

TalkTalk Super Router (Huawei HG 635) Port Forwarding

What's Port Forwarding?

Port forwarding is used when a certain program, server, games console or device requires that a specific signal is routed through. For example, a wireless CCTV camera may require a signal on a specific port to be routed through to that device when you try to connect externally from a device such as a Smart Phone or Tablet. Some programs require a port is open as they will listen on this custom port for communication channelled directly to them.

These programs are too numerous to mention here, so we recommend you first take a look at <http://portforward.com/>

This is a vast online resource of routers, ports and applications that use them. You can often find specific information for a particular program, and how to open the port that is required.

Remember also, if you are setting up port forwarding to a physical device, such as another PC or wireless camera, and this has an IP address provided via DHCP from the router, when the router is rebooted, the internal address of the device may change. This can upset the port forwarding rules you have set in the router, and stop it from working. To avoid this, you can 'reserve' an IP address for that specific device.

NOTE: Once the device has been set up for external access it can be 'seen' from a location outside of your LAN, the TalkTalk HG635 Router does not allow 'Loop Back' access so you will need to access the device only from an external network when using the external internet address. Most routers prevent 'Loop Back' as an additional security measure. E.g. <http://myhost.dyndns-web.com:8150> will not access your device from the LAN which hosts the device!

If you have a Smartphone temporarily disable the WiFi and turn on Mobile Data which will enable you to test access to the device via your mobile phone network. Don't forget to return the Smartphone settings back to avoid excessive data charges.

Accessing the HG635 Router

Log into the router by typing 192.168.1.1 in your internet browser. When prompted, enter the user name and password, the default user name is 'admin' and the default password is 'admin'.

Remotely Accessing Camera

Using the technology of Dynamic DNS, Remote Access allows you to remotely access your computer, DVR, webcam, camera system, and other devices using an easy to remember custom hostname. You will need to subscribe to a DDNS provider first. There are a number of free DDNS services available that automatically deal with dynamically changing IP addresses.

Simply install the update client to monitor your device, and your hostname will update whenever its IP address changes. In this example DynDns is used to gain remote access, even when the external IP address changes.

The screenshot shows the 'Internet Services' configuration page for a TalkTalk Super Router. The left sidebar contains a menu with 'Internet Services' selected. The main content area is titled 'Internet Services' and includes a sub-section for 'Dynamic DNS (DDNS)'. The configuration fields are as follows:

- Enable DDNS: ☒
- Status: Synchronized
- Provider: (with a dropdown arrow)
- Host name:
- Domain name:
- Username:
- Password:

A 'Save' button is located at the bottom right of the configuration area. Below the DDNS section, there is a link for 'Simple Network Time Protocol (SNTP)'.

To reserve an IP address

Within your Home/Local Network IP addresses are normally assigned automatically as devices are connected to the network, which means that you need to assign/reserve a Static IP Address for your device.

Select 'Home Network' from the top menu bar. Select 'LAN Interface' from the Home Network Section. Under DHCP reservation, click 'Create new static IP address'. Select your device or enter the device details and Save the settings when completed.

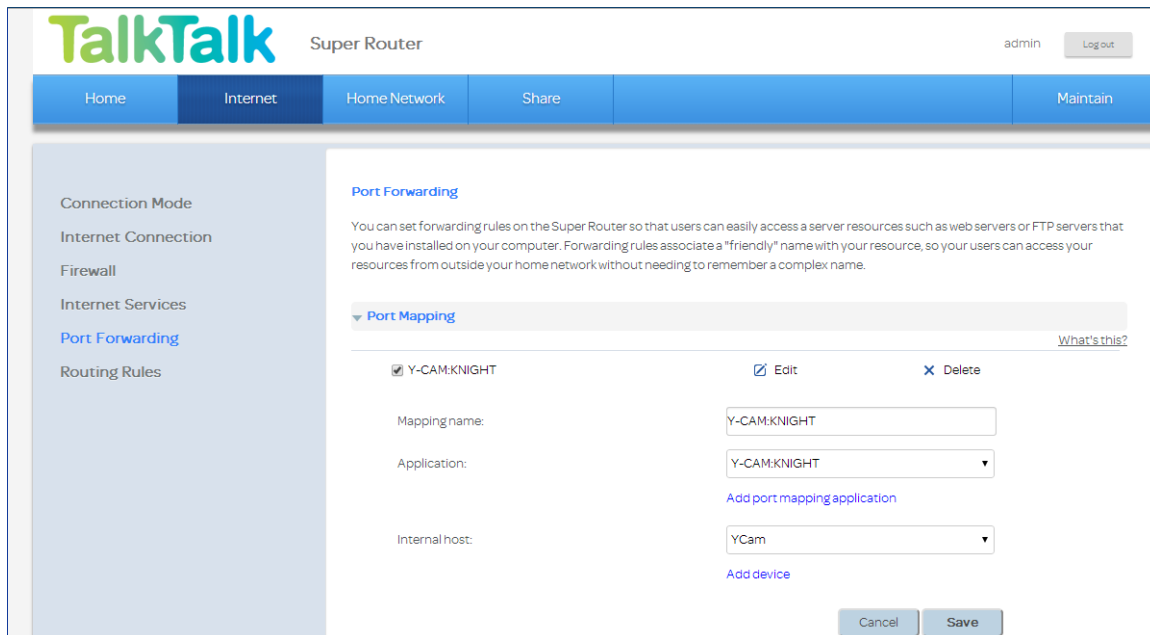
The screenshot shows the 'LAN Interface' configuration page for a TalkTalk Super Router. The left sidebar contains a menu with 'LAN Interface' selected. The main content area is titled 'Network Interfaces' and includes a sub-section for 'DHCP Reservation'. The configuration fields are as follows:

- Use this address: ☒ 00:19:70:0F:27:DA (with 'Edit' and 'Delete' links)
- Enable this rule: ☒
- IP address:
- MAC address:

An 'Add device' link is located below the MAC address field. 'Cancel' and 'Save' buttons are at the bottom right.

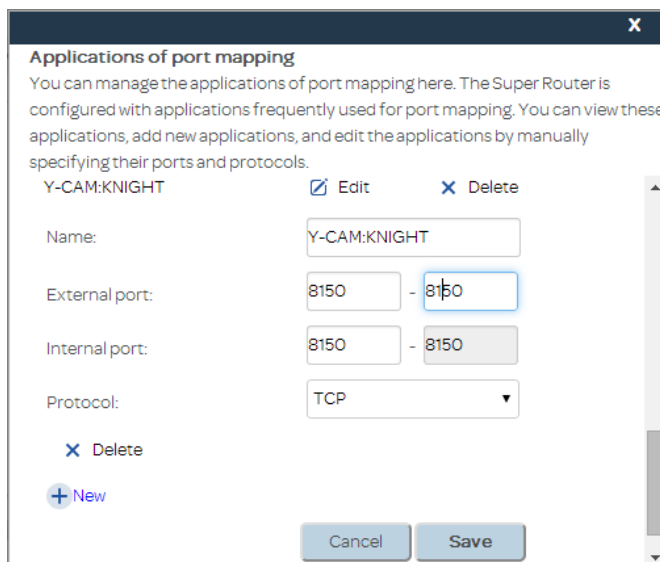
Port Forwarding

Select 'Internet' from the top and then select 'Port Forwarding'. Under Port Mapping, select 'New Port Mapping'



The screenshot shows the TalkTalk Super Router web interface. The top navigation bar includes 'Home', 'Internet', 'Home Network', 'Share', and 'Maintain'. The 'Internet' tab is selected. On the left sidebar, 'Port Forwarding' is highlighted under 'Internet Services'. The main content area is titled 'Port Forwarding' and contains a description of forwarding rules. Below this, there is a 'Port Mapping' section with a table showing a single entry: 'Y-CAM:KNIGHT'. The entry has checkboxes for 'Edit' and 'Delete'. Below the table, there are input fields for 'Mapping name', 'Application', and 'Internal host', each with a dropdown menu. The 'Mapping name' field contains 'Y-CAM:KNIGHT', the 'Application' dropdown is set to 'Y-CAM:KNIGHT', and the 'Internal host' dropdown is set to 'YCam'. There are links for 'Add port mapping application' and 'Add device'. At the bottom right, there are 'Cancel' and 'Save' buttons.

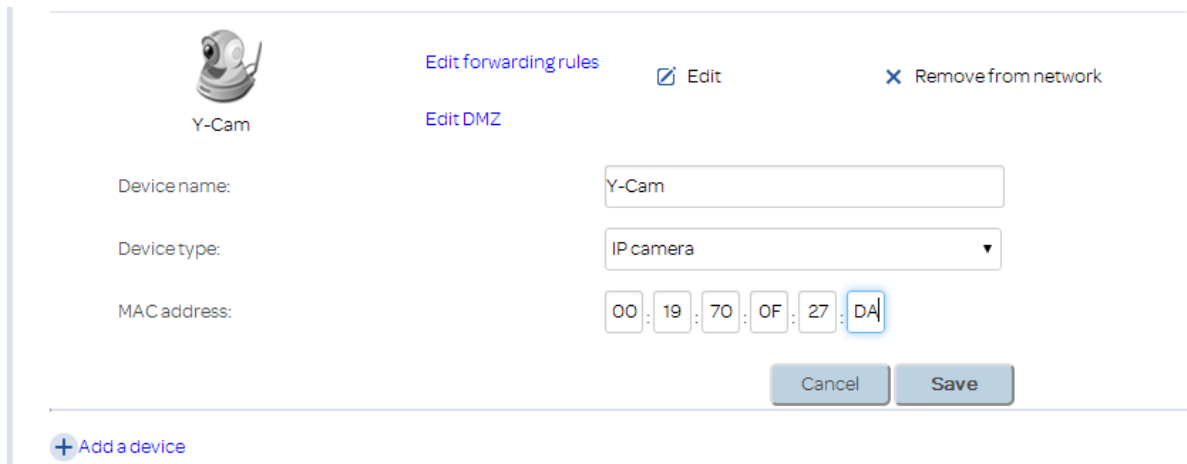
Enter a name for this rule in the Mapping Name field. Choose your application and if your application is not listed, click 'Add port mapping application'. At the bottom of the application list is an option for 'New'. Enter the name of the application, and enter the start and end ports you wish to open. Keep the number of External ports to a minimum, in this example only one port is opened, 8150. The internal port setting should be kept the same as the external port if possible; this is to avoid possibility of conflicts. Then click Save.



The screenshot shows a dialog box titled 'Applications of port mapping'. It contains a description of the application management feature. Below the description, there is a table with one entry: 'Y-CAM:KNIGHT'. The entry has checkboxes for 'Edit' and 'Delete'. Below the table, there are input fields for 'Name', 'External port', 'Internal port', and 'Protocol'. The 'Name' field contains 'Y-CAM:KNIGHT', the 'External port' field contains '8150', the 'Internal port' field contains '8150', and the 'Protocol' dropdown is set to 'TCP'. There are links for 'Delete' and 'New'. At the bottom, there are 'Cancel' and 'Save' buttons.

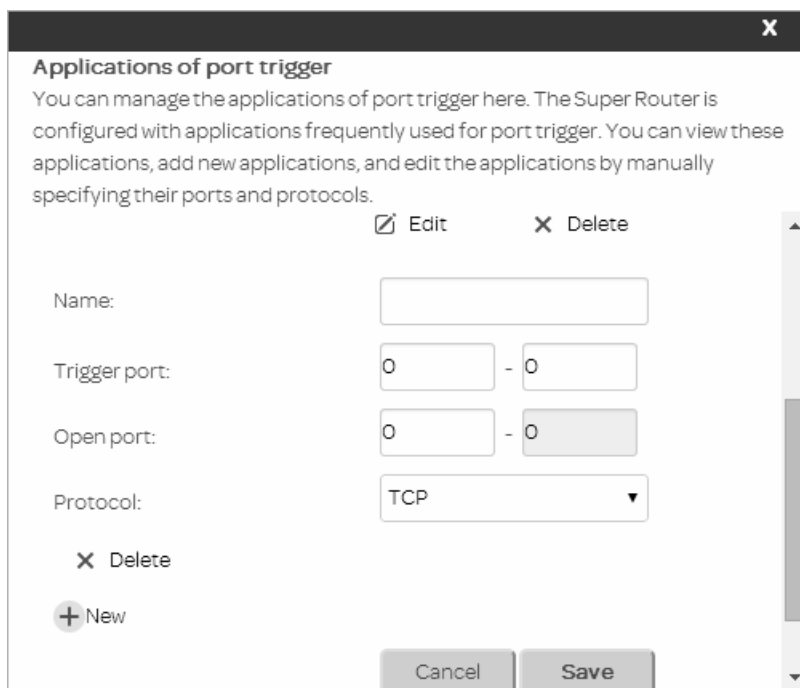
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You can then specify a device an internal host. You can choose from any previously connected devices in the list, or Add a new device.



The screenshot shows the configuration page for a device named 'Y-Cam'. At the top, there is a camera icon and the name 'Y-Cam'. To the right of the name are two links: 'Edit forwarding rules' and 'Edit DMZ'. Further right are two buttons: 'Edit' (with a pencil icon) and 'Remove from network' (with an 'X' icon). Below the name, there are three fields: 'Device name:' with the value 'Y-Cam', 'Device type:' with a dropdown menu showing 'IP camera', and 'MAC address:' with a field containing '00:19:70:0F:27:DA'. At the bottom right are 'Cancel' and 'Save' buttons. At the bottom left is a '+ Add a device' link.

If you only wish to open a port, you can select 'New Port Trigger' and enter the port details. However, this is not required for the Y-Cam.



The screenshot shows a dialog box titled 'Applications of port trigger'. It contains a description: 'You can manage the applications of port trigger here. The Super Router is configured with applications frequently used for port trigger. You can view these applications, add new applications, and edit the applications by manually specifying their ports and protocols.' Below the description are two buttons: 'Edit' (with a pencil icon) and 'Delete' (with an 'X' icon). There are four fields: 'Name:' with an empty text box, 'Trigger port:' with two input boxes containing '0' and a '-' sign, 'Open port:' with two input boxes containing '0' and a '-' sign, and 'Protocol:' with a dropdown menu showing 'TCP'. At the bottom left is a '+ New' button. At the bottom right are 'Cancel' and 'Save' buttons.

Always remember to 'Save' when you add or change any details.