HTTPServer plugin for Miranda-IM r1.1.0

BG-Monster

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Contents

1 Introduction

HTTPServer plugin for Miranda is an integrated web server service for sharing files easily using Miranda-Im. This plugin mainly focuses on security with some advanced sharing settings.

Main Features:

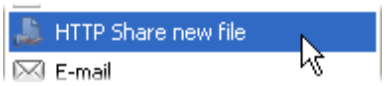
- Speed control !
- External IP detection. See topic 5 in FAQ
- Set IP-based sharing control rules.
- Set the number of times a file can be downloaded.

- You do not need to move a file to a www root to share it.
- Interface to allow other plugins to share files.
- You can change the default port used.
- Uses popup plugin if installed to show major HTTP server events.
- HTTP Server usage statistics.
- Basic MIME support (support Apache mime.types file syntax). See topic 6 in FAQ
- Resume and partial download feature : you can know use it with download accelerators !!!
- Log to file.

Note: Suggestions and contributions are welcome. Please report to the contact section.

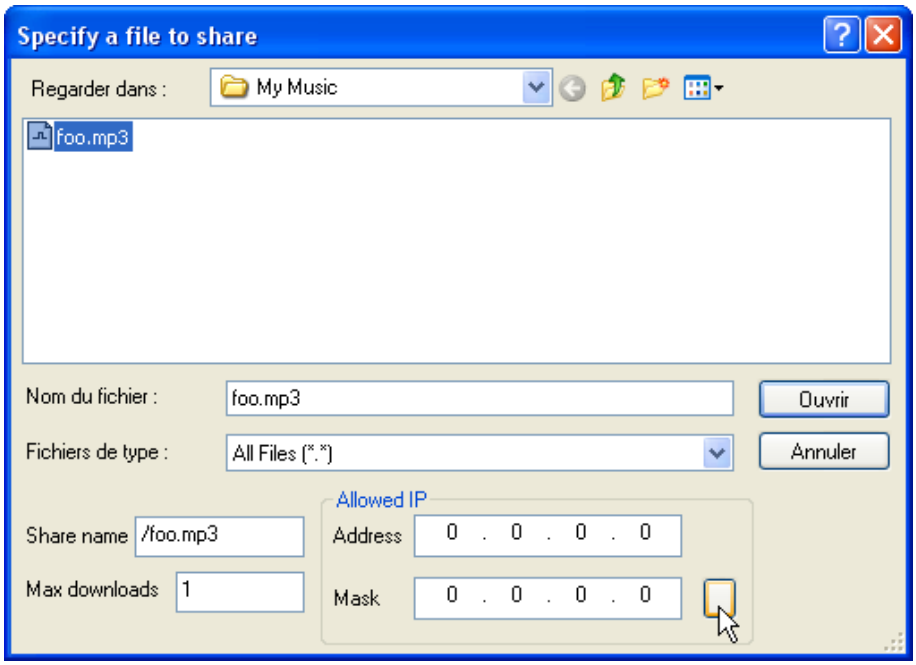
2 How to use ?

2.1 Create new shares



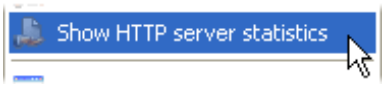
Once the plugin have been installed, you will find an **HTTP Share new file** entry in the user menu. Simply click this entry to open the new share window. Select the file you want to share or *drag&drop* it in the lower part of the windows and it will set automatically the **Share name**. You can modify it afterwards if you want. You can also set the **Max downloads entry** which define the number of time a share can be downloaded (-1 means unlimited downloads). A share that reach the 0 download limit is automatically removed from the share list. Please note that only completed downloads are taken into account. Each time the server is accessed, you can see a popup windows with the IP address of the client and the file he asks for. If you click on this popup, it will open the statistics window.

You can set some IP-based rules for restricting access. If Miranda-IM manages to find the IP of the remote user from the instant-messaging protocol (sometimes the found IP may be incorrect though), it will fill **Allowed IP address** and **Allowed IP Mask** automatically to provide exclusive access (255.255.255.255 mask with the IP of the peer). If it can't find the IP of the user, no restriction will be applied (0.0.0.0 mask with null IP address). The little button enables you to switch between these two masks (0.0.0.0 and 255.255.255.255). You can see the question 2 in the FAQ section for further informations. When everything is set-up, simply press **Open** and the link will be passed in the dialog windows.

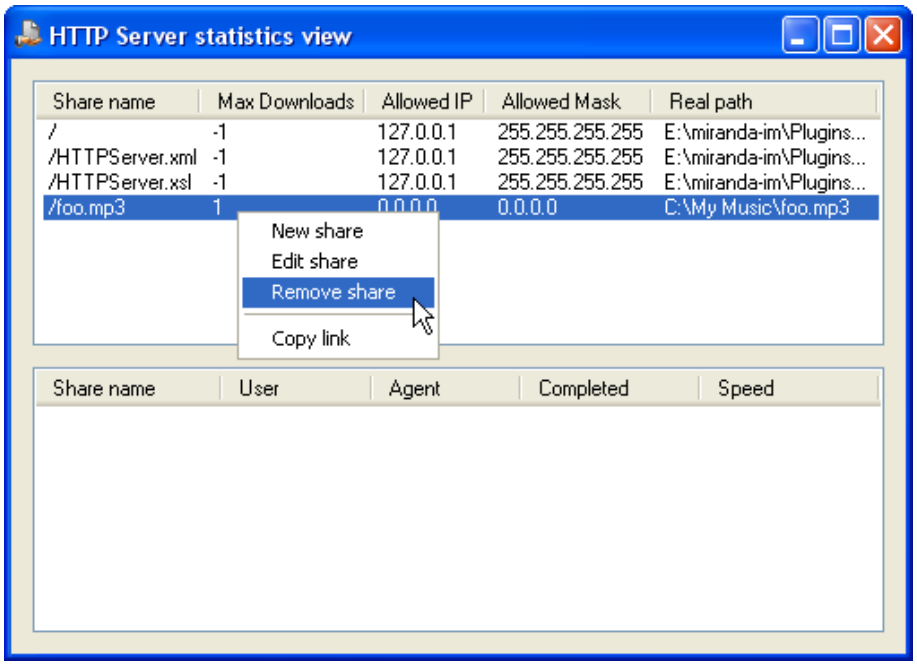


2.2 Managing the server

The server is set-up to display the share list on `http://127.0.0.1/`. You can access this list only from the computer where the plugin is installed. The three shares you can see here are *system* shares. If you remove them, you won't be able to see this share list anymore.



You can manage shares through the **Show HTTP server statistics** entry in the Miranda-IM main menu (unless you unchecked the box **Show HTTP server statistics** in the option tab). In this window, you can see the list of current shares and some server usage statistics. If you want to remove a share, simply right-click on it and select **Remove share**. You can also add some new shares from this window with the **New share** entry (or *drag&dropping* a file in this window) and edit previous ones with **Edit share**. The **Copy link** entry enables you to paste the share link to the clipboard.



2.3 Server configuration

You can configure HTTP server in the option tab in Miranda-IM option panel. The **Enable/Disable HTTP server** and **Show HTTP server statistics** checkboxes enable you to remove HTTPServer entries from main menu for those who don't like long menus. If you don't like popups either, you can disable them with the **Show popups** checkbox. You can also enable the logging feature of the server with the **Write log file** checkbox. If you do so, it will create a `HTTPServer.log` file in the plug-in directory where all requests are dumped. You can open this log file with the **Open log** button. If you don't want to use all your upload bandwidth, you can set-up the maximum download speed in the **Maximum upload speed**. To disable speed control (unlimited bandwidth), simply put -1 in the **Maximum upload speed** field. Finally, if you want the speed control to be disabled when your status is away or N/A, you can check **No control when Away/NA**.

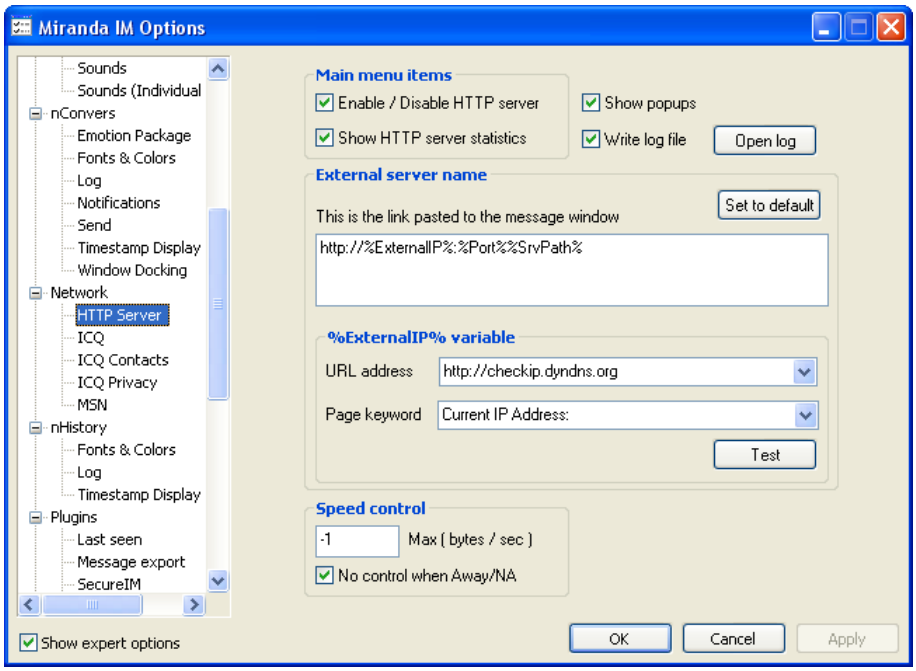
The **External server name** let you configure the link format string. It defines the way HTTPServer build the link to be passed in the dialog window when creating a share. Four variables are available:

- `%LocalIP%` is your local IP address (see question 4 for troubles and information)
- `%RemoteIP%` is your external IP address (see question 4 for troubles and information)
- `%Port%` is the server port (80 by default or the one set-up manually, see question 1)
- `%SrvPath%` is the file name you entered when you have created a new share (it already includes the / at the beginning of the path, that's why default

link is `http://%RemoteIP%:%Port%/%SrvPath%` and not `http://%RemoteIP%:%Port%/%SrvPath%`)

You can reset the link to the default with the button **Set to default**.

The two boxes called **URL Address** and **Page keyword** enables you to fine tune the web-based IP detection. Indeed, first one is the URL of the page where your IP address should be written and second one is a significant string in HTML source that HTTPServer will use to find the IP address in page. Please go to question 5 for more details.



The **Disable HTTP server** entry from main menu enables you to activate or deactivate the server on the fly. Note that it is not like disabling the plug-in : all HTTPSever functions will remain available but client won't be able to connect to the server. Please note that this setting will be taken into account without having to restart Miranda-IM and the state of HTTP Server is saved for next sessions.

3 Frequently asked questions

You will find in this section some common issues with HTTP Server. Feel free to contribute to this section.

1. How do i change the default port ?

Go to the Miranda-IM option windows and select **Network** tab. You can now set the **Incoming connection** parameters for the HTTP Server.

2. What are these IP mask ?

IP masks enable you to fine tune the access rules of your shares. It allows you to make a share available for a specific network (i.e. a specific range of IPs). For exemple, if you use 192.168.0.1 as **Allowed IP address** with 255.255.255.255 mask, the only client enable to download the share will be 192.168.0.1. For the same **Allowed IP address**, if you use 255.255.255.0 mask, all clients from 192.168.0.0 to 192.168.0.255 will be able to download the share. To determine wether a client is allowed to download or not, the server makes binary AND of client IP and mask and compares it with the **Allowed IP address**. For example, 192.168.0.157 AND 255.255.255.0 $=$ 192.168.0.0 : the client is allowed to download.

3. Running HTTPServer behind NAT (Windows ICS for example)

If you're connected to Internet behind a router you'll have to forward the server port to the computer where HTTP Server is installed. The most common situation is a computer connected through windows Internet connection sharing. To add the mapping that will allow HTTP requests to be passed to an internal host:

1. Double-click Network Connections in Control Panel.
2. Right-click the Internet connection (which is also the connection where ICS is enabled), and then click Properties.
3. On the Advanced tab, click Settings.
4. In the Services box, check to see if there is an Web Server entry (probably already set-up for port 80). If so, click this service filter, and then click Delete.
5. Click Add.
6. Fill in the Service Settings form as follows:
   - Description of Service: HTTPServer
   - Name or IP: ¡IP address or name of the computer where HTTPServer is running¿
   - Protocol: TCP
   - External Port number for this service: $<$the port set-up for HTTPServer$>$ (80 by default)
   - Internal Port number for this service: $<$the port set-up for HTTPServer$>$ (80 by default)
7. Click OK to complete the configuration, and then click OK to exit the Advanced Settings dialog box.

ICS should now be configured to allow clients on the Internet to connect to the internal HTTP server.

4. Why the given download link doesn't work ?

Sometimes HTTP Server can't determine your Internet public IP address and use your local network private IP instead with %LocalIP% variable (it happens when you have multiple interfaces). You can change the link with your public IP instead of your private one. You can find it here or there. Since 1.0.0, a web based external

IP detection has been implemented with the %RemoteIP% variable now used in the default link. You can also provide any link format string in the option tab where you can put a DNS from services like DynDns or any other custom link.

5. How does the IP Detection work and how can i use it ?

The IP Detection algorithm is very simple : it grabs the page at the given URL and look for the keyword you specified in the page source. Then, if it manages to find it, it tries to read an IP address immediatly after the keyword (if the keyword is void, it looks for an address immediatly at the begining of the source). A set of URL where you can find your IP address has already been set-up in the option panel but if you find a better one (for exemple a status page in your router web-server), simply browse it in your favorite browser, watch source and get a significant part of text before the IP address. Then you can use it putting the URL and the part of the source in the option panel. You can play with the **Test** button to check your settings. Please note that the algorithm is often smart enought to find the IP address without any keyword. However, it is much more efficiant if you specify one.

6. Basic MIME support

To be more compatible with all browser, HTTPServer now support MIME (a basic implementation though). It will determine the MIME type of a share with its extension. If you experience problems with MIME type recognition, you can edit the HTTPMimeTypes files (from the Apache project). The syntax is <type/subtype> <extension>*.

7. What are all these files in the archive ?

The plugin is based on four *main* files :

- HTTPServer.dll : It is the core of the plugin
- HTTPServer.xml : It is the xml file where the plugin stores the list of shares with there properties (number of downloads, IP, ...)
- HTTPServer.xsl : It is a style sheet to format the list of share when you call http://127.0.0.1/. You can customize it if you know what you do.
- HTTPMimeTypes : it is the MIME types file. It establish a map between MIME types and files extensions. This files is from Apache sources and can be customized if you need to.

The archive includes two other files : HTTPServer.pdf is this documentation (really ?!) and m_HTTPServer.h is an header file for developers who want to use sharing capabilities of HTTPServer. The plugin will also create HTTPServer.log in the plugin directory : this is the server log.

4 Contact

You can download the latest HTTPServer plugin release at Miranda-Im download page here.

Feel free to contact us for suggestions or contribution :

- Kennet_N@ofir.dk (author of HTTPServer plugin)
- frenchzed@hotmail.com (author of this document)