

# Z1 GEM Installation

## 1 Checklist

What you need:

A computer with network interface that can be connected to GEM. WEB browser (Internet Explorer, Chrome, Mozilla etc.)

Before you start, try to collect all the information you need. Here is a list: All usernames and passwords for all users. Also, find out what names they would like to use for their email address – if different from their login username. For security reasons we recommend that names used in email addresses should be different from login names.

Decide who should have administrator privileges. Administrators have full access to all user files and settings. We recommend that two users are given administrator privileges.

*Microsoft Windows workgroup name. The default setting in all Windows computers is* **WORKGROUP** – *this is also the default for Z1, but if a different name is to be used it has to agree between Z1 and all workstations.* 

Internet Provider information

Your POP3 Mailbox addresses, usernames and passwords

SMTP server address (optional)

Your company mail address (domain)

Network name for your Z1 server (it is called Z1 by default but you are free to give it a name – use a simple, short name without special characters, just letters and digits).

Your domain name (if you have no TCP/IP network yet – invent a name – the default name is **company.lan** – we recommend that you use the **.lan** extension to make it different from internet domain names, but you should change the **company** part).

If you already have a TCP/IP network, you should find out a legal IP address you may assign to Z1 and the IP mask to use with your network. In addition, you will already have a domain name – so you should use it.

Box contents:

- Z1 GEM
- 1 straight network cable blue
- Spare disk
- Power cable.

### 2 Location

Please find the safe location for the Z1 GEM.

Avoid places in direct sunlight or close to radiators or other heat sources. Avoid places that may get cluttered with papers, books and other items blocking access and air flow. Avoid places that may get wet or get flooded, places where people may spill coffee etc.

Please ensure that Z1 GEM has at least 5 cm space on all sides for ventilation.

Ensure that there is easy access to power socket and both local and wide area network.

## 3 Initial Set-up

If your Internet access is provided with a router with DHCP service, set-up the router first following the manufacturer instructions. If a selection of DHCP addresses is available in the router, select a subnet other than **192.168.60.x** that is a default setting for Z1 GEM LAN and would be in conflict without additional configuration. (If 192.168.60.x subnet must be used for Internet router DHCP server, Z1 GEM initial configuration should be performed first in order to change the default LAN address).

Connect a PC internet interface directly to Z1 GEM network interface marked LAN.

Connect Z1 GEM WAN interface to the Internet router LAN interface.

Plug in the power cable and press power button. Z1 GEM will take about two minutes to start. During the start-up you should see the red (disk activity) LED flashing.



Configure your PC network interface to be able to communicate with Z1 GEM LAN interface. You can use automatic setup (DHCP) or you can set-up manually the IP number to 192.168.60.120, mask to 255.255.255.0 and gateway to 192.168.60.1. If you intend to leave the PC in this configuration then you should also set-up DNS server to 192.168.60.1. (All these settings are automatic with DHCP)

## 4 Initial Configuration

Start the WEB browser.

If DNS is set-up (manually or with DHCP) enter <u>http://www</u> in the URL box. If not, then you can use <u>http://192.168.60.1</u>. Z1 GEM should present you with the Initial set-up page:



Select Administration





#### Select Network/Configuration and login when asked

One Logged Host: z	in: zybert 4demo.zybert-c.lan		Server Status Logout Preferences	()  @
Z1 Adminhome System Networks Netwo	ork Parameters			
			0	Help
—————————————————————————————————————	Z1 Network Settings			
Users	This form helps you to set-up Z1 networking parameters.			
			Local Area Network	_
F C Email	Z1 host name	z4demo	(Name of your Z1. No special characters)	- Y
v 🖏 Networks	Domain	zybert-c.lan	(Your internal network domain name)	?
Configuration	Workgroup name	demo4-group	(Microsoft Windows WORKGROUP name)	?
🌉 Firewall	Save and Activate Settings Cancel			
Port Redirection				
WEB Access Control	LAN - Local Area Network			
8 SSH Public Keve	IP address 19	92.168.60.1	This is the network address of your LAN interface.	
CDOK Configuration	IP mask 25	55.255.255.0		
SPOK Configuration	DHCP Server		(Should Z1 act as the DHCP server?)	
💓 Create File Share 🕨 🗎 System	Domain Controller 🗹		(Should Z1 act as the Windows Primary Domain	?
	WAN - Wide Area Network			
🕞 🚞 Support	Use DHCP		(Check for automatic setup)	?
🕞 🚞 Tools	DNS from DHCP		(Use DNS server provided by DHCP)	?
	Open Firewall for acce from WAN	ess 🔽	(Disables firewall control on WAN)	?
	IP address	192.168.200	21 These settings will be used if DHCP is not	?
	IP mask	255.255.255	0 selected or not available.	?
	Gateway	192,168,200	(Current values from DHCP shown here)	2

Read the explanations carefully, refer to on-line help for more details. It is important that all LAN parameters are set correctly. **DHCP Server** should be left on unless you already have another DHCP server in the network. If you do then **DHCP** Server here MUST be disabled and your existing DHCP server may need to be configured later to know about GEM.

**Domain Controller** setting should be left on if your GEM is the first server in your network. If you have a Windows server and it acts as a Primary Domain Controller then you must unset Domain Controller here. There can be only one Primary Domain Controller on your network.

WAN settings may be left as they are if your Internet router provides a DHCP service. Otherwise you have to set all parameters to values appropriate to your WAN network and unset **Use DHCP**.

**DNS from DHCP** is an optional setting that causes Z1 to use DNS addresses provided by the WAN DHCP server (if **Use DHCP** is selected) to forward all non-local DNS queries. This is not usually needed should only be used if you are sure that the information provided by your DHCP server is correct. The situation when this setting is useful is when the DNS provided by the DHCP server contains information not available from Internet – for instance about other subnets on your network – like DMZ etc. You can safely set it if DHCP information is provided by another GEM or Z1 server.

The Z1 firewall (open at that moment) will return to its normal setting when this set-up is finished. In this state all incoming Internet traffic is blocked (with few exceptions) unless it is a response to outgoing traffic (so that you can access Internet from your LAN). If you are using non-standard configuration – and need to access GEM through WAN then it may be advisable to delay firewall set-up – in this case, check **Open Firewall for access from WAN** before proceeding – you will have to deal with the firewall later.

#### Press Save and Activate Settings>, check the parameters and press Install>

Follow instructions on the screen. Nothing has changed in the system yet. When you press **Install>** your new settings will be put in place, normal system security will be imposed and the system will install new network settings. Please, wait about two minutes before trying to access the server.

If you changed LAN address of the GEM then your PC may need to restart its network service. Depending on your operating system this may require a reboot of your PC now. If not then you should see the normal main page of Z1 GEM after it restarts network.

We are done! Refer to the Administration Guide to find out how to add users, configure email and other subsystems.