

## Putty Error Messages and Solution

### ◆The server's host key is not cached in the registry◆

This error message occurs when PuTTY connects to a new SSH server. Every server identifies itself by means of a host key; once PuTTY knows the host key for a server, it will be able to detect if a malicious attacker redirects your connection to another machine.

If you see this message, it means that PuTTY has not seen this host key before, and has no way of knowing whether it is correct or not. You should attempt to verify the host key by other means, such as asking the machine's administrator.

If you see this message and you know that your installation of PuTTY *has* connected to the same server before, it may have been recently upgraded to SSH protocol version 2. SSH protocols 1 and 2 use separate host keys, so when you first use SSH 2 with a server you have only used SSH 1 with before, you will see this message again. You should verify the correctness of the key as before.

### ◆WARNING - POTENTIAL SECURITY BREACH!◆

This message, followed by ◆The server's host key does not match the one PuTTY has cached in the registry◆, means that PuTTY has connected to the SSH server before, knows what its host key *should* be, but has found a different one.

This may mean that a malicious attacker has replaced your server with a different one, or has redirected your network connection to their own machine. On the other hand, it may simply mean that the administrator of your server has accidentally changed the key while upgrading the SSH software; this *shouldn't* happen but it is unfortunately possible.

You should contact your server's administrator and see whether they expect the host key to have changed. If so, verify the new host key in the same way as you would if it was new.

### ◆Out of space for port forwardings◆

PuTTY has a fixed-size buffer which it uses to store the details of all port forwardings you have set up in an SSH session. If you specify too many port forwardings on the PuTTY or Plink command line and this buffer becomes full, you will see this error message.

We need to fix this (fixed-size buffers are almost always a mistake) but we haven't got round to it. If you actually have trouble with this, let us know and we'll move it up our priority list.

### ◆The first cipher supported by the server is ... below the configured warning threshold◆

This occurs when the SSH server does not offer any ciphers which you have configured PuTTY to consider strong enough.

### ◆Server sent disconnect message type 2 (SSH\_DISCONNECT\_PROTOCOL\_ERROR): "Too many authentication failures for root"◆

This message is produced by an OpenSSH (or Sun SSH) server if it receives more failed authentication attempts than it is willing to tolerate. This can easily happen if you are using Pageant

and have a large number of keys loaded into it. This can be worked around on the server by disabling public-key authentication or (for Sun SSH only) by increasing **MaxAuthTries** in **sshd\_config**. Neither of these is a really satisfactory solution, and we hope to provide a better one in a future version of PuTTY.

### ❖Out of memory❖

This occurs when PuTTY tries to allocate more memory than the system can give it. This *may* happen for genuine reasons: if the computer really has run out of memory, or if you have configured an extremely large number of lines of scrollback in your terminal. PuTTY is not able to recover from running out of memory; it will terminate immediately after giving this error.

However, this error can also occur when memory is not running out at all, because PuTTY receives data in the wrong format. In SSH 2 and also in SFTP, the server sends the length of each message before the message itself; so PuTTY will receive the length, try to allocate space for the message, and then receive the rest of the message. If the length PuTTY receives is garbage, it will try to allocate a ridiculous amount of memory, and will terminate with an ❖Out of memory❖ error.

### ❖Internal error❖, ❖Internal fault❖, ❖Assertion failed❖

Any error beginning with the word ❖Internal❖ should *never* occur. If it does, there is a bug in PuTTY by definition; Similarly, any error message starting with ❖Assertion failed❖ is a bug in PuTTY. Please report it to us, and include the exact text from the error message box.

### ❖Unable to use this private key file❖, ❖Couldn't load private key❖, ❖Key is of wrong type❖

If you see one of these messages, it often indicates that you've tried to load a key of an inappropriate type into PuTTY, Plink, PSCP, PSFTP, or Pageant.

You may have specified a key that's inappropriate for the connection you're making. The SSH-1 and SSH-2 protocols require different private key formats, and a SSH-1 key can't be used for a SSH-2 connection (or vice versa).

Alternatively, you may have tried to load an SSH-2 key in a ❖foreign❖ format (OpenSSH) directly into one of the PuTTY tools, in which case you need to import it into PuTTY's native format (\*.ppk) using PuTTYgen

### ❖Server refused our public key❖ or ❖Key refused❖

If you see one of these messages, it means that PuTTY has sent a public key to the server and offered to authenticate with it, and the server has refused to accept authentication. This usually means that the server is not configured to accept this key to authenticate this user.

This is almost certainly not a problem with PuTTY. If you see this type of message, the first thing you should do is check your *server* configuration carefully. Also, read the PuTTY Event Log; the server may have sent diagnostic messages explaining exactly what problem it had with your setup.

### ❖Access denied❖, ❖Authentication refused❖

If you see one of these messages, it means that the server has refused all the forms of authentication PuTTY has tried and it has no further ideas.

It may be worth checking the Event Log for diagnostic messages from the server giving more detail.

### ❖Network error: Software caused connection abort❖

This error occurs when the Windows network code decides that your network connection is dead. For example, it will happen if you pull the network cable out of the back of an Ethernet-connected computer, or if Windows has any other similar reason to believe the entire network has become unreachable.

We are not aware of any reason why this error might occur that would represent a bug in PuTTY. The problem is between you, your Windows system, your network and the remote system.

### ❖Network error: Connection reset by peer❖

This error occurs when the machines at each end of a network connection lose track of the state of the connection between them. For example, you might see it if your SSH server crashes, and manages to reboot fully before you next attempt to send data to it.

However, the most common reason to see this message is if you are connecting through a firewall or a NAT router which has timed the connection out.

### ❖Network error: Connection refused❖

This error means that the network connection PuTTY tried to make to your server was rejected by the server. Usually this happens because the server does not provide the service which PuTTY is trying to access.

Check that you are connecting with the correct protocol (SSH, Telnet or Rlogin), and check that the port number is correct. If that fails, consult the administrator of your server.

### ❖Network error: Connection timed out❖

This error means that the network connection PuTTY tried to make to your server received no response at all from the server. Usually this happens because the server machine is completely isolated from the network, or because it is turned off.

Check that you have correctly entered the host name or IP address of your server machine. If that fails, consult the administrator of your server.