

BBE – Helpdesk Management Tool

Fast network troubleshooting

The Helpdesk Management Tool

Broadband Business Engine Helpdesk Management Tool (BBE-HMT) is an application within the BBE product family*. BBE-HMT provides information needed for efficient troubleshooting in broadband networks.

With the broadband connection as the only source for services such as Internet, telephony or TV, fast troubleshooting becomes vital. With BBE-HMT, the first line technical support can be handled by the helpdesk personnel directly instead of forwarding the case to network engineers. This increases the customer experience and at the same time reduces OPEX.

Easy to Access

The troubleshooting page can be accessed from different screens in the BBE GUI:

- From the Customer screen in BBE-SMT
- From the Delivery Address list
- From the Port list

This allows that the troubleshooting page of the customer/physical port can be searched based on a number of parameters, such as, physical address, customer info, and so on.

Visibility of key network information

BBE-HMT provides an intuitive view of the network topology. This view shows to which port of the CPE the customer equipment is connected and how the end-user CPE is connected to the core network. BBE-HMT provides troubleshooting information for all network elements and ports on this path. Examples of the information provided are:

- Node name, type and model
- IP address
- Up/down status
- Uptime
- Element configuration
- Counters
- QoS parameters

BBE-HMT also provides information regarding CPEs connected to the network node, such as:

- MAC address
- SW and HW versions
- Client MAC address (PC, IP phone etc.)
- Connected services
- Counters
- QoS parameters

The availability of key network information reduces support case resolution times at the customer helpdesk and also decreases the need of costly visits to the end-user premises.

Valuable service information

BBE-HMT provides valuable information of the services provisioned to a CPE, such as the current (or most recent) and historical lease/expire information for each service.

Access control on troubleshooting data

In a wholesale or open access network all troubleshooting data in the whole network is visible to the network owner. However, each service provider can troubleshoot its own services and cannot see any information or data of other customers or service providers.

Verify and Repair

BBE-HMT provides a verification function that checks whether the subscription on a specific port is correctly provisioned. If the service provisioning is incorrect, the user can use the Repair function to correct the subscription by recreating the element configuration. This function can be used by the first line helpdesk to eliminate simple problems.

Integration

BBE-HMT is connected to BECS, the PacketFront Software's control and provisioning system, using the BBE-Core and BECS Mediation Point. It also has an open northbound API.

Key Benefits

- Reduces fault resolution time
- Enables Customer Services to troubleshoot the network
- Provides topology view of the network connections between the customer and the core network
- Offers key network information such as node status, port status, uptime, bandwidth, etc.
- In open access networks allows each service provider to troubleshoot its own customers and services

The screenshot shows the 'Network' tab with two network elements. The first element is 'VRS_HGB_12_1' with details: Model: SE2, MAC: 0008.ae45.14fd, Uptime: 11w2d1h54m0s, and Element IP: tengigabitethernet:(10.197.190.2), tengigabitethernet:(10.197.190.21), loopback0:(10.197.192.64). The second element is 'VRS_HGB_12_1-1' with details: Model: MSR2024G, MAC: 0008.ae7a.00fb, Uptime: 10w5d1h05m23s, and Element IP: gigabitethernet:(10.97.190.58), igabitethernet:(10.197.190.61), loopback0:(10.197.199.14).

The **Network** tab shows the current status of the uplink, network speed, uptime, and information about the uplink equipment.

The screenshot shows the 'Equipment' tab for a 'DRG761_MK12' device. It includes 'CPE Information' with fields: Mac Address: 000f.d532.65e0, IPv4 Address: 10.197.192.98, Version: DR7xx_4.5.1_R7, and Service: DHCP_static_std. Below is a 'CPE Ports' table:

Port:	fa1	fa2	fa3	fa4	WAN
Status:	down	down	down	down	up
Speed:	10-half	10-half	100-half	10-half	1000-full
Clients:			Client 1		Router
MAC:			0003a.5d81.00f4		0008.ae55.c65
Latest IPv4:			130.244.112.96		n/a
Latest Srvc:			Tele2_100MB		n/a

The **Equipment** tab provides the information regarding CPEs connected to the network node.

*This product requires BBE-Core version 1.8 or later