

## Data Center & Edge Use Case 6

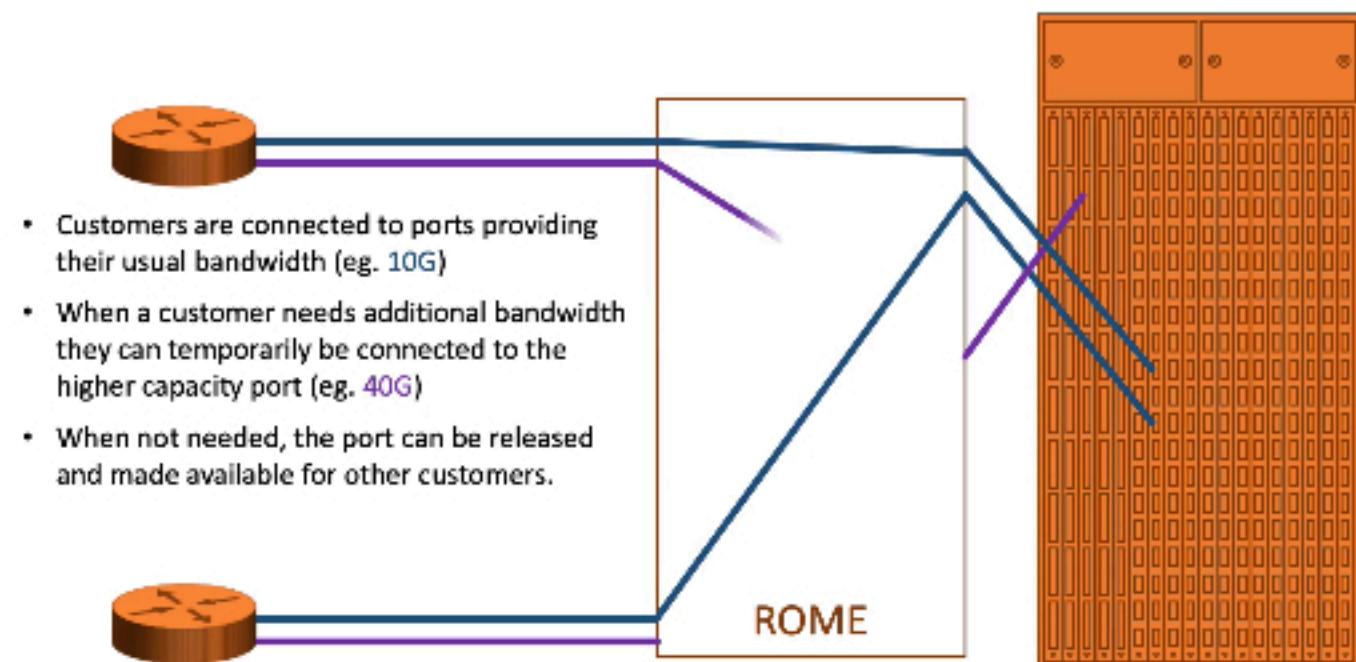
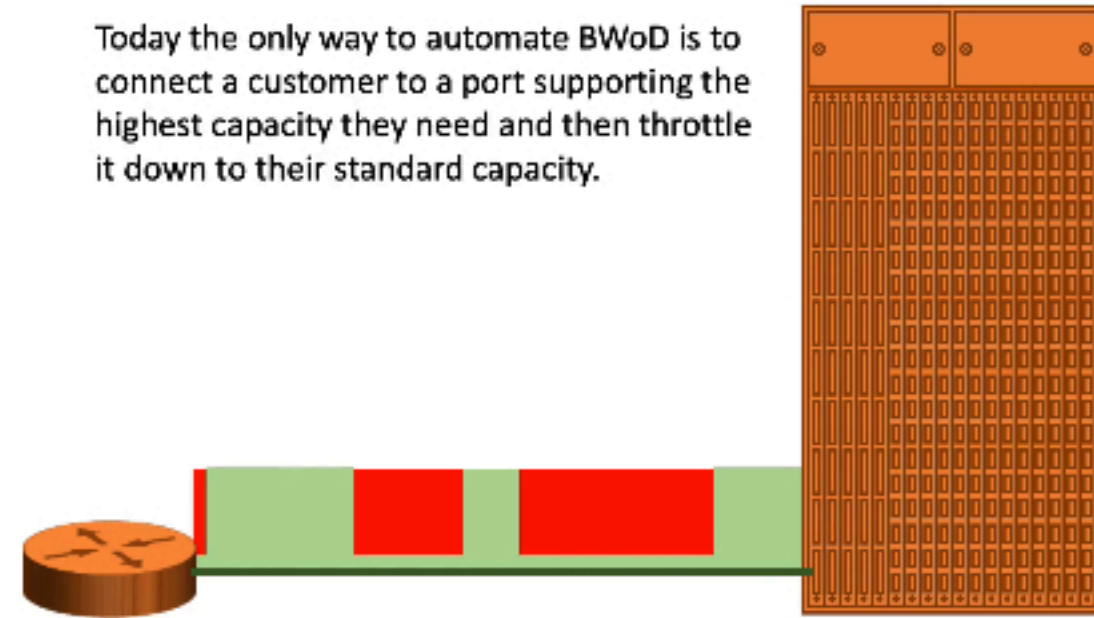
# Bandwidth On Demand Enabled via Layer 0

Today BWoD can only be implemented by provisioning the highest contracted speed (eg 100G) and bandwidth restricting the port to the normal operating capacity (eg 10G) until the high capacity is required. This means that the high capacity port is frequently operating at an average throughput of 15 – 20G meaning over 80% of its capacity is being lost whilst the port cost, footprint and running costs are being incurred.

In addition to all the usual benefits of an automated physical layer, the **ROME** also increases the utilization of high capacity ports in BWoD scenarios.

Customers can be connected to a low cost port (eg 10G) that provides all the B/W they need for their usual day-to-day operation. When the customer needs additional B/W, the ROME can temporarily connect them to a second higher bandwidth port (eg 100G) allowing them access to the additional bandwidth they need. When they no longer need the additional capacity the port can be released. The port is now available for other customers which minimizes the number of high capacity ports needed and increases the ports utilization dramatically.

Today the only way to automate BWoD is to connect a customer to a port supporting the highest capacity they need and then throttle it down to their standard capacity.



### Benefits include:

- Higher utilization on high capacity ports
- Fewer high capacity ports needed
- Lower CAPEX
- Lower cost of power, cooling, maintenance, etc
- No interruption to customer connection
- B/W can be added/removed in seconds
- Customer self-service portal easily enabled
- Automatic audit trail for connection changes