

Staselog Diplomat

Easy Congestion Elimination



Key Benefits:

- More efficient network usage
- Shorter network delays
- Easy to install
- Automatic congestion elimination
- Ensures VoIP traffic
- Requires no administration

Staselog Diplomat is an easy-to-use congestion elimination device for IP networks. Staselog Diplomat can be quickly installed into network, and it requires no administration. It is optimal for shared residential networks (e.g. HomePNA), and small office networks.

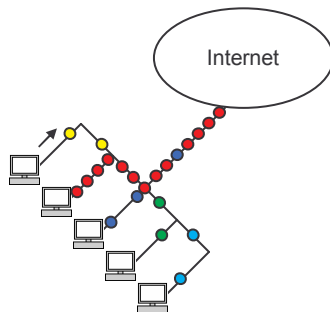


Fig. 1: Network congestion caused by heavy network user

Network Congestion Problem

Network congestion is a real problem in every shared network. One user can make the network unusable for all the others. This occurs when aggressive applications, like peer-to-peer file sharing applications are used. "Quality by capacity" is no longer a solution: some applications are able to use all the available bandwidth, regardless how fast the connection is. Network congestion must be handled by controlling the network data.

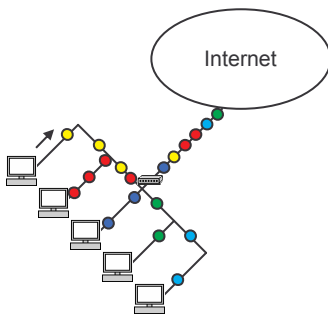


Fig. 2: Network congestion eliminated with Staselog Diplomat

Eliminating Network Congestion with Staselog Diplomat

Staselog Diplomat eliminates network congestion caused by aggressive applications. It gives each network user equal opportunity to use the network. Available bandwidth is allocated fairly to each user by their needs: If there is enough bandwidth available, heavy user can use it as much as needed. If there are many network users and heavy network usage, Staselog Diplomat automatically guarantees equal share of bandwidth for all users. This way VoIP and other critical applications are assigned enough bandwidth to operate properly.

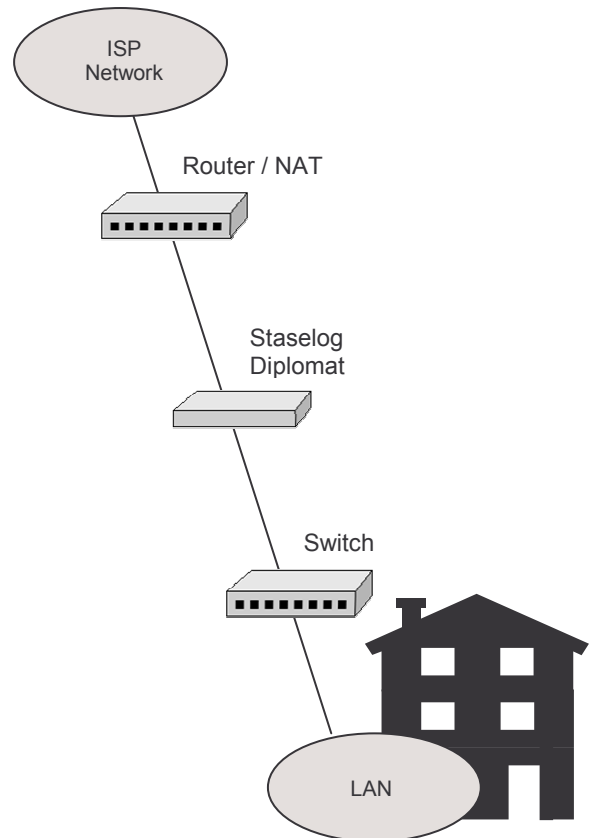
Installing Staselog Diplomat

Staselog Diplomat can be installed into network in less than 5 minutes. If the preselected connection speed matches the current network speed, the device can be installed into network without any further configuration. It is easy to check and set the connection speed using the serial interface. Staselog Diplomat operates as transparent bridge, so there is no need for any other network changes.

Using Staselog Diplomat

Staselog Diplomat operates fully automatic, removing congestion and distributing bandwidth to all network users. There is no need for configuration or administration of any kind.

Staselog Diplomat makes sure that all network users have equal access to the network. It prevents heavy users from congesting the network, and ensures sufficient bandwidth for everyone.



Staselog Diplomat Specifications

USER INTERFACE	
User interface type	Command line UI
User interface access	Serial port

CONGESTION ELIMINATION FEATURES	
Congestion elimination	Fully automatic

PERFORMANCE	
Max. throughput (full duplex)	25 Mbit/s
- with packet size 720 bytes	15 Mbit/s
- with packet size 512 bytes	12 Mbit/s
- with realistic packet size distribution (*)	11 Mbit/s
Max. number of network users	Unlimited
Max. number of connections	Unlimited

HARDWARE	
Dimensions (W x H x D)	151 x 260 x 26 mm
Weight	1,120 kg
Network interface	10/100 Ethernet
Connectors	2x RJ-45, 1x RS-232

*) Realistic packet size distribution from Institute of Communications Engineering, Tampere University of Technology 2003