



Staselog

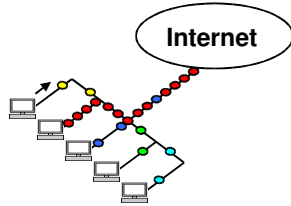
Ensuring Network Traffic

Shared connection without congestion

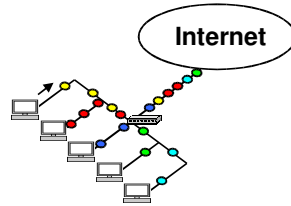
Shared connection

Sharing a broadband connection with other households is an excellent arrangement, provided that there is enough bandwidth for everybody.

One user takes it all:



Fair share for all users:



A single user may take it all

A single P2P user is capable to occupy all the bandwidth, thus blocking others. Unfortunately, this is mostly the case.

Staselog Diplomat™



The fair share solution

Staselog Diplomat makes sure that the bandwidth is fairly shared in village networks or companies. The installation is simple and the operation is automatic.

Staselog Network Equalizer™



The centralized solution

A single device is capable of serving hundreds of targets. In addition to the fair share policy, the traffic control and measurement can be applied to users or applications with high granularity.

Fair bandwidth distribution in the upload direction is enough

- Symmetric P2P traffic uses all the given bandwidth in the upload direction and causes network congestion
- Fair bandwidth sharing opens the upload bottleneck
- Average delay is reduced by 50%, long delays are eliminated
- Others than P2P users get most of the advantage, just as there was 4 or 5 times more bandwidth available
- Asymmetrical networks can be fully (100%) utilized
- Different connection speeds remain as subscribed
- A guaranteed minimum bandwidth is ensured for each user

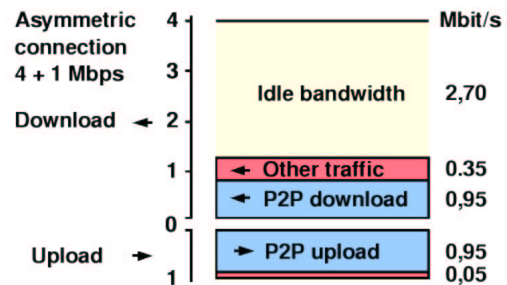


FIGURE 1. NO BANDWIDTH MANAGEMENT APPLIED

Symmetric P2P traffic* occupies all the available bandwidth in the upload direction and equal amount in the other direction. Although 60% of the total bandwidth was free, there is congestion. Interactive users (the red line in Figure) expect immediate response for their actions, which happens only if both directions are free of congestion.

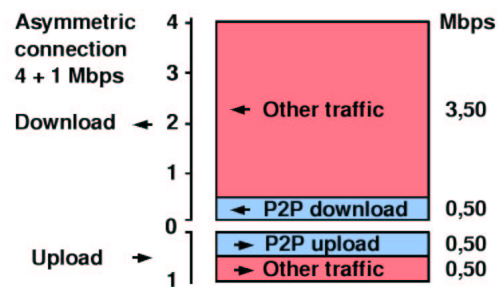


FIGURE 2. FAIR UPLOAD BANDWIDTH DISTRIBUTION

Staselog's fair bandwidth distribution opens the bottleneck. P2P traffic is decreased in both directions. The other traffic gets more bandwidth in both directions. Since the other traffic is asymmetric (typically 1 to 7), it can now fully utilize the free bandwidth in both directions. Applying fair bandwidth sharing in both directions improves the situation further.

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