



# GeneFlash Network

Gel Documentation System

## Network Configuration Guide

### Introduction:

Your network GeneFlash system is capable of saving images to either a USB memory stick or to a nominated drive on a remote PC. Before configuring the system to save to a remote PC, install the GeneFlash system following the instructions in the **GeneFlash Installation and Capture Guide**, ensuring that the system works and that you can save images to a USB memory stick.

### Network capture overview:

Networked GeneFlash works by communicating with a server program, 'GeneFlash Server', that runs on the host PC. This server program monitors the network and maintains communication with any networked GeneFlash systems on your network. The 'GeneFlash Server' program is used to monitor the status of networked GeneFlash systems and controls where on the PC images are saved.

Important: The 'GeneFlash Server' program must be left running so that network GeneFlash systems can save images over the network.

### Installing the GeneFlash Network Software on the host PC:

Insert the CD labelled GeneFlash Network Software into a CD drive. The disk should auto-run. Follow the onscreen instructions.

### Configuring the GeneFlash systems for network operation overview:

Before a networked GeneFlash can be used to save images over the network it must be configured i.e. told the IP address of the host computer and any required network security settings. To configure the system a program, 'GeneFlash Config' is run on the host PC. This generates a file 'Network.cfg' that is transferred to the GeneFlash system via the USB memory stick.

### Configuring for networks:

Run the program 'GeneFlash Config', from either the desktop icon or "Start... Programs... Syngene... Networked GeneFlash.. .GeneFlash Config".

If your network uses DHCP (Dynamic Host Configuration Protocol) to allocate IP addresses then leave the DHCP checkbox checked. Ideally the host computer should be set to a static IP address, so that this will remain constant, but the GeneFlash system itself will use DHCP.

If not then your system administrator will need to allocate you an IP address for the GeneFlash system and to fill in the IP address, Netmask and Gateway fields appropriately.

1) Installation

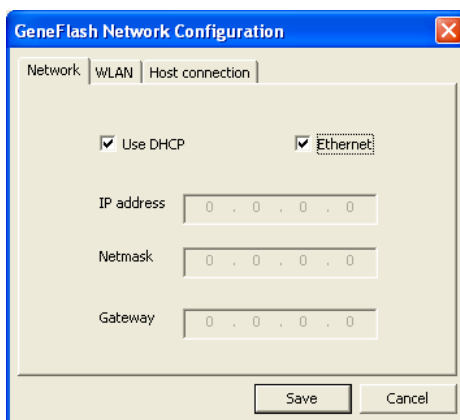
2) Configuring for network operation overview

3) Configuring for networks

### Configuring for networks:

Networked GeneFlash can support either WiFi or cabled networks.

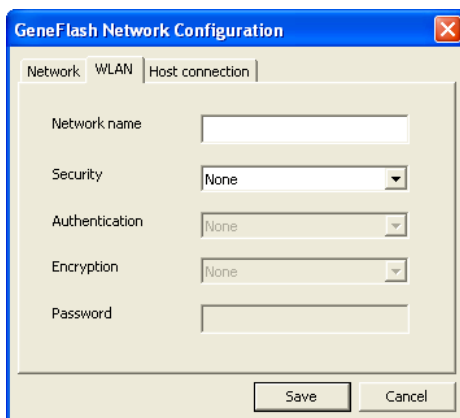
If your system uses 'cabled' Ethernet check the 'Ethernet' check box. If the network connection is via WiFi leave this unchecked.



### Wireless Configuration:

If you have chosen a wireless connection the WLAN tab will become enabled. This tab allows you to set up the wireless network settings, including security, authentication and encryption.

We recommend that your system administrator fills in these settings.



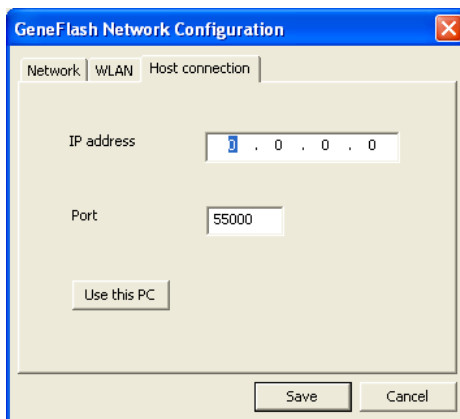
4) Wireless configuration

### Now select the "Host connection" tab:

This page sets the IP address of the host PC. If you are running the configuration program on the PC that will run the server program, 'GeneFlash Server', press the 'Use this PC' button to fill in the IP address field. If not then ask your system administrator for the IP address of the host computer.

Note that if your PC has more than one network adaptor, pressing this button again will cycle through the available IP addresses.

Normally you should not need to alter the port address, however if it clashes with something else on your network then you should alter the port address here and in the GeneFlash server configuration



5) Host connection

### Transferring the configuration to the GeneFlash system:

Press the "Save" button and save the file Network.cfg. Note that the GeneFlash Network Configuration program will exit at this point.

Transfer the file Network.cfg onto a USB memory stick in the root directory. Note that the file must be at the root level and not in a subfolder. Having powered up the GeneFlash system insert the USB memory stick into the system.

Press 'Select' on the GeneFlash key pad to access the main menu. Use the 'Up' and 'Down' arrows and choose 'Settings' and then press 'Select'. Then choose 'Set Network Settings'. After a few seconds a message screen will appear saying 'Settings Updated', when it does press the 'Cancel' button. If you get a red screen and a message saying 'Settings not updated, file not found', check that the file is actually on the USB memory stick AND that the media type is NOT set to 'networked' by choosing 'Media Management/Select media' from the main menu level.

### Setting GeneFlash to save to the remote PC by default:

Return to the main menu by pressing Cancel once. Use the 'Up' and 'Down' arrows and choose 'Settings' and then press 'Select'. Then choose 'Set media type'. Set 'Use Network' to 'Yes' using the arrow keys and then press Save. If you are using a cabled network plug the cable into the back of the GeneFlash system. Now turn the GeneFlash system off and on again.

Your GeneFlash is now configured to save images to a remote PC. If at any point you wish to save to a USB memory stick instead, go to the main menu, choose 'Media Management' then 'Select media'. Set 'Use network' to 'No'. Note that this will be overridden when the system is next power cycled to the choice made in 'Settings/Set media type'.

### Configuring the host PC:

Run the program 'GeneFlash Server', from either the desktop icon or "Start... Programs... Syngene... Networked GeneFlash... GeneFlash Server".

Press the 'Configure' button and the configuration dialog should appear. If the message 'No store location. GeneFlash requires this, so configure this now' appears click 'OK'. If you wish to password protect the server program settings it would be advisable to enter a password here.

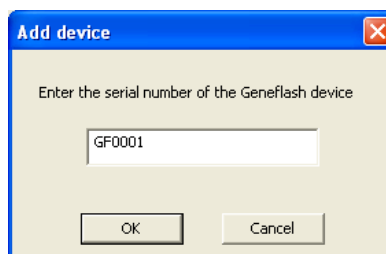
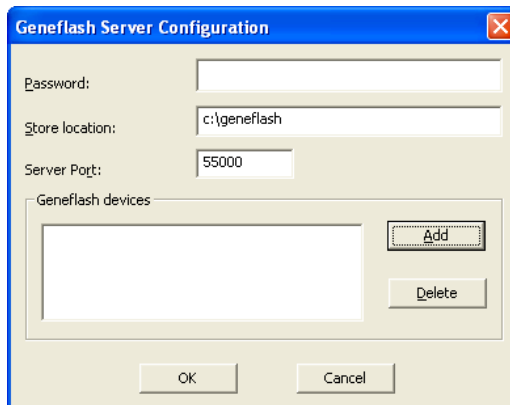
Set the store location to the full path on the host PC where you want the images to be saved. In this example the directory c:\geneflash has been chosen.

If you are using a Firewall application on the host PC you will need to ask your system administrator to open port 55000. If this Server Port isn't available, you can choose another here, but you will need to make sure the GeneFlash configuration is changed to use the same one.

### Adding a GeneFlash system to the server:

The 'GeneFlash Server' program needs to know the serial numbers of any networked GeneFlash systems connected to its network.

Press the 'Add' button and enter the system's serial number ensuring the use of capitalised letters. This can be obtained from the system's menu by pressing 'Select' on the GeneFlash key pad to access the main menu. Use the 'Up' and 'Down' arrows and choose 'Settings' and then press 'Select'. Then choose 'System status'.



6) Transferring configuration to GeneFlash system

7) Save to remote PC by default

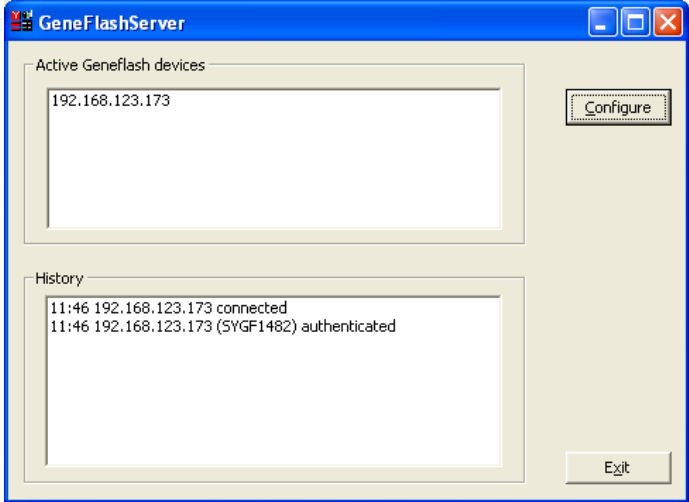
8) Configuring host PC

9) Adding GeneFlash to server

**Using networked GeneFlash:**

If it is not already running start the program 'GeneFlash Server', from either the desktop icon or "Start... Programs... Syngene... Networked GeneFlash... GeneFlash Server". Remember this program should be left running on the host computer to communicate with the networked GeneFlash systems.

The top pane shows the IP addresses of any networked GeneFlash systems that are currently communicating with the host computer. The history pane shows when systems have been connected, authenticated and disconnected.



When the system is working, saving images to the network is exactly the same as saving to a USB memory stick, simply press the 'Save' button and the image will be saved into a subdirectory corresponding to the system's serial number on the host computer. For example images from system serial number SYGFN/0001 will be saved into the directory c:\GeneFlash\SYGFN0001. This helps avoid confusion if you have several GeneFlash systems on your network.

If the network connection is not working then the message 'no network connection' appears on the system's screen for a few seconds. Check that the 'GeneFlash Server' program is running and that the network cable (if used) is connected.



CONTACT SYNGENE:  
EUROPE  
BEACON HOUSE  
NUFFIELD ROAD  
CAMBRIDGE  
CB4 1TF

IN USA:  
5108 PEGASUS COURT, SUITE M  
FREDERICK  
MD 21704

Tel: +44 1223 727123  
Fax: +44 1223 727101  
Email: sales@syngene.com  
Email: support@syngene.com

Tel: 800 686 4407/301 662 2863  
Fax: 301 631 3977  
Email: ussales@syngene.com  
Email: support@syngene.com

[www.syngene.com](http://www.syngene.com)