

This video went over AS path prepending, which is adding an AS to the left of the AS path to increase the hop count of one route so that routers will tend to not take that path. The effects of path prepending with a lack of regulation allows for any ISP to append these AS numbers to influence the path that traffic will take. There has been a problem with the AS path exceeding the physical hardware set length. This speaker explains that there could be better ways to direct traffic without prepending. There can be reasons to prepend these paths which include loss of a neighbor, lack of knowledge about BGP and procrastination for stability. It seems that also path prepending is dependent on the PoP location and will produce a mixed bag of results of whether it is more efficient to use prepending or not. Also, there are security implications about using path prepending and hijacking AS paths. They found that as you prepend more paths, it becomes more believable to the router to send the traffic to that malicious path. With path prepending, it is an extremely useful tool that can route traffic efficiently, but on the other hand it can be a security vulnerability and if not regulated can reach its physical length limitation.