ANTlabs
Connectivity Made Easy

InnGate 3 New Product Feature: Multi-Tier QoS

Hospitality institutions often receive complaints from premium paying guests that their internet bandwidth is slow. Using rate limiting, there is no way to ensure that paying users will always get faster bandwidth and better quality than non-paying users.

ANT*labs* has introduced a new **Multi-tier QoS** innovation to address the concerns of hotel operators. Using this new feature, the administrator is now able to set a maximum bandwidth cap for all the users enjoying complimentary service and a separate higher bandwidth cap for paying users. In this way, the administrator can ensure that the paying users will always get faster bandwidth and better quality of service than non-paying users.

Hotels often view provision of internet access to guests as an additional operation cost without realizing that the available internet bandwidth can be monetized to generate revenue.

With this new multi-tier QoS feature, hotels will be able to add value to their existing internet bandwidth by providing premium tier internet access as well as guaranteed access for conference organisers and users.

Tier	Guaranteed	Premium	Complimentary
Priority	Highest	High	Lowest
Usage of Bandwidth	Up to 5 guaranteed classes of users	All users share the bandwidth allocated. Excess bandwidth from other tiers may be utilized if available	All users to share the bandwidth allocated
	Bandwidth is reserved for each class and the users will always get the bandwidth allocated when they request for it	Allows application prioritization by defining different priority for web, mail, VPN, streaming, IM, VOIP, FTP, P2P and others.	Best effort will be made in internet bandwidth allocation
Usage Scenario	Suitable for provisioning guaranteed bandwidth for conferences and company guests staying in the hotel	Suitable for assigning to paid guests and VIPs as this tier guarantees best quality of service	Suitable for assigning to non-paying guests who just need basic internet access

Key Benefits

1. Monetize existing bandwidth. Instead of providing delicated line for each and every conference, existing bandwidth can be configured to a guaranteed bandwidth for the conference organisers and guests.
2. Offer alternative to guests who are willing to pay for guaranteed internet bandwidth, thus increasing the revenue of the hotel.
3. Offer basic complimentary HSIA service that is good enough for most guests.

Frequently Asked Question (FAQ)

1. What is guaranteed bandwidth?

Guaranteed bandwidth means that all the users in that particular class will always get the requested guaranteed bandwidth in total regardless of how many users are in the system.

If there is only 1 user in Guaranteed Bandwidth Class 1 (allocated 1 Mbps), that particular user will always get 1 Mbps bandwidth. This is true even if there are a few hundred other users in the system on the Premium and Complimentary tiers, who will only be sharing the remaining bandwidth.

2. If there is more than 1 user in the same bandwidth tier, how is the bandwidth being divided?

The bandwidth will be divided equally among all the users in the same bandwidth tier in a dynamic manner based on the total number of users who requested for bandwidth.

When there are 10 users in the Guaranteed Bandwidth 1 which is allocated 1 Mbps, out of these 10 login users, only 4 active users are requesting for bandwidth, then each user will get 256 kbps (1 Mbps / 4). If an in-active user starts to request for bandwidth, then each user's bandwidth will be dynamically adjusted to 200kbps (1 Mbps / 5).

3. What can I do now with QoS that I cannot do with Bandwidth rate-limit?

With bandwidth rate-limit feature, the administrator can configure different bandwidth rate-limits for multiple tiers of users. E.g. 256kbps for users of complimentary Internet access and 1Mbps for users paying for Internet usage. However, the administrator is unable to define a cap limit on the total bandwidth that each category of users can get, so there is no way to guarantee that paying users will always get better bandwidth and quality than non-paying users.

With Multi-Tier QoS, the administrator is now able to set a maximum bandwidth cap for all the complimentary users and a separate higher bandwidth cap for paying users. In this way, the administrator can ensure that paying users will always get better bandwidth and quality of service than non-paying users.

4. What is application traffic prioritization?

Application traffic prioritization categories the users' traffic into various broad categories like Web, Mail, VPN and assign different level of priority to each of the category. By assigning higher level of priority to commonly used traffic, especially those that are sensitive to latency, the system ensures good quality of service and provides a good Internet usage experience for the users.

Availability of Multi-tier QoS feature

InnGate 3 M-Series	InnGate 3 E-Series	InnGate 3 G-Series
No	**Yes**	**Yes**