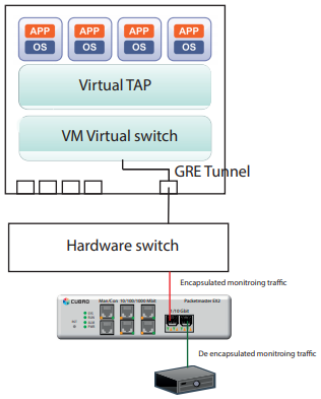
CUBRO
NETWORK VISIBILITY

GRE DE-ENCAPSULATION

APPLICATION NOTE

AUGUST 2017



Highlights

- GRE receiver and originator
- Hardware de-encapsulation
- Line rate up to 40 Gbit
- Multiple GRE streams per unit
- Easy to configure
- Filtering possible afterwards
- Standard feature (no extra charge)

Supported by

Packetmasters

EX2, EX5-3, EX12, EX32

EX20400, EX48400

What is GRE DE-Encapsulation

Virtualisation is a very common approach in data centers, but for monitoring purposes it is not so easy, because the network communication within the hyper visor is not transported over the physical NIC in the server. It is transported over the virtual switch. Thus, there is no access to this trac.

It is common to use virtual TAPs to solve this issue. But these virtual TAPs could not send out the trac straight, they use in most cases a GRE Tunnel.

GRE is a L2 transparent tunnel.

Original HP Header	Original Payload

Tunnel HP Header	GRE Header	GRE Payload

The original IP trac will be encapsulated with the new IP header and the GRE header. This trac can then pass the virtual and in some cases a hardware switch to reach the monitoring device. But this trac cannot be used for monitoring directly. It needs to be first de-encapsulated.

This can be done in an easy way with the Packetmaster, even the smallest unit the EX2 supports GRE de-encapsulation at line rate.

After de-encapsulation the trac looks like the original and can be ltered and forwarded to the monitoring device.