



Falkenberg 2021-04-29

INCIDENT REPORT REGARDING CONNECTIVITY ISSUES WITHIN GLESYS NETWORK

This document contains the background, remediation actions, root cause analysis and upcoming improvements regarding the GleSYS Network in Falkenberg.

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BACKGROUND

The GleSYS Network is an integral part of our hosting platform, connecting our data centers and cloud platforms to the Internet.

GleSYS Core Network is built on Cisco routers and switches interconnected with physically diverse 100GbE and 10GbE links.

RFO

Two incorrectly configured circuits were connected causing a network loop. This led to control-plane malfunction on multiple network devices leaving us without management access to the devices which in turn forced us to physically disconnect the ports.

SEQUENCE OF EVENTS

2021-04-29 06:54 CEST

Alarms start coming in

2021-04-29 06:55 CEST

On-call staff escalates to senior network engineer

2021-04-29 07:06 CEST

Issue tracked down to network loop in our datacenter network.

2021-04-29 07:07 CEST

Field Engineer is en-route to site

2021-04-29 07:20 CEST

Field Engineer arrives on-site

2021-04-29 07:23 CEST

The loop is removed and alarms start to clear.

2021-04-29 07:25 CEST

The incident is declared as over.

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CONCLUSIONS SO FAR

Network loops and misconfigurations happen from time to time. Since we cannot protect ourselves 100% from errors being made one of our many tasks is to build a network that is resilient to errors and misconfigurations.

We have already concluded that our current design needs to improve, and since it's now spread into different geographical locations, it's more difficult to find and correct errors in a timely manner.

We know what to do, and we have a plan. New hardware to build the new network has been ordered since a while back now. (January). Unfortunately, the shortage of semiconductors in the world right now is leading to extremely long delivery times for new hardware, and we are still waiting for the last pieces to be delivered so that we can make the necessary changes.

Until then, we will need to find workarounds to minimize the effect of errors.

We will to take the following actions:

- Improve out-of-band access to devices
- Minimize blast radius and improve loop-detection in our switched network

CEO Comment

Since we have had two similar incidents in our Falkenberg network within a year we already have two ongoing initiatives to reduce the risk of errors like this.

I can only conclude that this work is not moving fast enough and that we need to give more attention to alternative solutions until we get the hardware we need.

I have the absolute greatest confidence in our network team and I want to emphasize that we do not lack the brains to solve these problems. It is now clear that we have been understaffed in our network team and we as an organization have not been responsive enough to address this problem.

It is my hope that you as a customer continue to have confidence in us and our teams, and that you feel that we take the problem as seriously as you do. This is largely a matter of priority and lack of resources, for which I, as CEO, must take full responsibility.

—

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From now on, we will regularly post updates in our blog where we will report on the work we do to work our way around and eliminate these problems.

Until then, we will still have the risk that a similar event and outage can happen again but our preventive work will result in a faster response time keeping impact to a minimum. Geographical distances and people working from home due to Covid-19 notwithstanding.

We will also announce when we feel completely ready.

If you as a customer have any questions or comments regarding this incident, feel free to contact us at support@glesys.se.

Sincerely,

Eric Lindsjö, Head of Network
GleSYS AB

Glenn Johansson, CEO
GleSYS AB

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