Accounting and Billing in Networks

If an ISP arranges a payment system with his customers, or if a company wants to divide the costs between separate departments, you will always have to use one of the following mechanisms:

Port based billing:

If you can assign one port of the distributing device of your network to each "customer", this will be the simplest way to bill them. All traffic (bytes) transported to or from the appropriate port can simply be read from the device via SNMP and is to be multiplied by the price per byte.
In this case you can't differentiate the costs by the service used (IP–Port), or the actual partner (IP– resp. MAC–address). But if the customer is connected via a manageable switch resp. router, the counters for In und Out (BytesIn and BytesOut) of the connecting device can be taken as measured without extra costs for special hardware.
Hint: The counters have periodically overflows so they have to be monitored permanently by the accounting software.

Traffic related billing:

If there is no explicit port for each customer, you have to analyze the traffic stream. This is also necessary if there are different costs for services or communicating partners. If there is one common uplink, you can measure the traffic with a station connected to this link by listening to the whole traffic. In case of many different connections that have to be regarded for measurements you can use *NetFlow* informations provided by today's switches or routers. A perfect software for both scenarios is NetControl for Windows

RzK Accounting Lösungen

- NetControl
- Einsatz –Szenarios
- NetReport