

## BMExtreme

Any feedback (improvements, questions or issues) can be made through:

- Website: <http://www.LP23.com/support/>
- E-Mail: [mail@LP23.com](mailto:mail@LP23.com)

BMExtreme: <http://www.LP23.com/bmextreme/>

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### Keeping track of statistics

All units indicated within the program and/or logs are in megabytes (MB) unless otherwise stated. Statistics for day/week/month are stored in '\Logs\...\\_stats.txt' files. Any IP statistics will be stored in the '\Logs\IP Stats' folder. For any speed related graphs: red = sent, green = received.

### Configuration and log files

The location of these files are user specific and can be found in the following folders:

- C:\Documents and Settings\username\Application Data\BMExtreme (XP and lower)
- C:\Users\username\AppData\Roaming\BMExtreme (Vista and above)

**NOTE:** For Vista and above, log and configuration files may remain from older installs in the Program Files or VirtualStore folders - they are not used.

### What files are needed for backup

To backup log and configuration data, the only files required for backup are config.bin, config.dat, log.dat and profile.dat. The 'Logs' and/or 'IP Stats' folders may also contain wanted files.

### Fast User Switching (Windows XP +)

BMExtreme will only monitor bandwidth for the current user (for which it is running). If multiple users require monitoring, BMExtreme should be setup to start at login (through the startup menu). Of note is that the active user will monitor all bandwidth that may be used by others (i.e. torrents).

### Windows Vista and above - compatibility issues

If there are issues with monitoring, try turning off the User Account Control (UAC) or make sure that BMExtreme is allowed administrator rights. This will reduce any problems experienced with available features and/or monitoring accuracy.

### Using WinPcap for network analysis

If WinPcap is installed on the system, BMExtreme will use it by default. If monitoring is not working as expected, WinPcap can be tried as an alternative. If IP related features such as ignoring LAN traffic is grayed out, WinPcap may be required (Vista and above may need to allow administrator rights as per above as well). WinPcap may also provide improved performance and monitoring.

**NOTE:** WinPcap is available from <http://www.winpcap.org/>.

### Forced monitoring

BMExtreme will default to SNMP or Winsock monitoring depending on your operating system. Also, WinPcap will be default if installed (see above). To force a particular monitoring path - change the ForceMonitoring option in the config.dat file from "None" to "SNMP", "Winsock" or "WinPcap".

### **Single instance**

Only one instance of BMExtreme can be started at a time. If more than one instance is required, the SingleInstance option in the config.dat file can be changed from "1" to "0".

### **Hard-coding IP address values**

To force certain IP addresses to be monitored whether or not they are detected, the file "ipList.txt" can be created in the main installation folder with one IP address per line. Up to 7 IPs will be used including any actual adapters found (with IPs taken from the file added first).

### **Dial-up information**

When no bandwidth cap is configured, connection information will be shown (i.e. time connected to the internet) This data while beneficial to dial-up users, will also be stored in the logs.

### **Wireless**

With some wireless setups in Windows NT/XP, SNMP monitoring will be used if Winsock or WinPcap monitoring does initialize properly. This may reduce accuracy but allows some type of monitoring to take place. This may occur on Vista systems and above as well depending on the amount of protection the system is setup with (see compatibility issues section below).

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### **Configure – Options**

In the top portion, there is a choice to decide which day statistics are reset. In most cases it will be the date that the internet connection was installed. As well, there are choices for which day the week begins, the current language for the main window and the date format for logs.

### **Start minimized (hiding the tray icon)**

Selecting this option will minimize BMExtreme directly after starting. By opening the config.dat file and changing the TrayIconShow option to either a 0 (don't show) or 1 (show), users can hide the tray icon completely. It's only changeable in this manner to prevent accidentally enabling it and not being able to restore it.

### **Check for updates**

Selecting this option allows BMExtreme to check for updates daily (no other information is transferred and the program will only connect to the LP23.com server).

### **Password protection**

This option adds a password check to both the configure menu and when exiting. When the password option is set, most options will be moved to the config.bin file to prevent modification. To configure how the password option can be used, additional optional options can be set in the config.dat file before enabling password protection. Available options are:

- PasswordAccount - access account option in tray icon options (default = on)
- PasswordConfig - access configuration options (default = on)
- PasswordExit - exit application (default = on)
- PasswordRestore - restoring window from minimized state (default = off)

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## Configure - Traffic

Different adapters can be selected here to provide monitoring on specific devices on the system.

### Ignore LAN/UDP traffic

Selecting this option will automatically ignore LAN addresses without having to manually add them to the profiles configuration tab. UDP traffic can also be monitored or ignored as well.

### Monitor IP addresses

All the IP addresses (and domain names) accessed will be saved daily in the 'IP Stats' folder.

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## Configure - Caps

Various options can be set up here to monitor General, Peak and Peak/Off Peak caps. Caps can range in duration (hourly/daily/weekly/monthly) as well as recovery rates for satellite connections.

### Bandwidth cap limit

To make bandwidth calculations, enter an amount here to compare against. Bandwidth limits options available are monthly/weekly (according to the reset date in options), daily caps over x amount of days, hourly, or satellite based ISP caps.

- The monthly reset box (daily cap) allows users to reset the cap monthly based off the month start day in the Options tab.
- Calculations for hourly caps are cumulative (based on the last x hours). To change this behavior so that it is calculated starting from the top of the hour, select the xx:00 reset box.

**EXAMPLE:** For the xx:00 reset option - if the current time is 3:15 and it is setup to monitor the last 2 hours, the timeframe calculated will be 1:15 to 3:15 with it unchecked and 2:00 to 4:00 if it is checked.

### Terminate connections

If this option is selected and the limit is within 5% - any open connections will be closed and any downloads (without a download manager) may be lost.

**NOTE:** For Vista and above, User Account Control (UAC) needs to be off or BMExtreme allowed administrator rights for this feature to work correctly.

### Run batch file

If this option is selected and the limit is within 5% - BMExtreme will check for a file named terminate.bat in the main folder and will run it if found. This could be used instead of the Terminate connections option to maintain internet availability while closing down certain applications for situations involving daily caps. The batch file is run once when within 5% of the limit and until it resets - whenever the application is started and everyday at midnight.

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## Configure - Logs

### Exporting logs

There is an option to automatically export logs which will save logs in the folder listed. This option is available for users who prefer to have their bandwidth information saved daily. The export button will do the same function output the data in the same fashion instantly. For those who want the logs placed in another folder other than '..\BMExtreme\Logs' you can do that here.

**NOTE:** If the log.dat file is deleted, bandwidth information will be imported from the 'Logs\stats\_daily.txt' file which can be useful for any manual changes.

### Check shared bandwidth

Networks that share bandwidth can use this setting to monitor all the computers. To set this up, select the Check shared bandwidth option with a username for the computer connection. For each separate computer to be monitored, select a different username (i.e. Laptop, Desktop, etc). As well, make sure that a proper bandwidth limit and month/week/day selection is made. From this point on all monitoring will be still based on the current computer, but any limit calculations will take into account all computers being monitored. Statistics can also be viewed online for additional real-time information.

**NOTE:** Groups can be added by putting `_group_` in front of the username. So for example, usernames `"_Business_LAN"`, `"_Home_LAN"`, `"_Home_Laptop"` would ignore the business stats when viewed from home and vice versa.

**IMPORTANT:** Usernames are not case sensitive (LAPTOP = laptop).

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## Configure - Profiles

### User/Profile option

Users can be seen as main entities with profiles as sub entities. When a user is selected from the tray icon (Main user by default) - only that user will be monitored with all others being ignored. All profiles under that user will be monitored constantly and bandwidth will be observed under any rules given. By changing the profile from the task icon, nothing is changed except for the statistics shown - all other profiles under the current user will still be monitored.

### Setting up and changing user and profile use

To change between users and profiles as indicated in the example below, choose the appropriate selection from the task icon. When a specific user is selected, only that user will be monitored. When selecting a specific profile, all other profiles for that specific user continue to be monitored according to the rules given. The only reason to change profiles would be to see the specific info.

### Show traffic in graphs regardless of profiles

If this is selected, the only data shown related to the chosen profile will be the data values in the main window (day/week/month/session) and cap information. Everything else (i.e. graphs and speed indicator) will be based off the main profile for the user.

## IP Address/Port option

This allows the option to monitor or ignore any required addresses/ports.

**NOTE:** In the case that ignore/monitor IP addresses overlap - priority will be given based on the given order and default to monitor if no match found.

**IMPORTANT:** Since it defaults to monitor - ignore port -1 or ignore x.x.x.x may be required at the end to make sure that everything else is ignored.

### EXAMPLES:

1. Port 80 will monitor web (browser) traffic and port 21 for FTP.
2. IP overlap with IP 192.168.23.23 results in:
  - 1. Ignore 192.168.x.x                      2. Monitor 192.168.23.23                      = Ignored
  - 1. Monitor 192.168.23.23                      2. Ignore 192.168.x.x                      = Monitored

## Time Interval option

The time interval feature allows certain times to have different limit caps (satellite for example) or only monitor a certain percentage of actual bandwidth (non-peak hours). This should be flexible enough to incorporate any ISP time scheme.

## Warnings

Warnings can be given when either the speed given is exceeded or the bandwidth used is close to the maximum value. These warning will be given either as a dialog, or emailed.

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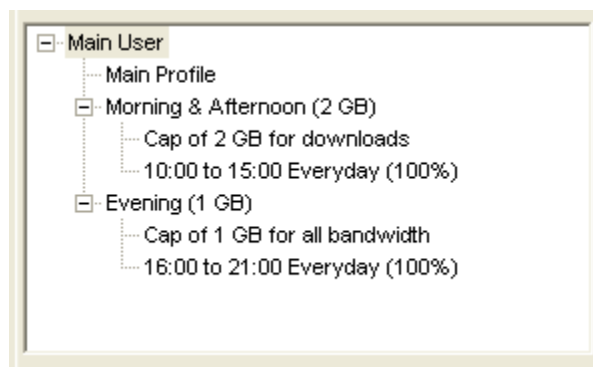
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## Profile Tutorials

### 1. Setting up custom bandwidth caps

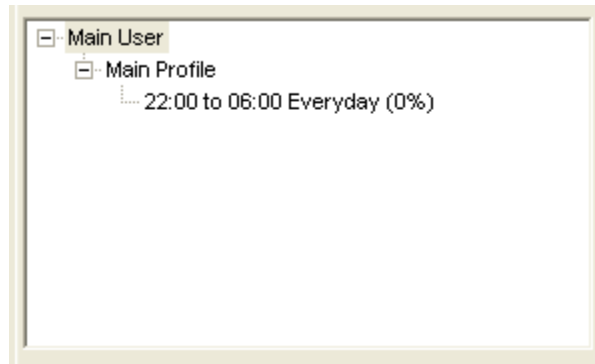
- 2 GB download from 10:00 to 15:00
- 1 GB download/upload from 16:00 to 21:00
- unlimited for any other time

- Highlight Main User
- Select Profile from the combo box and click ADD
- Enter Morning & Afternoon (2 GB) (OK)
  
- Highlight Morning & Afternoon (2 GB)
- Select Bandwidth Cap and click ADD
- Enter 2 GB for downloads (OK)
  
- Highlight Morning & Afternoon
- Select Time Interval from the combo box and click ADD
- Enter Start All days 10:00, End All days 15:00, Percentage to monitor 100% (OK)
  
- Highlight Main User
- Select Profile from the combo box and click ADD
- Enter Evening (1 GB) (OK)
  
- Highlight Evening (1 GB)
- Select Bandwidth Cap and click ADD
- Enter 1 GB for all (OK)
  
- Highlight Evening (1 GB)
- Select Time Interval from the combo box and click ADD
- Enter Start All days 16:00, End All days 21:00, Percentage to monitor 100% (OK)



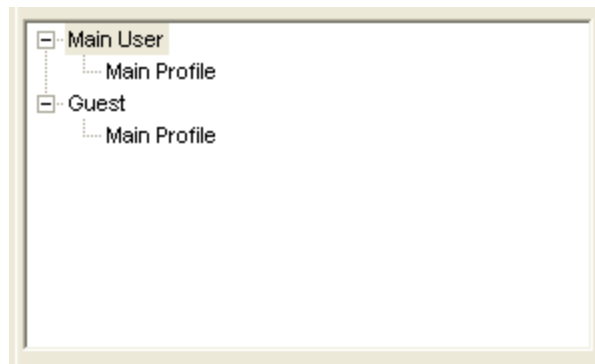
## 2. Ignoring off-peak hours from 22:00 to 6:00

- Highlight Main Profile
- Select Time Interval from the combo box and click ADD
- Enter Start All days 22:00, End All days 06:00, Percentage to monitor 0% (OK)



## 3. Setting up a guest user account

- Highlight Main User
- Select User from the combo box and click ADD
- Enter Guest (OK)



#### 4. Only checking email bandwidth

- Highlight Main User
- Select Profile from the combo box and click ADD
- Enter Email Traffic (OK)
  
- Highlight Email Traffic
- Select IP Address/Port and click ADD
- Enter 25 and select Monitor (OK)
  
- Highlight Email Traffic
- Select IP Address/Port and click ADD
- Enter 110 and select Monitor (OK)
  
- Highlight Email Traffic
- Select IP Address/Port and click ADD
- Enter -1 and select Ignore (OK)

