

SAIX Service Level Agreement

1. Service Definition

This SLA is provided on the Connection to the SAIX Infrastructure and is applicable to availability of the Connection of the traffic on the SAIX Infrastructure. A connection can be:

- Single 10GE or 100GE connection (Fig 1.)
- Multiple 10GE or 100GE connections in a so-called LAG configuration (Fig 2.) are considered to be a single connection

A LAG consists of two (2) or more single connections (connections members) of the same bandwidth that together behave as a single logical connection.

A Member Connection (or the individual members of a LAG) is terminated on the SAIX patch panel. This patch panel is the demarcation point between the Member and SAIX. See Figures 1 and 2 for a schematic layout of the setup. The responsibility for the (LAG) connection between the Member's router and the SAIX patch panel is with the Member (green in Figures 1 and 2). The responsibility for the (LAG) connection from the SAIX patch panel is with SAIX (red in Figures 1 and 2). In case of a LAG connection not all member connections of the LAG necessarily terminate on the same patch panel.

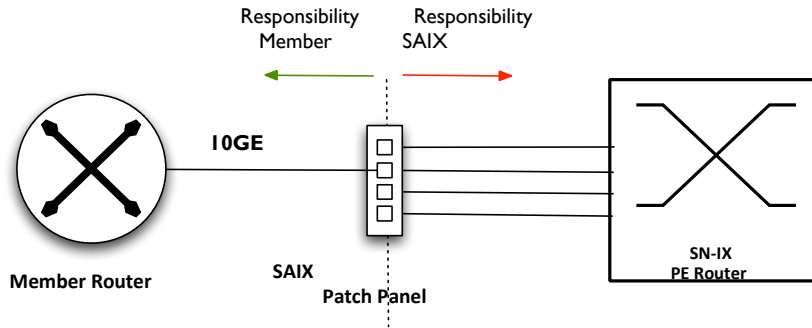


Figure 1: The patch panel is the demarcation point between the Member and SAIX

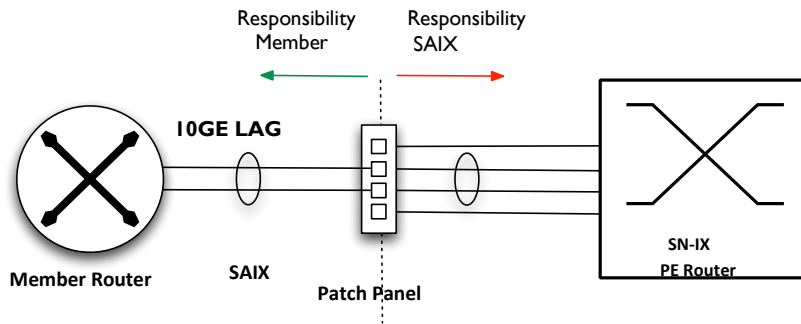


Figure 2 LAG connection consisting of two (2) member connections on SAIX platform. The SAIX Patch panel(s) are the demarcation point for responsibility.

2. Availability of the service

The aim of the service availability is at least 99.95% per month. SAIX defines availability as the amount of time per month that the SAIX Infrastructure and the connection under consideration to it are available to the Member.

To calculate availability the following formula is used: $P = \frac{A-B-C}{A} \times 100$

Where:

- A = Number of hours in a month
- B = $\sum_{i=1}^n B_i$ Sum of all outages due to announced maintenance,
- C = $\sum_{j=1}^m C_j$ Sum of all outages
- P = Availability percentage

SAIX considers the service unavailable when:

- The connection of the Member to the SAIX Infrastructure is not operational due to a problem within the responsibility sphere of SAIX (see fig. 1 and 2).
- The connection of the Member to the SAIX Infrastructure is operational but 50% or more of the other Member's routers in the same service LAN are unreachable due to a problem within the responsibility sphere of SAIX.
- If the connection of the Member consists of a so called LAG and one or more of the individual links in this LAG are down due to a problem within the responsibility sphere of SAIX and the average traffic load on the remaining links exceeds 90%.

The unavailability period starts when:

1. An authorized Member representative contacts the SAIX NOC to open an SLA-case and a trouble ticket in mutual agreement.

Or

2. A trouble ticket has been opened by the SAIX NOC after a Member-affecting problem is detected. The affected Members will be mentioned in the trouble ticket

The unavailability ends when the trouble ticket is closed in mutual agreement in case of 1, providing the Member's 24 hours availability, or by the SAIX NOC in case of 2.

Exceptions to the unavailability (C in the formula) are:

- Photonic cross connect swaps in the SAIX Infrastructure and relating to 10GE ports below 200 milli-seconds.
- Prolonged swap time after a photonic cross-connect swap due to certain conditions. In case such a condition exists, the SAIX NOC, while testing the Member's port(s), will notify the Member about this. Examples are:
 - in case the Member uses LACP for port aggregation.
- Outages needed for requested change orders to the connection by the Member.
- Outage periods reported by the Member in which no fault is observed or confirmed by SAIX
- Outages due to force majeure.

3. Scheduled Maintenance

Scheduled maintenance is a necessary element of network operations and therefore not counted as “service unavailability”.

SAIX NOC will announce maintenance at least 72 hours in advance by e-mail to the relevant technical distribution lists. The notification will include at least the following information:

- Start date and time of the maintenance
- Expected end date and time of the maintenance
- Expected impact on availability
- Impacted Members

To make sure that maintenance announcements are seen by the Member, it is the responsibility of the Member to make sure the relevant contact details are registered and known to SAIX.

4. Trouble tickets and escalation

The SAIX NOC actively monitors the SAIX Infrastructure 24 hours/day, 7 days/week. SLA Members will report outages. The NOC will open a trouble ticket. In case the Member needs to escalate a problem, the requests are relayed to the Director of SAIX. Escalation and case Severity is outline as below.

5. Operational SLAs

Severity Level	1 (Critical)	2 (High)	3 (Medium)	4 (Low)
Support Availability	24/7	24/7	24/7	Working Hours (08:00 - 16:00)
KPI Achievement	99.95%	99.95%	99.95%	99.95%
Response Time	Immediate	30 MIN	60 MIN	120 MIN
Restoration Time	1 Hour	2 Hours	4 Hours	8 Hours

Description of Severity levels

This SLA will be applied only if:

1. A member connection consist of one link or LAG and its average traffic (The 5-minute average load on the Member Connection) does not exceed 70% of its maximum capacity in a given month.
2. A member has two or more separate connections connected to two separate SAIX devices.

Severity Level	1 (Critical)	2 (High)	3 (Medium)	4 (Low)
Definition	Total loss of service	Partial loss of service (Service degradation)	Minor loss of service with low impact	The failure causes a minor Network outage.