUT	Users <b>0</b>		Download	-	Upload <b>0</b>	КВ

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