How to Analyze Network Utilization Rate

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Summary

Network utilization is the ratio of current network traffic to the maximum traffic that the port can handle. Through monitoring network utilization, we can understand whether the network is busy, normal or idle. Capsa Network Analyzer make it easy for us to monitor the network utilization, so as to find out the bottleneck and improve network performance.

Why is the network utilization low? How to increase network utilization?

Monitor Network Utilization in the Summary Tab

The Summary tab provides general information of the entire network. In the Summary tab we can get a quick view of the real-time network utilization of many statistic types.

Monitor Network Utilization in the Dashboard Tab

If we want to get a trend chart of the network utilization, then we need to use the Dashboard tab. The graphs and charts in the Dashboard tab allow us to view network utilization dynamically in different chart types.
Conclusion

By monitoring and analyzing network utilization with Capsa we can understand the performance of the entire network. Network utilization also plays an important role in benchmark setting and network troubleshooting.

What is Network Utilization?

Network utilization is the ratio of current network traffic to the maximum traffic that the port can handle. It indicates the bandwidth use in the network. While high network utilization indicates the network is busy, low network utilization indicates the network is idle. When network utilization exceeds the threshold under normal condition, it will cause low transmission speed, intermittence, request delay and so on.

Networks of different types or in different topology have different theoretical peek value under general conditions. However, this doesn't mean that the higher the network utilization is the better. We must make sure there is no packet loss when network utilization reaches a certain value. For a switched Ethernet, 50% network utilization can be considered as high efficiency. If using hub as core switch device in the network, the network utilization should be lower for the increasing collisions.

Through monitoring network utilization, we can understand whether the network is idle, normal or busy. It also helps us to set proper benchmark and troubleshoot network failures.