



PNI vs Public Peering

Global Peering Forum 21.3.2012



Your Speaker Today...



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AGENDA

A Init7

B PNI vs Public Peering



A Init7

This is a placeholder for one or more marketing slides...

[...]



Init7 AS13030 Backbone Key Facts:

- connected to ~20 internet exchanges
- 918 IPv4 BGP adjacencies
- 482 IPv6 BGP adjacencies

(according to <http://bgp.he.net/>)



DISCLAIMER

These slides show experience examples of the Init7 / AS13030 backbone over various years. They may work or may not work for you. Please use the methods described with care and at your own risk. Init7 or the author cannot be held responsible for any damage occurred by using the methods described here.



B PNI vs. Public Peering

PNI vs Public Peering #1

... what people think:

Peering is free! Transit costs money!

We all know this is not true. Considering the free fall of transit prices in the last decade it might even be the other way round.



PNI vs Public Peering #2

Facts to consider:

Peering cost increase with distance.

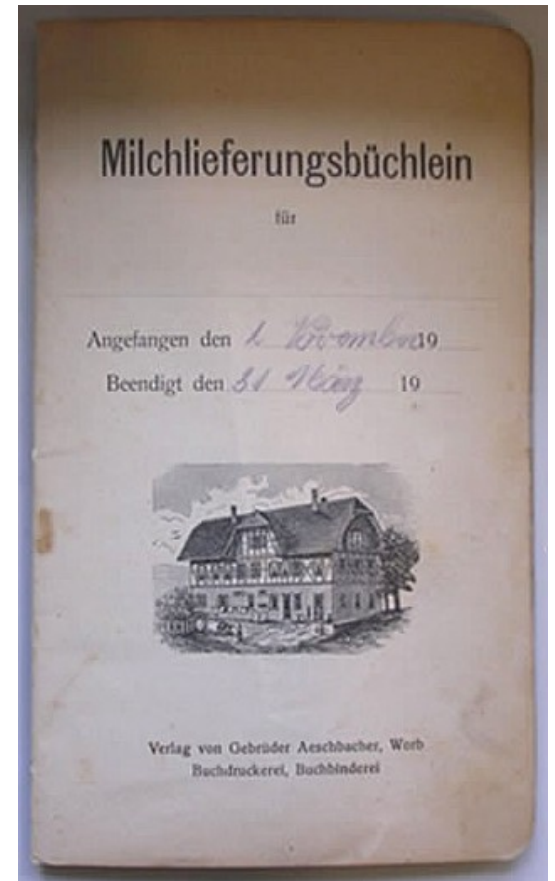
Local Peering may be considered “almost free”, but peering in a remote location (i.e. in Amsterdam for a Switzerland based network) can be costly.



PNI vs Public Peering #3

Milchbüchleinrechnung!

- German translation:
Milchmädchenrechnung
- English translation:
naive fallacy



PNI vs Public Peering #4

Cost calculation AMS-IX (2Gbps / 7Gbps)

| (Currency USD or EUR) | NRC | MRC |
|----------------------------------|-----------|-------------|
| AMS-IX Port | | 1'500.00 |
| Amsterdam Colocation | | 1'200.00 |
| 10Gig transport to AMS | | 2'000.00 |
| Router (depreciation 36mt) | 50'000.00 | 1'388.89 |
| Labour (tech staff) | | 1'000.00 |
| Travel etc. (Peering Manager) | | 500.00 |
| | | |
| Total cost | | 7'588.89 |
| | | |
| Price per Mbps (20% load) | | 3.79 |
| Price per Mbps (70% load) | | 1.08 |



PNI vs Public Peering #5

- Transit for low volumes would be cheaper than peering!

(find arguments to convince the CFO)



PNI vs Public Peering #6

Cost calculation AMS-IX (40Gbps)

| (Currency USD or EUR) | NRC | MRC |
|----------------------------------|------------|-------------|
| 40Gig AMS-IX Port | | 6'000.00 |
| Amsterdam Colocation | | 1'200.00 |
| 40Gig transport to AMS | | 6'000.00 |
| Router (depreciation 36mt) | 100'000.00 | 2'777.80 |
| Labour (tech staff) | | 1'000.00 |
| Travel etc. (Peering Manager) | | 500.00 |
| | | |
| Total cost | | 17'477.80 |
| | | |
| Price per Mbps (70% load) | | 0.62 |



PNI vs Public Peering #7

Cost calculation AMS-IX 10Gbps + 60Gbps PNI

| (Currency USD or EUR) | NRC | MRC |
|--|------------|-------------|
| 10 Gig AMS-IX Port | | 1'500.00 |
| Amsterdam Colocation | | 1'200.00 |
| 40Gig transport to AMS | | 6'000.00 |
| Router (depreciation 36mt) | 150'000.00 | 4'166.70 |
| Labour (tech staff) | | 1'000.00 |
| Travel etc. (Peering Manager) | | 500.00 |
| | | |
| Total cost | | 14'366.80 |
| | | |
| Price per Mbps (Load 70%= 28Gbps) | | 0.51 |



Questions?

Please ask!

