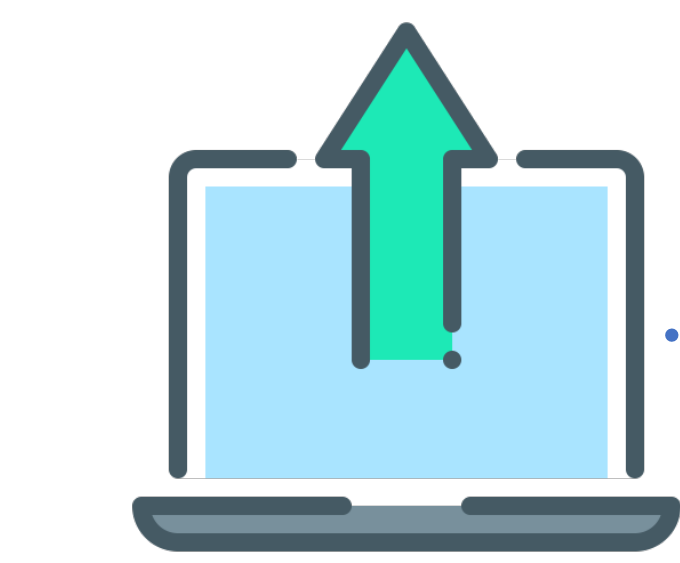


Eth	VLAN	IP	UDP	BWMap
vDBA BWMap Line Encoding				
Padding				5 bits
BWMap Length				11 bits
Alloc-ID				14 bits
DBRu				1 bit
PLOAMu				1 bit
Start Time				16 bits
Grant Size etc.				16 bits

Eth	VLAN	IP	UDP	DBRu
vDBA DBRu Line Encoding				
Padding				2 bits
ONU-ID				10 bits
Counter				4 bits
Buff Occupancy				24 bits



Management
Terminal

Orchestration and Management

Virtual Network Functions

VNO1

vOLT

vDBA1

VNO2

vOLT

vDBA2

VNO3

vOLT

vDBA3

Merging
Engine

XGTC

DBRU

Physical PON

XGTC

BWMAP

ONUs

OLT

XILINX®
VC709

ONU1

ONU2

XILINX®
VC709

Compute
Virtualisation
Control

Storage
Virtualisation
Control

Network
Virtualisation
Control

Hypervisor

Compute

Store

Network

Data Plane Acceleration



Data Plane

Traffic
Generator



TCONT#11

TCONT#12

TCONT#13

TCONT#21

TCONT#22

Option 1: Microblaze Local processing

Option 2: Passthrough