VGL VBG M8105 Next Gen ONT City of Malad, Idaho Deployment Case Studies

Virtual Gateway Labs’ VBG (Virtual Broadband Gateway) M8105 is designed and built to offer added smarts and capabilities beyond the traditional ONT (Optical Network Terminal). With traditional PON (Passive Optical Network) ONT or Point-to-Point Active Ethernet ONT, the sole purpose of the device is to provide broadband access to the end customer with basic networking features for bandwidth control. However, any additional services such as firewall, VPN, public safety emergency response system, just to name a few, all require a separate 3rd party device or appliance at the expense of the customers. Furthermore, for any services that customer subscribes, requires the customer to register or signup with the service provider then it takes the service provider time to bring the service up then deliver. This cycle can go up to 1 week before the customers could enjoy the newly subscribed services.

From the service provider side, the simple ONT can only provide bandwidth service efficiently. However, when offering value added contents or service, most of the time it requires to lease the service and re-distribute the service. Alternatively, it would be up to the end user to subscribe to the services with additional apps and using the bandwidth provided by the service provider. With this type of arrangement usually ends up with users complaining about the bandwidth availability and service provider suffers from updating bandwidth all the time without getting the benefit of added service with additional revenue.

For the reasons listed above, ATC Communications has chosen to adopt VGL M8105 Next Gen Open Access ONT for the deployment of new FTTH project at City of Malad in Idaho. VGL M8105 is designed to not only provide efficient bandwidth delivery but also provide the smarts to turn up value added services through Open Access Network. The architecture of M8105 allows ATC to effectively own and control the underlying bandwidth services while providing the Layer 7 application space for 3rd party service providers to provide services with its own space through the use of either Virtual Machine (VM) or Docker/Container.
The Open Access Network services and the Customer On-Demand service selection is achieved by setting a dedicated path from the service provider to the VM of the M8105 Next Gen ONT. The VM will act as the virtual environment for which the Content or value added service provider through the Open Access Network model can use to put in specific apps or service for delivering the required services to the end customer. ATC would allow the service provider to not only own the VM space but allowing them access to add/delete applications, controlling bandwidth flow and to provide the opportunity for the customer to opt-in and opt-out of the service on demand. By using M8105 to offer such a service, it also allows ATC to work with the value added service provider to obtain a revenue sharing model which the fund can be used to upgrade bandwidth and services to improve the final customer experience to create a win-win-win situation for everyone.

Currently, ATC has already deployed over 1300 units of M8105 to its customer in City of Malad. The service is achieved with a ring architecture at the core of the network to allow for maximum distribution efficiency while getting ready for the transparent network function for supporting the Open Access Network model.
To further enhancing the service to the residents of City of Malad, ATC further devised an overlay usage of the designed architecture to provide Public Safety Service to the subscribers. The service make use of the VM within the M8105 to be on high alert 24/7 for monitoring of any emergency messages or responses and alert the residents on demand of any emergency situation.
The particular deployment at City of Malad is to adopt outdoor M8105 Next Gen ONT running with single fiber active Ethernet environment to provide a true Gigabit Ether bandwidth to the home.
With the deployment of VGL M8105 Next Gen Open Access Gateway, ATC is now able to provide the residents with the following benefits

1. True Gigabit Ethernet fiber-to-the-home service
2. Open Access to 3rd party content and service vendor on demand
3. Convenient of outdoor deployment for ease of service
4. Subscription to Emergency Alert System and notification
5. Higher service level for one of the best pricing in the city.

Not only are the residents of City of Malad the beneficiary of this adoption of VGL M8105 for FTTH deployment, ATC also benefited from this decision

1. Adoption of Open Access Network for recruiting service providers
2. New revenue sharing model with service providers
3. Efficiency of providing the VoIP telephone services
4. Providing high speed symmetrical bandwidth service while maintaining pricing effectiveness
5. Customer satisfaction beyond the local competitors allowing the subscribers to pick and choose services as they wish.