Dragon User Guide version 4.10.3001.3

1. Using the Dragon Software

Thank you for purchasing Dragon Software. Realtek Dragon is the best network management product available for online games. The Dragon software is used to control the network bandwidth on Windows 7, Windows8, Windows10 or later platforms.

Many users play online game (League of Legend, StarCraft2, Overwatch), watch video streaming (YouTube, Netflix) or listen to online audio (KKBOX, Spotify), and download files through P2P software at the same time. P2P software would affect the network quality seriously and delay the real-time programs. Dragon network management uses advanced feature cooperate with Realtek Gaming Ethernet adapter to deliver more intelligence and more control than traditional network interface. Dragon Bandwidth Control software automatically detects foreground/group traffic and prioritize it as six bandwidth priority levels (the highest priority, high priority, normal priority, low priority, lower priority, and the lowest priority) for optimum performance. User can set traffic limit by visualize network management, or manually adjust application priority, or block certain high network traffic applications down, to prevent this application interfered with user concerned gaming process.

Dragon network management default settings deliver first priority in foreground group processes. The benefits of latency, network traffic, and intelligence will help user to get better user experience and lower down traffic lag issue on this platform

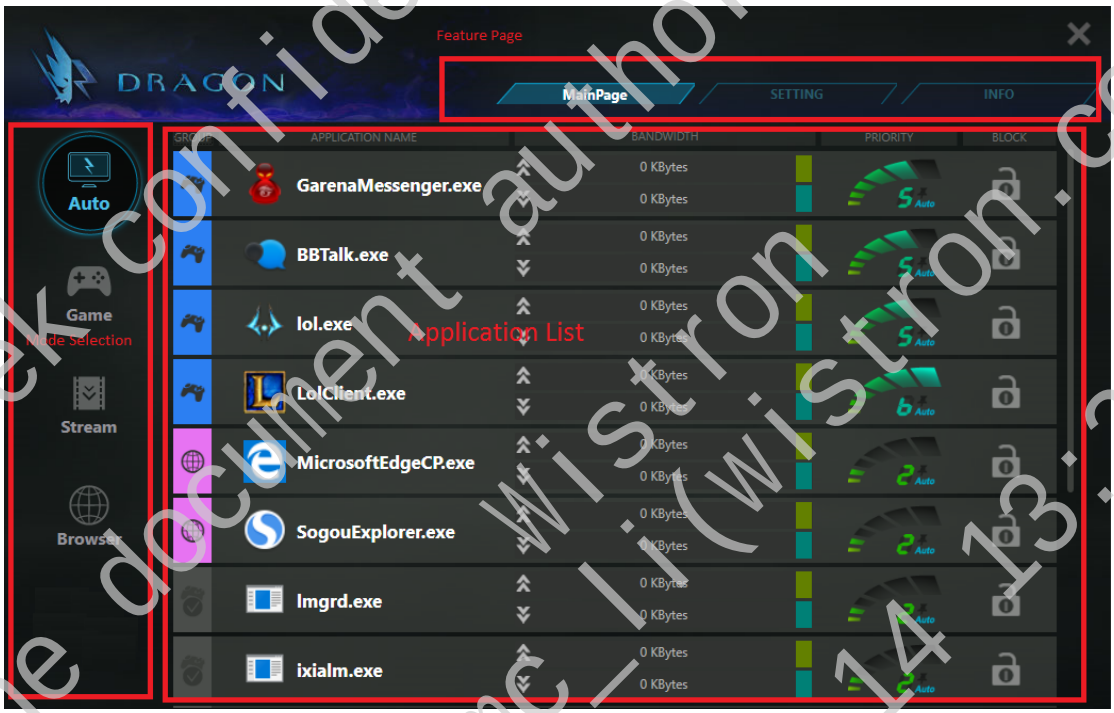
2. Starting the Realtek Dragon Software

Realtek Dragon network management software loads at Startup. Once installed, the Realtek Dragon network management icon shows on system tray (the right bottom corner of the screen). Mouse right click on the tray icon to show the application window.

Realtek confidential files
The document authorized to
mate_inc_1 (wistron.com)
2020-07-14 13:27:13

Users also can start Dragon network management from the “start” menu by left click the icon in following path “Start->Programs->Realtek->Dragon->Dragon.exe”.
The following picture is the Realtek Dragon network management main page. There are three area in this page, it is Feature page area, Mode Selection area, and Application List area.

There are MainPage tabs, SETTING tab, and INFO tab in Feature Page area, and there are five modes in Mode Selection area, and there are AUTO mode, GAME mode, STREAM mode, and BROWSER mode respectively. In Application List area, there are all running program which was internet access required, in other words, if the program doesn’t need to send/receive packet from internet, it will not be displayed on Application List area.



As you see the picture that shows above, the Dragon default setting in main page was AUTO mode. We will describe the definition of AUTO mode, GAME mode, STREAM mode, and BROWSER mode later.

Dragon was a TSR program, user can minimize this window by click “Cross Button”

Realtek confidential files
The document authorized to
Wistron
nate_mc_li(wistron.com)
2020-07-14 13:27:13

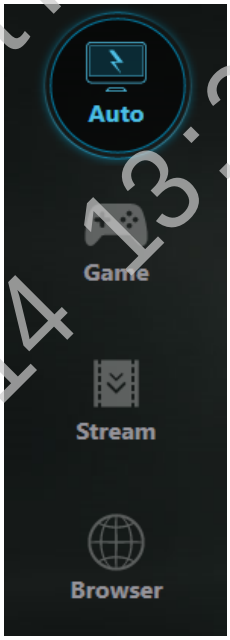
2.1 Feature pages

The Dragon software provides 3 tabs, here is “MainPage tab”, “SETTING tab”, and “INFO tab”. When Dragon was launched, it will display MainPage, because more information user concerned was contained in this page.

2.1.1 MainPage tab – Mode Selection Area

In MainPage tab, there are Mode Selection area, and Application List page. There are four modes “AUTO”, “GAME”, “STREAM”, and “BROWSER” mode in this page, and the definition of each mode was show below:

A. Auto Mode: Dragon auto adjust priority
   Dragon can detect foreground application, and set this application priority to highest priority, to make sure this application can get the best network bandwidth in this computer. At the same time, Dragon also set others application in this application group to high priority, and other group application will be set to lowest, to make sure this group can get the better bandwidth than other group.



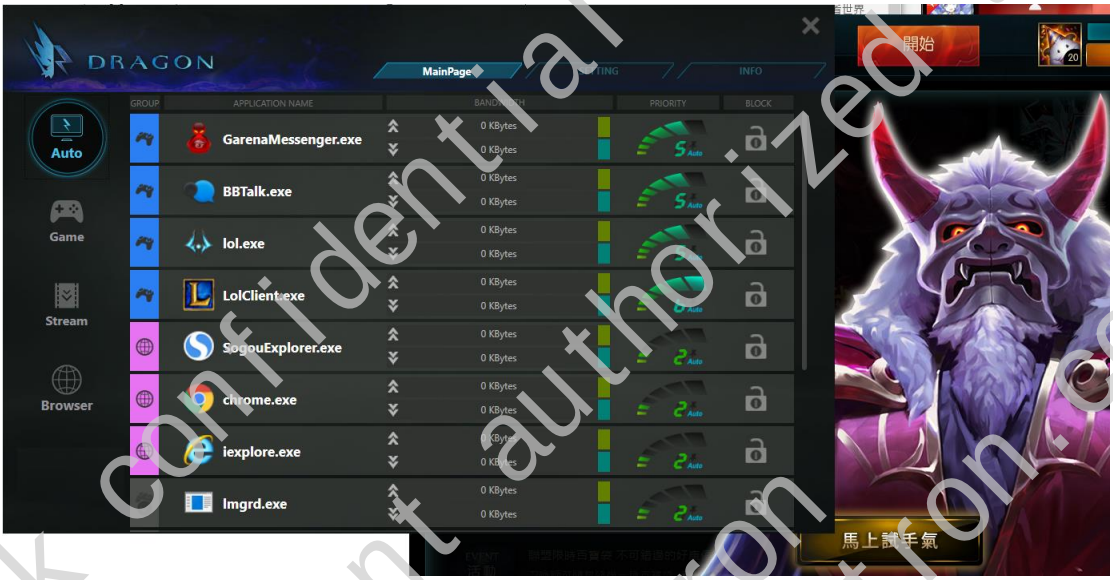
B. Game Mode:
   The process belong to game such as League of Legend, WarCraft3 Diablo3 etc. will get the highest bandwidth priority, the other process will get the lowest bandwidth priority.
C. Stream Mode:
   The process belong to Stream such as SKYPE, PPS etc. will get the highest bandwidth priority, the other process will get the lowest bandwidth priority.

Realtek confidential files
The document authorized to
nate_mc_li(wistron.com)
2020-07-14 13:27:13

D. Browser Mode:
The process belong to Stream such as Chrome, IE, Firefox etc. will get the highest bandwidth priority, the other process will get the lowest bandwidth priority

You can get the example in next page.

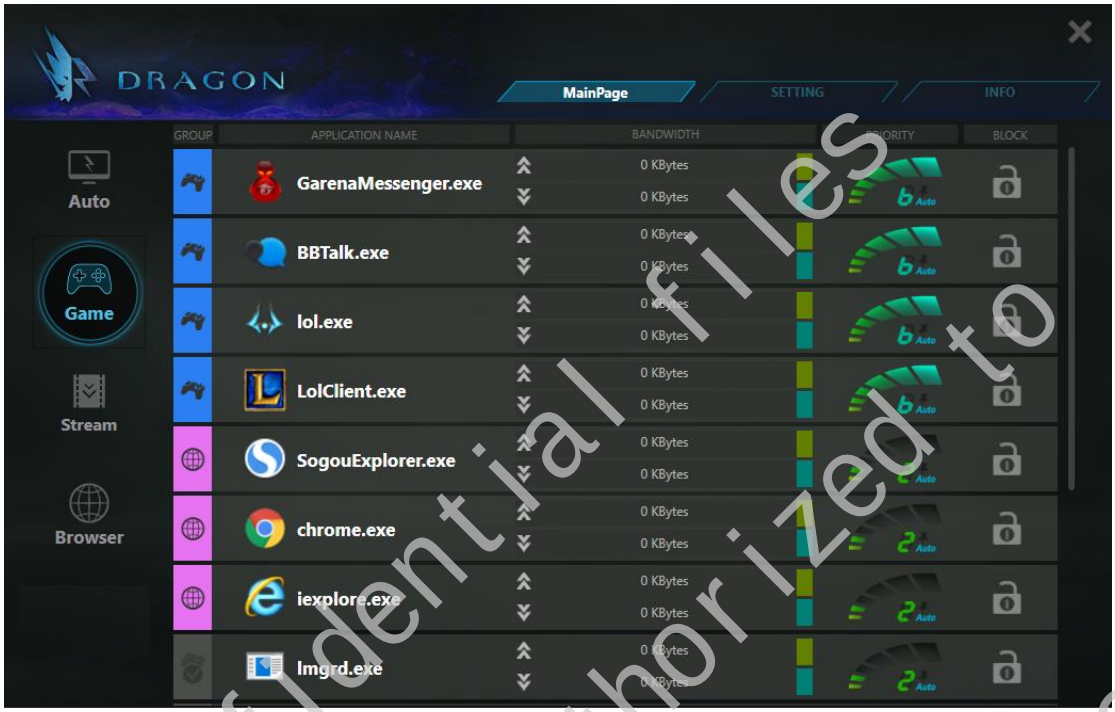
For Example:



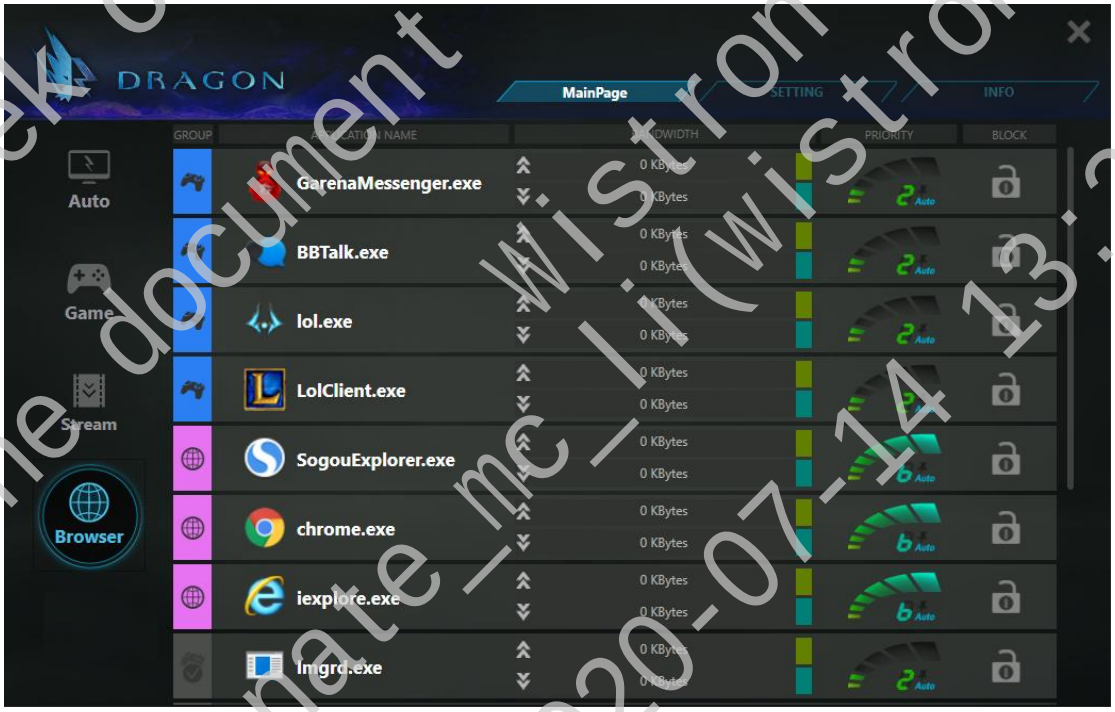
As the picture show above, the Auto mode was selected, and the foreground program was League of Legend, this process was belonged to game, so all gaming process such as GarenaMessenger.exe, BBTalk.exe, lol.exe was assigned to high priority (Level5), and the foreground program "League of Legend" was assigned to highest priority (Level6), the other process will be assigned the lowest priority.

If user select Game mode, all gaming process will be assigned to highest priority, and other process will be assigned to lowest priority, as you see in below.

Realtek confidential files
The document authorized to
nate_mc_li(wistron.com)
2020-07-14 13:27:13

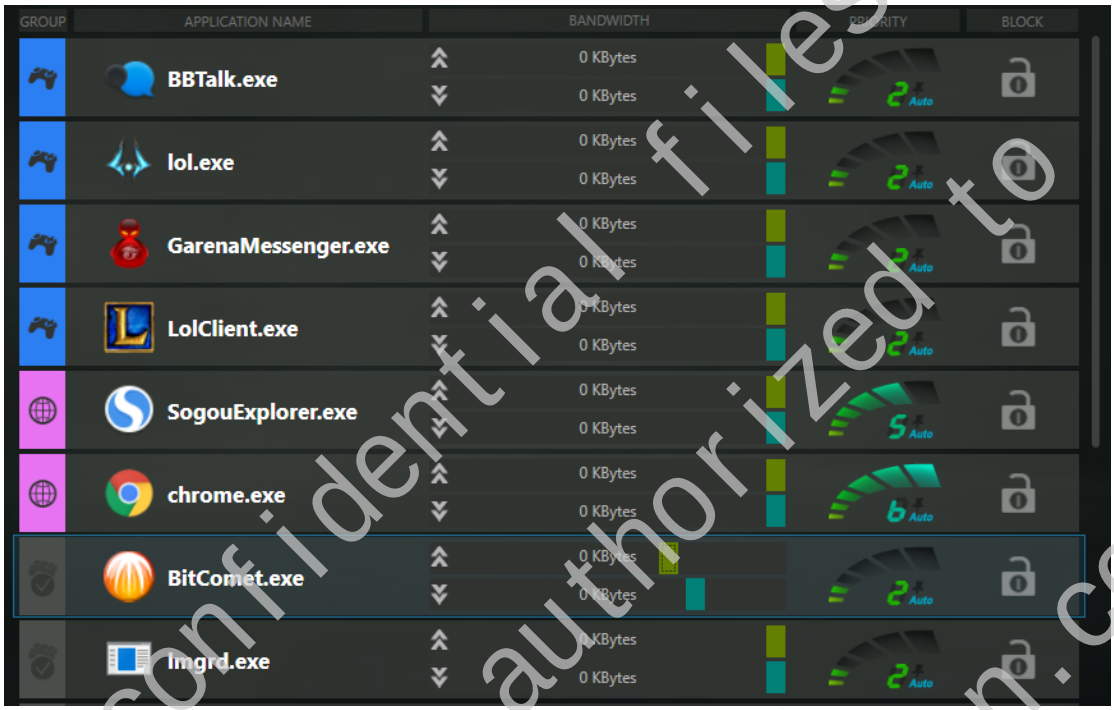


If user select Browser mode, all process is belonged to browser will be assigned to highest priority, and other process will be assigned to lowest priority, as you see in below.



Realtek confidential files
The document authorized to
Wistron
nate_mc_li(wistron.com)
2020-07-14 13:27:13

2.1.2 MainPage tab – Application List Area



As you see in above, we will show some information of each process in this area, the Group, Application Name, Bandwidth, Priority, and Block information was included.

Because we divide all process to four different group, each was Game group, Browser group, Stream group, and un-defined group. We use different color and different icon to present different group, so user can easily understand group information in group column:

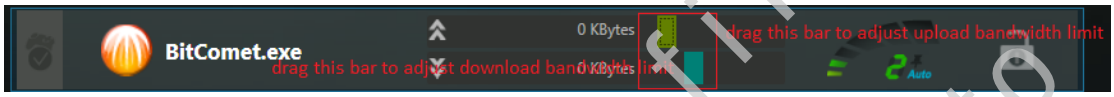
1. it means Browser group
2. it means Game group
3. it means Stream group

For Example, please see the picture show right, Google Chrome belong to Browser group,

Realtek confidential files
The document authorized to
Wistron
rate_mc_liu(wistron.com)
2020-07-14 13:27:13

Battle.net Update Agent belong to Game group, and PPS belong to Stream group.

We can limit the upload or download bandwidth easily by drag the upload limitation bar or download limitation bar



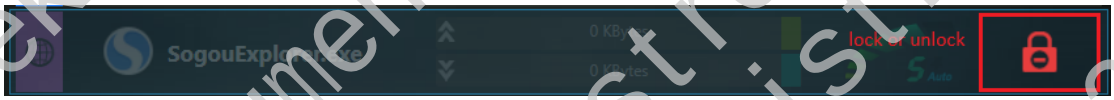
We can change priority by left click priority button

The priority will change from the following order:

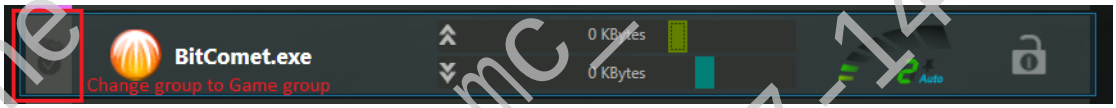
Highest->High-> Normal-> Low->Lower->Lowest

The priority icon was show below:

We can lock or un-lock bandwidth by left click lock button.

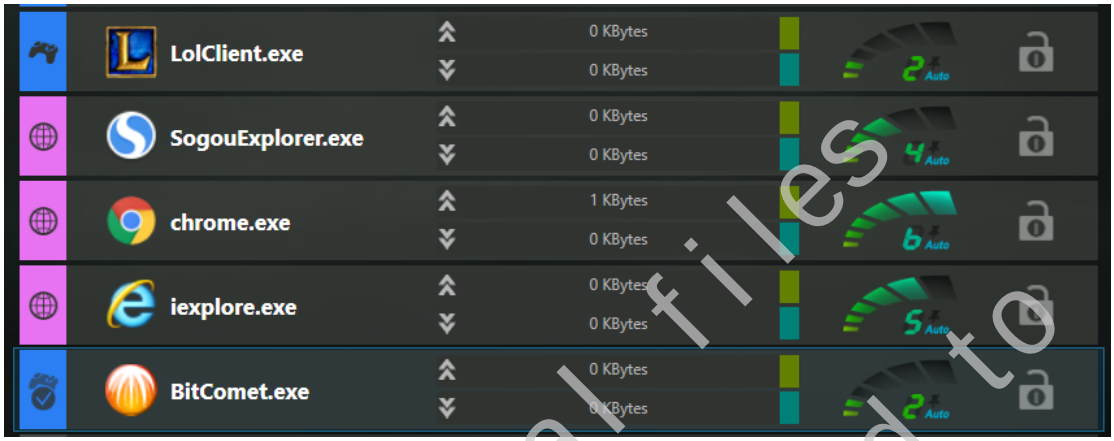


User can change the process was belonged to un-defined group to Game/Stream/Browser group by click group button in un-defined process row.



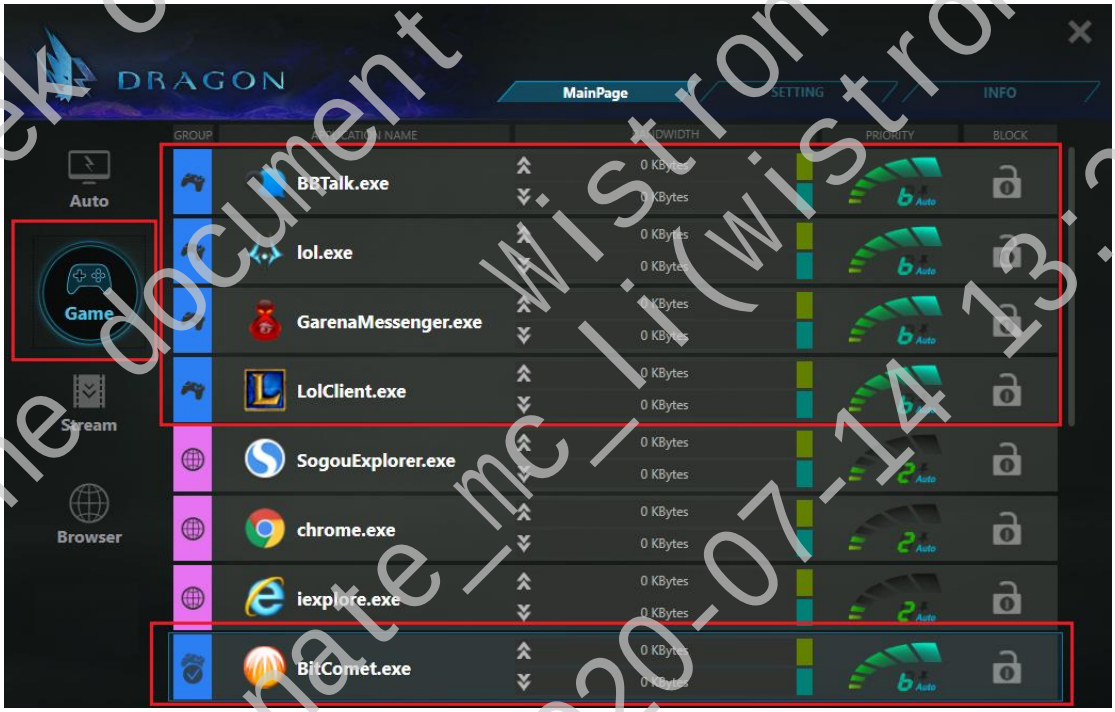
If user changed un-defined group process to Game/Stream/Browser group, the group color changes to blue/green/pink, the same as original game/stream/browser group.

Realtek confidential files
The document authorized to
Wistron
name_mc_hk(wistron.com)
2020-07-14 13:27:13



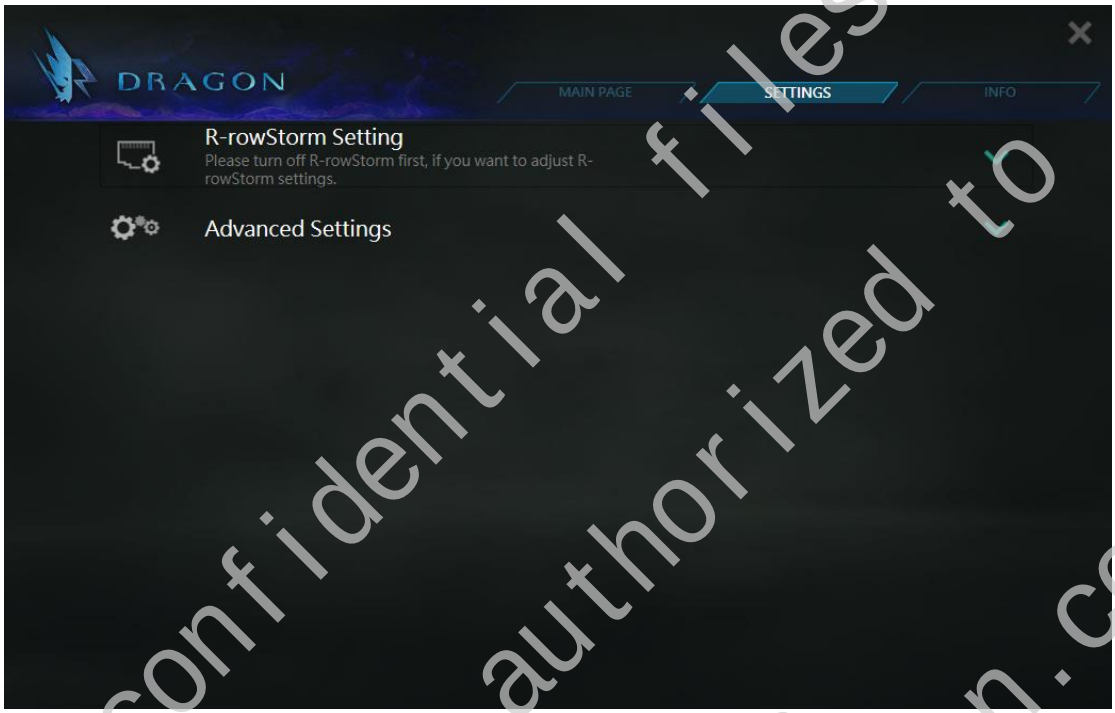
Because original un-defined process was changed to Game/stream/browser group by user, the priority assignment method will be changed by Game/stream/browser group policy. In other words, if user change mode to Game mode, this process will be assigned the highest priority (Level6), as you see in next page.

User also can change back to un-defined group by click group button again.



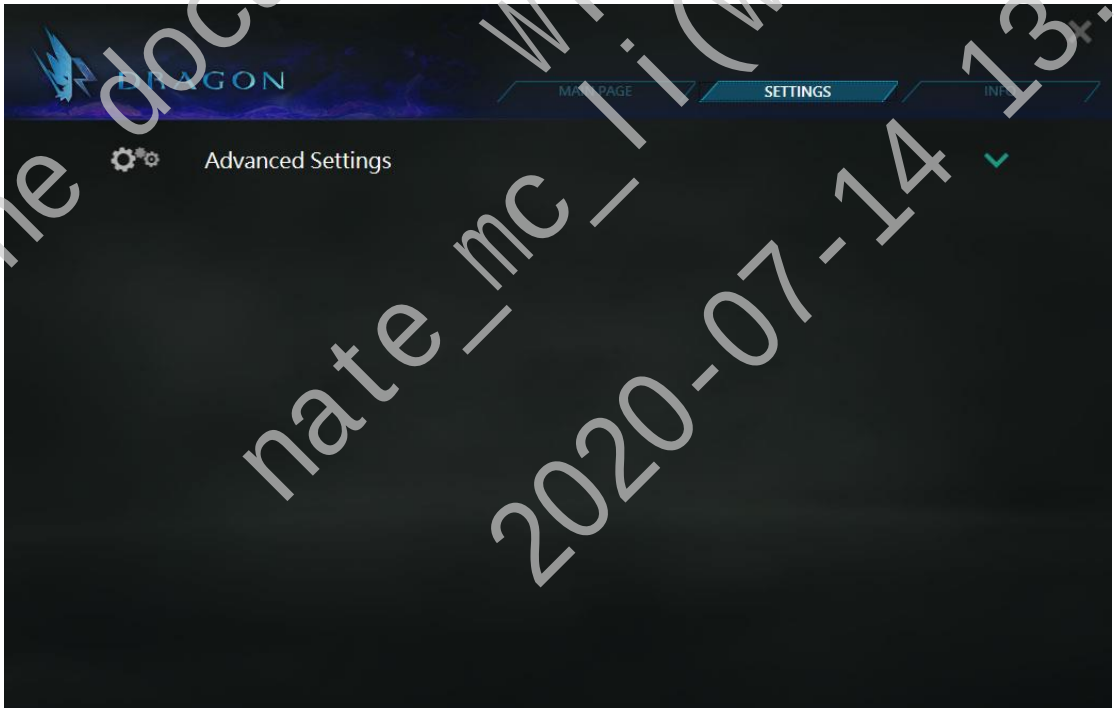
Realtek confidential files
The document authorized to
Wistron
nate_mc_li(wistron.com)
2020-07-14 13:27:13

2.2. SETTING tab



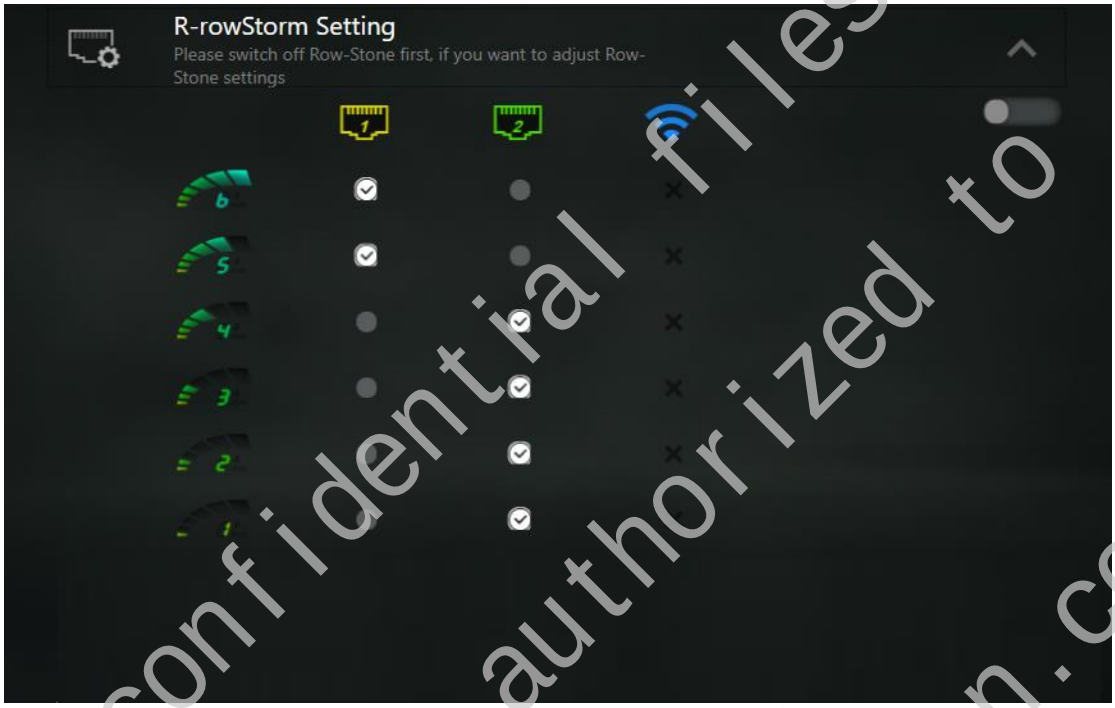
In this page, we have two setting area, R-rowStorm Setting and Advanced Settings.

If there is only one supported adapter on PC, the first item "R-rowStorm Setting" will be not displayed on this page.



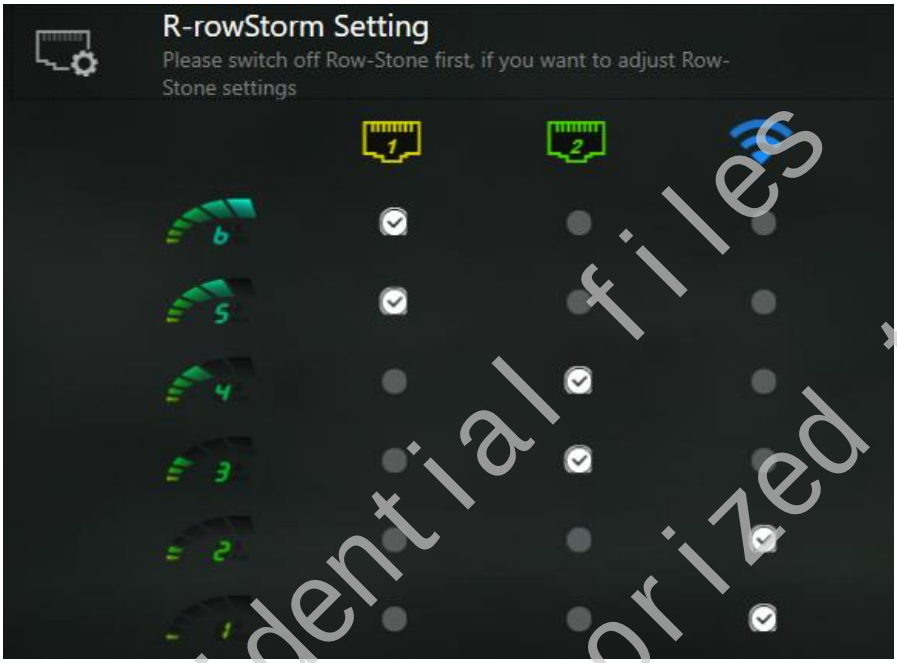
Realtek confidential files
The document authorized to
Wistron
nate_mc_li(wistron.com)
2020-07-14 13:27:13

2.2.1 SETTING tab – R-rowStrom Setting page

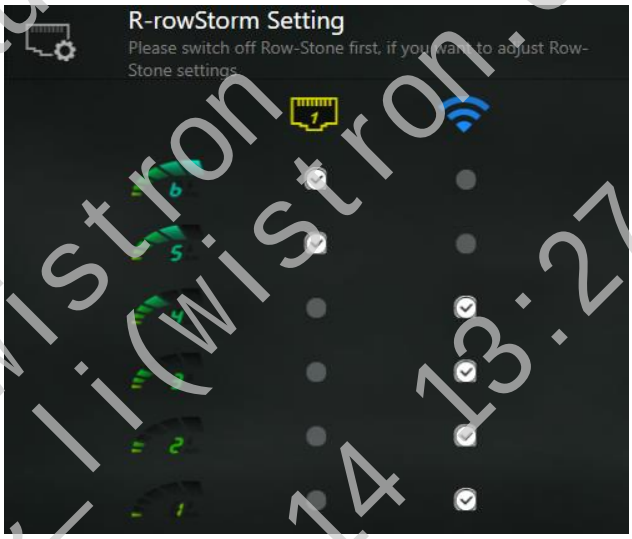


In this page, it will show the network adapter and priority binding status. As you see in previous page, that mean highest priority (Level6), and high priority (Level5) will send/receive packet via adapter1 Ethernet (Yellow color). The normal priority (Level4), low priority (Level3), Lower priority (Level2), and lowest priority (Level1) will send/receive packet via adapter2 Ethernet (Green color). Adapter3 Wifi (Blue color) cannot be selected and was disabled, because the status was disconnected, if the status change to connected, it will be change as enabled.

Realtek confidential files
The document authorized to
nate_mc_li(wistron.com)
2020-07-14 13:27:13

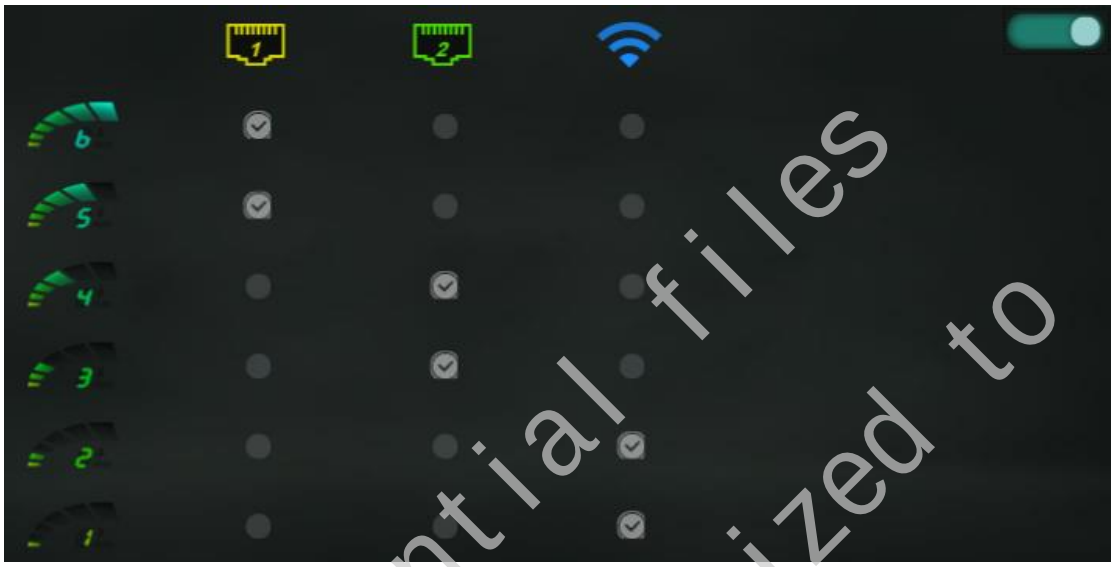


If there are only two supported adapters on PC, there is only two adapter icon show on this page.



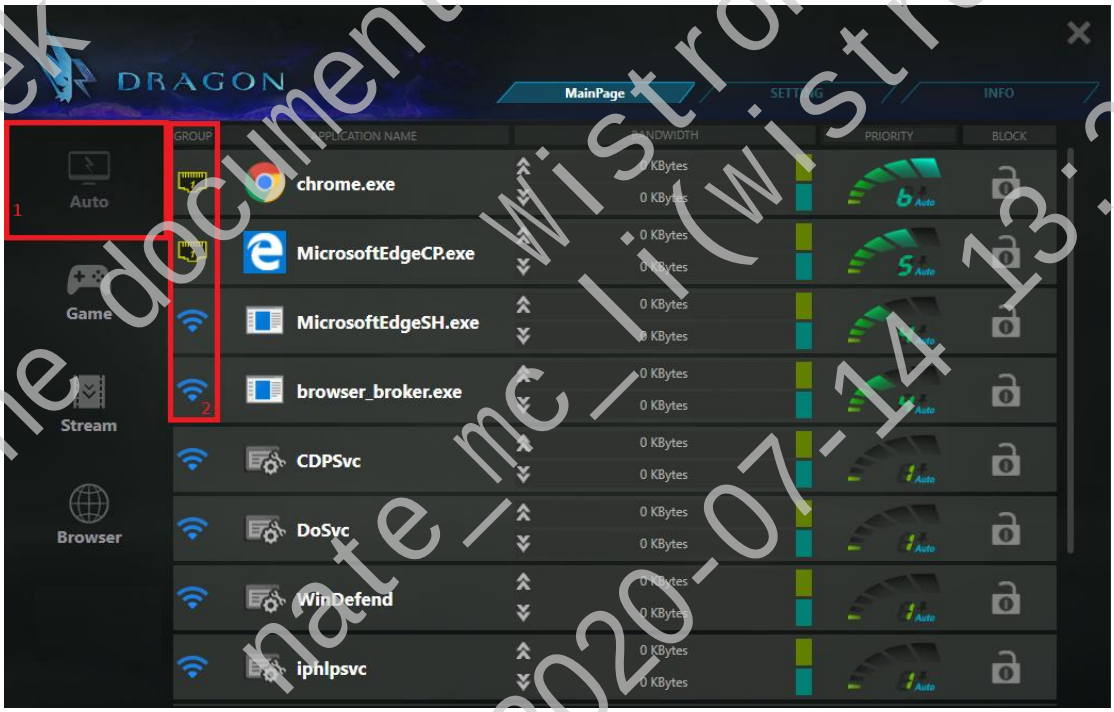
User can turn on R-rowStorm feature by switch on the button show right.

Realtek confidential files
The document authorized to
wistron
name_mc_li(wistron.com)
2020-07-14 13:27:13



As picture show above, if user switch on R-rowStorm feature, Adapter-Priority binding selection was locked, because we do not allow user change this binding relationship, it has high risk to get the packet dropped issue.

When R-rowStorm feature was enabled, the Auto mode was disabled. Because this two feature Auto Mode and R-rowStorm was conflicted.

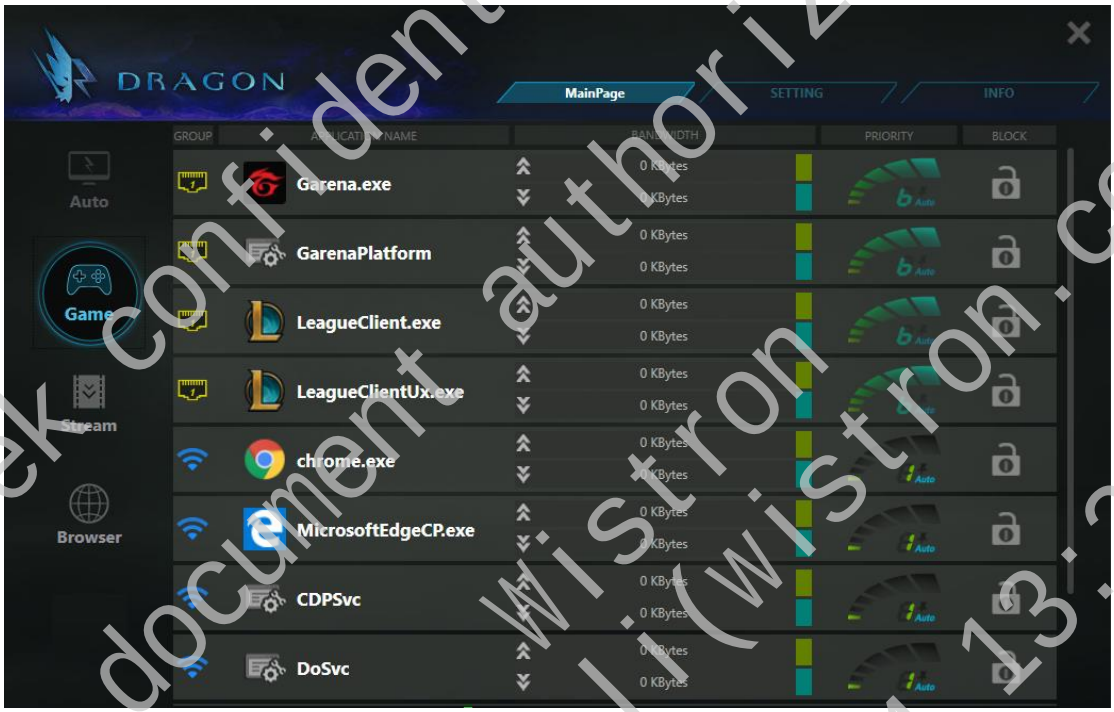


As the picture show in above, the group column was change to adapter column, because which network adapter channel user connect to internet is more important, we hide the group information and show on the network adapter. For example in below, Chrome.exe transmit

Realtek confidential files
The document authorized to
nate_mc_li(wistron.com)
Wistron
2020-07-14 13:27:13

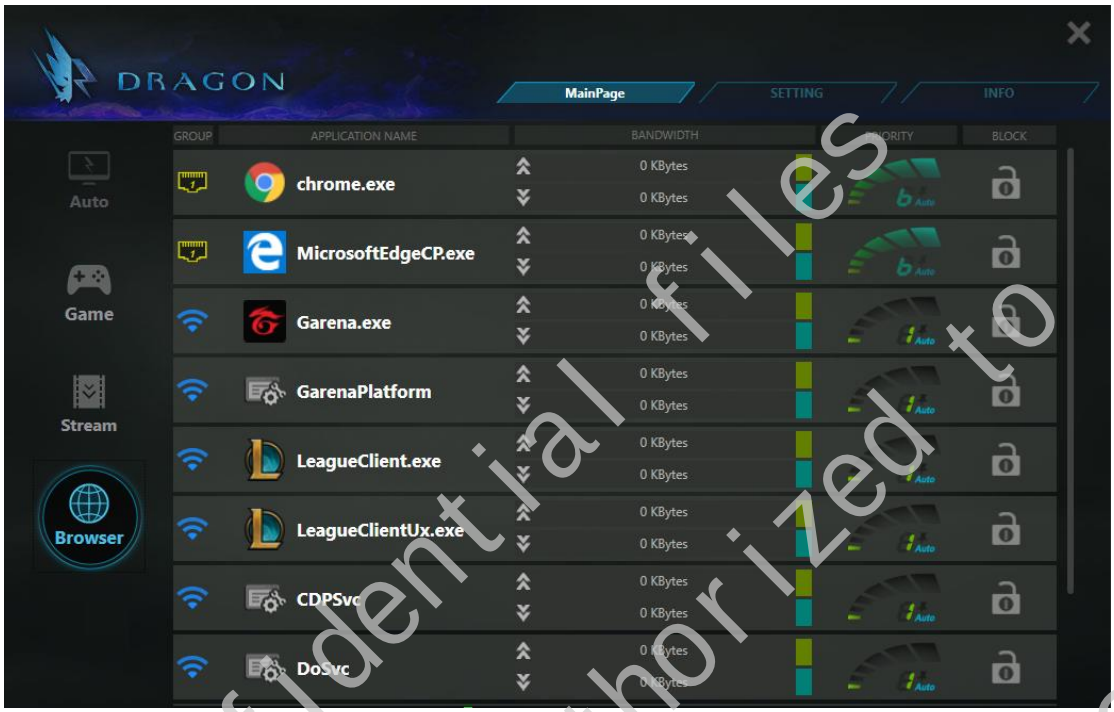
packet via ethernet network adapter1(Yellow color), and MicrosoftEdgeCP.exe transmit packet via ethernet network adapter1(Yellow color) too, but browser_broker.exe and MicrosoftEdgeSH.exe transmit packet via WIFI network adapter2 (Blue color).

Although we disable Auto mode, user still can select Game mode, Stream mode, and Browser Mode. If new mode is selected, the priority will changed at the same time, that mean the process will transmit/receive packet by new assigned adapter. Please get the example in next page.



As you see in above, we change to Game mode, and all gaming process will change to Highest priority, and transmit/receive packet via Adapter1 (Yellow color), and other process will transmit/receive packet via WIFI adapter (Blue color).

Realtek confidential files
The document authorized to
nate_mc_li(wistron.com)
Wistron
2020-07-14 13:27:13

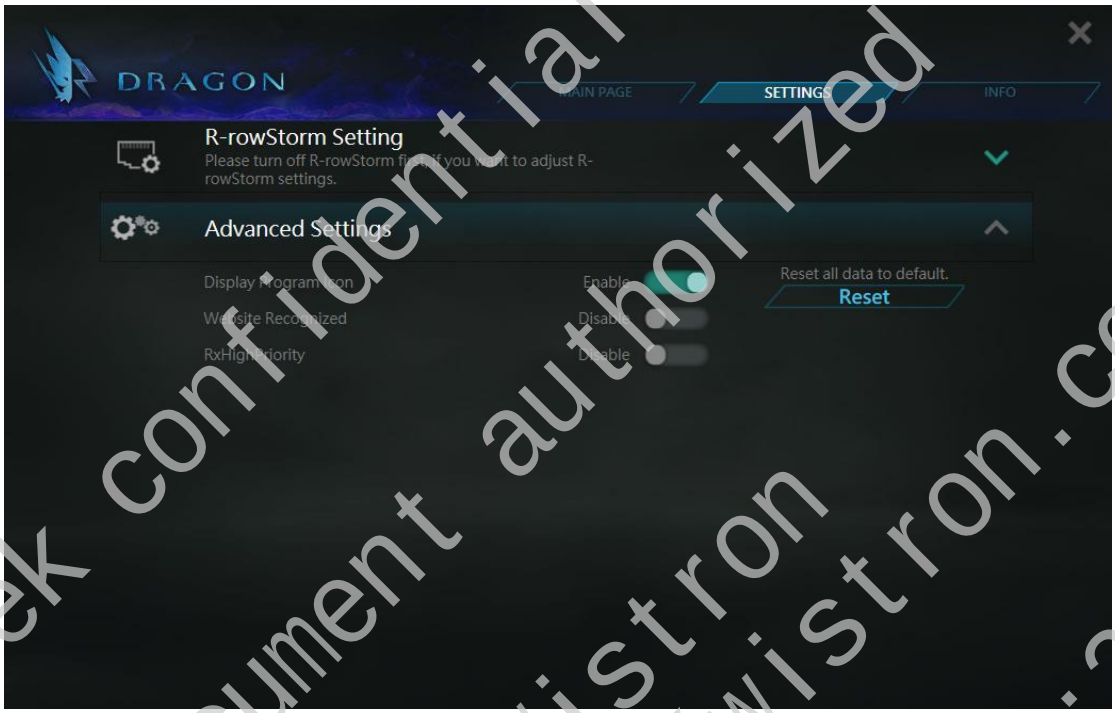


When we change to Browser mode, all gaming processes will change to lowest priority and transmit/receive packet via WIFI adapter (Blue color), but the processes belong to browser will transmit/receive packet via Adapter1 (Yellow color).

Realtek confidential files
The document authorized to
Wistron
nate_mc_li(wistron.com)
2020-07-14 13:27:13

2.2.2 Setting tab – Advanced Settings

User can open Advanced Setting page by click Advanced Settings button. In this setting page, user can enable/disable Display Program Icon, enable/disable Website Recognized feature, enable/disable RxHighPriority feature (we will introduce these three features later), and reset application list to default by click “Reset” button

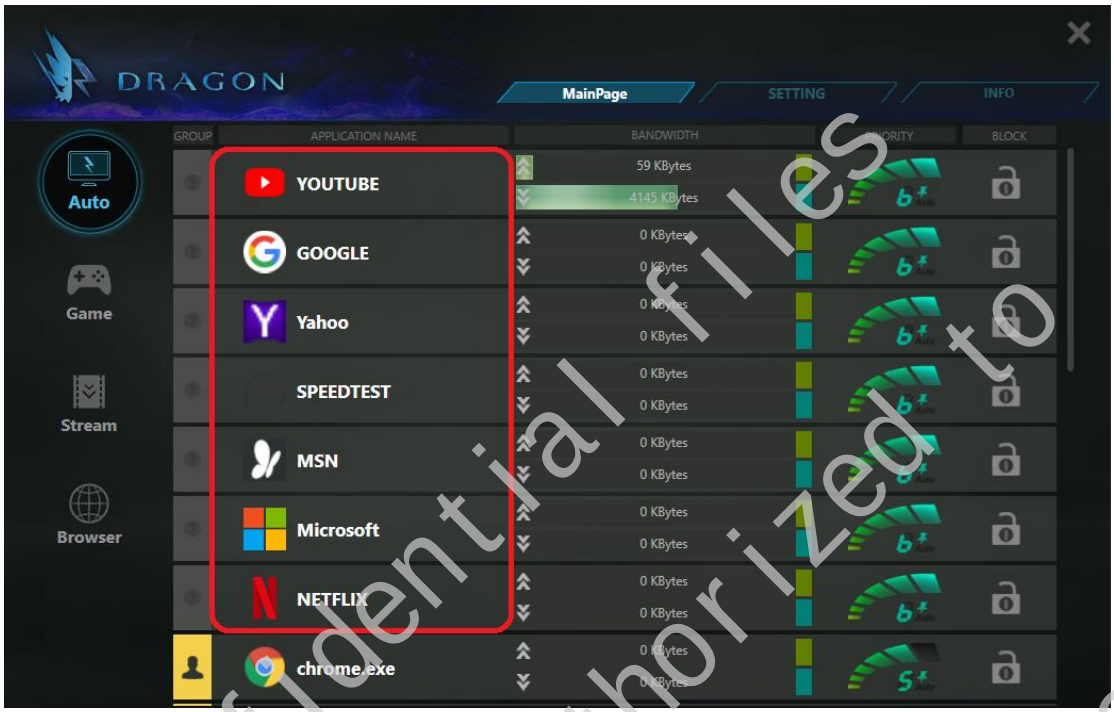


Application list shows applications with their icons. If user disable Display Program Icon feature, these icons will not be shown.

If user enable Website Recognized feature, Dragon will isolate more famous website to independent item from browser application, such as Google, Yahoo, Netflix, YouTube, etc. user can set priority level, adjust bandwidth limit, or block this website individually. Please refer to the picture in next page.

If user enable RxHighPriority feature, Dragon will speed up to receive highest priority packet. This feature only supported in Realtek 8125AG adapter.

Realtek confidential files
The document authorized to
Wistron
nate_mc_li (wistron.com)
2020-07-14 13:27:13

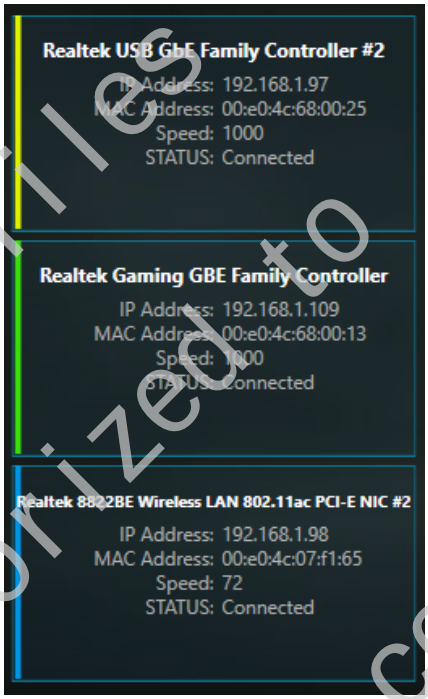


2.3. INFO tab

There are four sub-pages in INFO page. Each was SystemInfo page, Alarm page, Monitoring page, and About page. User can get the information of system, the statistical data of network in this page.

Realtek confidential files
The document authorized to
Wistron
nate_mc_li(wistron.com)
2020-07-14 13:27:13

2.3.1 INFO tab - SystemInfo



As the picture show above, if there are three network adapter in your computer and the status was connected, there are three adapter block, otherwise, there are only show the how many adapter was in your environment.

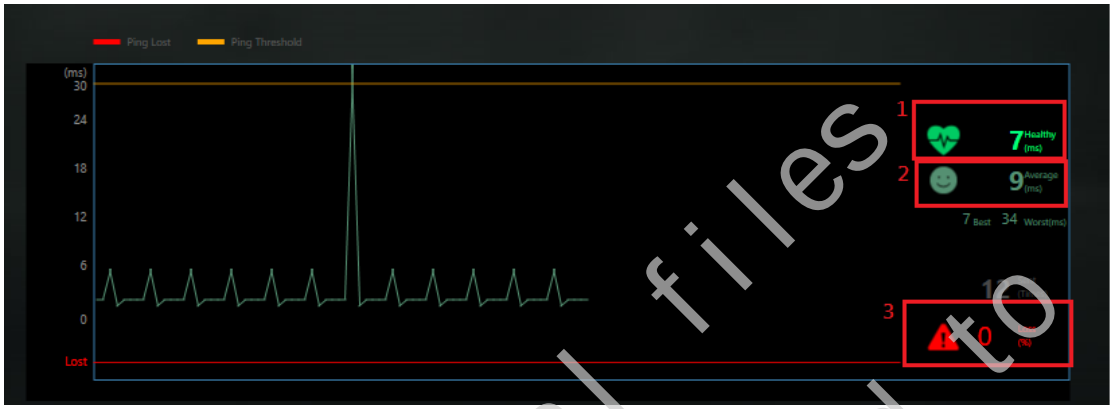
In this page, we also can get the hardware information about CPU model, RAM model, VGA model, and the operating system version. We also show the network maximum value in here.

2.3.2 INFO tab - Alarm

In Alarm page, Dragon provide Advanced Alarm Message feature to monitor and record network quality.

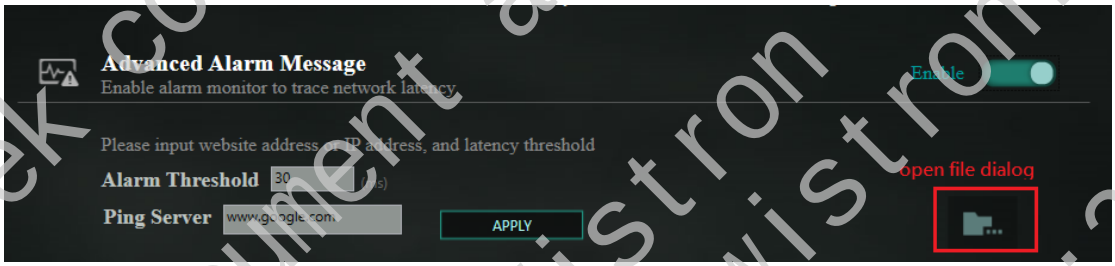
In the above picture, user can set alarm threshold, and set tracing server by themselves. The information will show on E.K.G diagram.

Realtek confidential files
The document authorized to
Wistron
nate_mc_li(wistron.com)
2020-07-14 13:27:13



1. It is immediate ping latency.
2. It is average ping latency.
3. It is ping lost percentage information.

If user enable this feature, it will monitor network quality of user's platform continuously until disable. Dragon will save this information. If user want to check previous network quality, they can click open file dialog to open previous data.



Realtek confidential files
The document authorized to
Wistron
nate_mc_li(wistron.com)
2020-07-14 13:27:13

2.3.3 INFO tab - Monitoring

In Monitoring page, there are statistical data about instant network traffic, show below.

Or the top5 processes (network download/upload usage).

Realtek confidential files
The document authorized to
Wistron
nate_mc_li(wistron.com)
2020-07-14 13:27:13

2.3.4 INFO tab - About

In this page, it shows information of "Version", "Copyright", and our website. User can update Dragon database by click “Update button”.

Realtek confidential files
The document authorized to
Wistron
nate_mc_li(wistron.com)
2020-07-14 13:27:13