# Hands-On Troubleshooting Set Top Boxes for Customer Service/ Help Desk



# **Course Description**

Carriers are introducing IPTV services using IPTV set top boxes. Customer services staff will need to support these new services to assist customers who use their services and to troubleshoot service calls to identify those which need technician service calls.

This will enable attendees to upgrade their knowledge about how Video and Television is carried over IP in state-of-the art systems and to recognize the key symptoms of particular faults that can occur.

At the end of the course attendees will be able to ask customers questions about their service and identify the difference between simple mis-operation of the service and serious network or service faults needing technician call-out.

Attendees will observe typical fault conditions within class to familiarize themselves with what customers might observe and practice troubleshooting test situations to identify the potential faults.

## **Students Will Learn**

- Describe Key IPTV Services And How They Work In Simple Terms
- Distinguish Typical Fault Conditions Reported By Customers
- Appreciate What Tests Technicians Can Perform To Fix Problems
- Troubleshoot Simple Problems Caused By Customer Miss-Operation
- Communicate With Technicians That Make Service Calls What Faults Are Likely
- And More...

#### **Target Audience**

This course is aimed at Customer Services and Help Desk staff to enable them to better understand the new IPTV services and provide support to customers.

# **Course Outline**

#### Module I: IPTV Services and How They Work

What the customer can expect from IPTV Standard Definition Television High Definition Television Types of IPTV Multicast Live TV Video On Demand Recording IPTV Where Live TV Comes from: The Head-End Video On Demand Servers

#### Module II: Troubleshooting Multicast Live TV Services

How Live TV is transported What happens when customers select channels The impact of network delay The impact of network access overload The impact of packet loss How customers describe problems Lip Sync and sound problems Picture sizes and shape Configuration and addressing issues What the customer can do to crash the system Tests the Technicians can perform to locate the problems

### Module III: Interfacing TV to Set Top Box

S Video

Composite Video

HDMI Interfaces Antenna feeds High Definition sound feeds How to tell the difference What the customer can configure on TVs Faults that can occur with the TV and their fixes

#### Module IV: Video On demand Problems

Differences between VoD and Multicast TV Different network loading problems Security and DRM issues and their impact on services Access identities and age restrictions

#### Module V: Developing Approaches to Troubleshooting

Recognizing how customers describe problems Matching descriptions to possible faults Identifying which potential fault conditions can be rejected Selecting what to ask the customer to help fix the problem Selecting what to do next

## **Delivery Method**

Instructor-Led with Numerous Hands-On Labs and Exercises.

# Equipment Requirements

(This apply's to our hands-on courses only)

BTS always provides equipment to have a very successful Hands-On course. BTS also encourages all attendees to bring their own equipment to the course. This will provide attendees the opportunity to incorporate their own gear into the labs and gain valuable training using their specific equipment.

# **Course Length**

2 Days