



Meaning of various aspects of Bandwidth policy at INVENTUM and/or any other bandwidth management server

1. **Bandwidth Pool meaning:** Pool can be assumed as a bag or a swimming pool that has been assigned bandwidth in terms of Mbps/Gbps where a main pool can be divided to smaller pools as per requirement for the purpose of sharing bandwidth.
2. **Minimum upload/download speed:** This is the min. committed/guaranteed speed to a customer.
3. **Upload/download burstable to:** If there is extra availability of bandwidth in a pool; a user will be able to get extra bandwidth as has been set where in the present INVENTUM there is no time limit for burstable bandwidth.
4. **Download/upload forwarding priority:** We have priorities option in INVENTUM reading as HIGH, 7, 6, 5, 4, 3, 2 & LOW which means priority with which a customer's request has to be entertained as the word priority already suggests. Example: We have three categories of plan (e.g. **Business** to be given top priority, **SME** to be given medium priority and **Home** to be given low priority), then in such case we can assign **Business** HIGH priority, **SME** – 7 priority and **Home** – 6 priority; however, the following significant point must also be considered:
 - a. Bandwidth pool priority is a significant factor (Example: If our pool's priority itself is 4, and we set anything higher than 4 for Business then Business will receive all the bandwidth while SME and Home will receive nothing in the event of bandwidth scarcity. Hence, ideal configuration of priority when pool's priority is 4 would be Business – priority 3, SME – priority 2 and Home – priority LOW.
 - b. While in other case, if our pool's priority is 6, an ideal configuration will be: Business – priority 6, SME – priority 5 and Home – priority 4.
5. **Contention ratio:** The formula is Min. Bandwidth x Contention Ratio = Burstable Bandwidth. Example: We have a plan of 5 Mbps wherein:
 - a. Min. upload/download is 5 Mbps and contention ratio is 1 x 1, then such plan will provide min. & burstable speed of 5 Mbps.
 - b. Min. upload/download is 5 Mbps and contention ratio is 1 x 2, then such plan will provide min. speed of 5 Mbps & burstable speed of 10 Mbps.
 - c. **CAUTION:** In case, min. upload/download is 5 Mbps and contention ratio is 1 x 2 and we manually set burstable speed of 8 instead of 10 in defiance of contention – ratio – formula, the configuration will be then termed to be erroneous causing the server to behave in an erratic manner.

(NOTE: The contents of this document has been vetted by Mr. Manoj Kumar & Mr. Sayantan Adhikary)