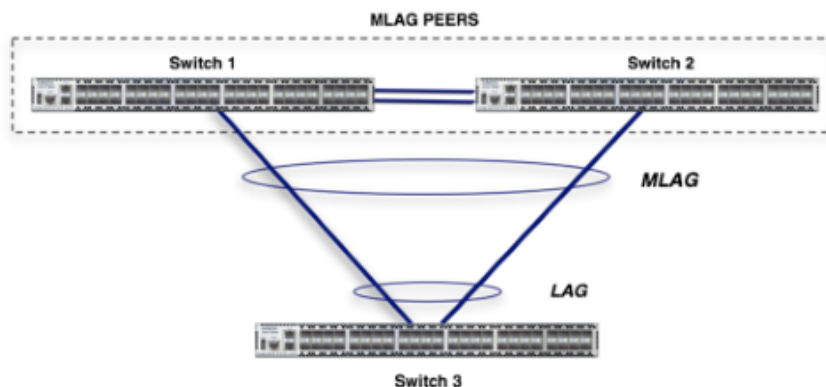


Special High availability features in Ar :

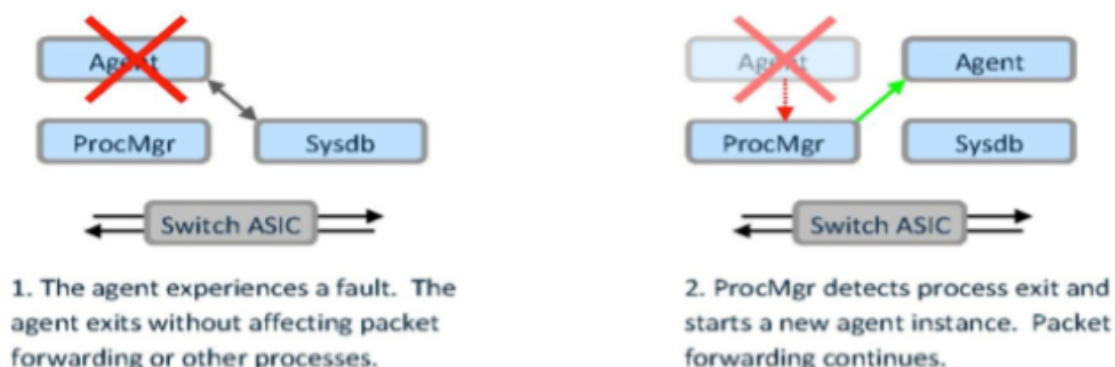
- **MLAG** : LAG or link aggregation is a way of bonding multiple physical links into a combined logical link. MLAG or multi-chassis link aggregation extends this capability allowing a downstream switch or host to connect to two switches configured as an MLAG domain. This provides redundancy by giving the downstream switch or host two uplink paths as well as full bandwidth utilization since the MLAG domain appears to be a single switch to Spanning Tree (STP). Because the MLAG domain appears to STP as a single switch there are no blocked ports.



- **Live software patching** : Patching the software upgrades without the need of a maintenance window .This ensures increases availability and reduced downtime . This ensures HA .

* Self healing software with Stateful Fault Repair (SFR):

On most embedded platforms, any software fault results in a reload, resulting in seconds or even minutes of downtime. Under EOS, any fault is contained within the agent or driver where the fault originated. If the fault causes the agent to crash, then the EOS process manager (ProcMgr) restarts it immediately. If the fault causes the agent to hang or loop, ProcMgr detects the condition and restarts the agent. Thus, faults within EOS are selfhealing. This process is shown in Figure [3] below.



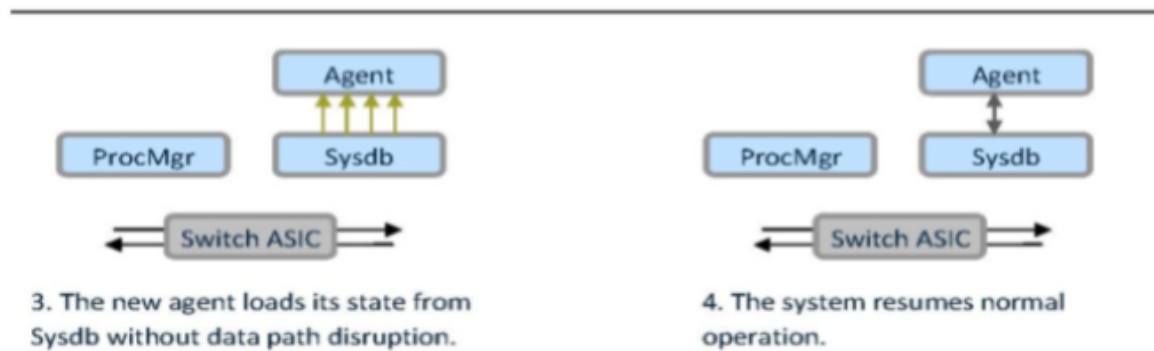


Figure 3: EOS Fault Containment and Self-Healing

• **1 + 1 hot-swappable power supplies and four N + 1 hot-swap fans** :For improved uptime.

***Clustering for Cloud devices** :CVX provides high availability by enabling you to use multiple (redundant) CVX Controllers in the same cluster. Each Controller in the cluster has its own dedicated machine so that if a Controller fails, the failure is isolated to a single machine.

Within a cluster, one of the Controllers is a primary (leader), and the other Controllers are backup (follower) Controllers. If the primary Controller fails, one of the backup Controllers automatically assumes the role of the primary Controller.

CVX high availability does not prevent or compromise the detection of software failures or link failures that may cause Controllers to be unreachable on the network.