# How to avoid "unstable connection"

## Why this is happening?

			Hardware Tools - Ecran2			
<b></b>	· ·	🛃 🕎 🦻 🗞 Set Content	Remote	Logs		
	Status	Name I <sup>A</sup> 2	Message			
			Realtime connection has been interrup	ted		
			Screen has established the connection			
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			Screen has established the connection			
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			Screen has established the connection			

You may have noticed some screen with the "unstable connection" warning sign. This situation happens when the real-time communication channel between the screen and the server is dropped. The real-time communication is needed in order to get screen status or other information as well as sending orders to the display (turn on, turn off, change content, get a screenshot, reboot, etc.). The main root cause of this issue is the firewall configuration and can be solved easily most of the time.

### First fix attempt that should be performed

We noticed that with some firewalls / routers or ISP the problem can easily be solve by **switching the display connection to zebrix to https instead of http**. You'll have to change URL from, for example, http://screenv2.zebrix.net to https://screenv2.zebrix.net

- Here is how you can change the URL on a SAMSUNG screen
- Here is how you can change the URL on a zebrix player

# Firewalls known to be concerned by this problem + solutions

#### **Fortinet Fortigate**

Fortigates have a default setting of five minute TTL's for TCP sessions; active sessions that have no packet movement simply get dropped. That parameter cannot be adjusted via the web interface, you have to use the CLI. Here's an example of how to adjust the TTL to 86400 seconds for the concerned rule, along with a default of ten minutes for everything else: <code>config system session-ttl set default 600 config port edit 123 set protocol 6 set timeout 86400 set end-port 80 set start-port 80 next end end</code> The "123" after the edit simply means the rule number; it has nothing to do with the port which is set within the rule as a range. The protocol is 6 for TCP.

#### Stonesoft

The problem on stonesoft firewall can easily be fixed by turning off the **"Deep Inspection"** and switching the **"Connection tracking mode"** to **"Loose"** 

Deep Inspection: Off							•
Anti-Virus:	Inherite	d from Continue Rule	(s)				•
Anti-Spam:	Inherite	nherited from Continue Rule(s)					
Connection Opt	ons						
Connection Tracking Mode: Idle Timeout: Synchronize Connections:		Loose					•
		Inherited from Continue Rule(s)					5
		Inherited from Continue Rule(s)					
Enforce TCP MSS:		Inherited from Continue Rule(s)					
		Migimum:		Maximum:			
DoS Protection (	Options						
			Inherited from Continu	erited from Continue Rule(s)		Discard	Ŧ
			Inherited from Continu	ie Rule(<)	Action:	Discard	
Rate-Based DoS Protection:			Inherited from Continue Rule(s)				-
Scan Detection:			Inherited from Continue Rule(s)				•
Rate-Based DoS Protection:		Inherited from Continu Inherited from Continu	Action:	<ul> <li>Discard</li> <li>Discard</li> </ul>			

#### With certain Proximus routers

Switching the connection of screens to https instead of http fixes the problem.

#### **Bluecoat Proxy / Firewall**

It has been noticed that bluecoat proxy antivirus module regularly close the channel to do its scanning job. If turning off the antivirus is not an option for you, consider to switch the connection of screens to https instead of http fixes the problem.

#### **Other firewalls?**

Please consider trying to adjust or disable following modules for the zebrix create rule:

- http antivirus module
- WebFilter / contentFiltering
- DLP module
- SSL Inpection
- Deep Packet Inspection
- Connection Tracking
- transparent proxy
- adjusting TTL (Time-to-live) or Timeout.

Alternatively, you can try to https instead of http or http over TCP6001 instead of http over TCP80 (Firewall might be more permissive)

From: https://documentation.zebrix.net/ - zebrix documentation

Permanent link: https://documentation.zebrix.net/doku.php?id=en:firewallconfiguration&rev=1611851293



