

# What is NBN Co's Multicast service?

**Multicast** is the NBN Co volume data distribution product, particularly suited to video and IPTV delivery. It is designed to enable content to be transmitted simultaneously to multiple parties but carried as a single stream as far into the network as possible before being replicated and forwarded to potentially thousands of end users.

Multicast is designed to enable content to be injected once per point of interconnect and is designed to provide a cost effective content delivery solution by reducing customer's backhaul costs compared with the Unicast method of content delivery. It has been designed to make "one to many" video transmission in Australia more efficient and more economical as well as providing many innovative and interactive opportunities.

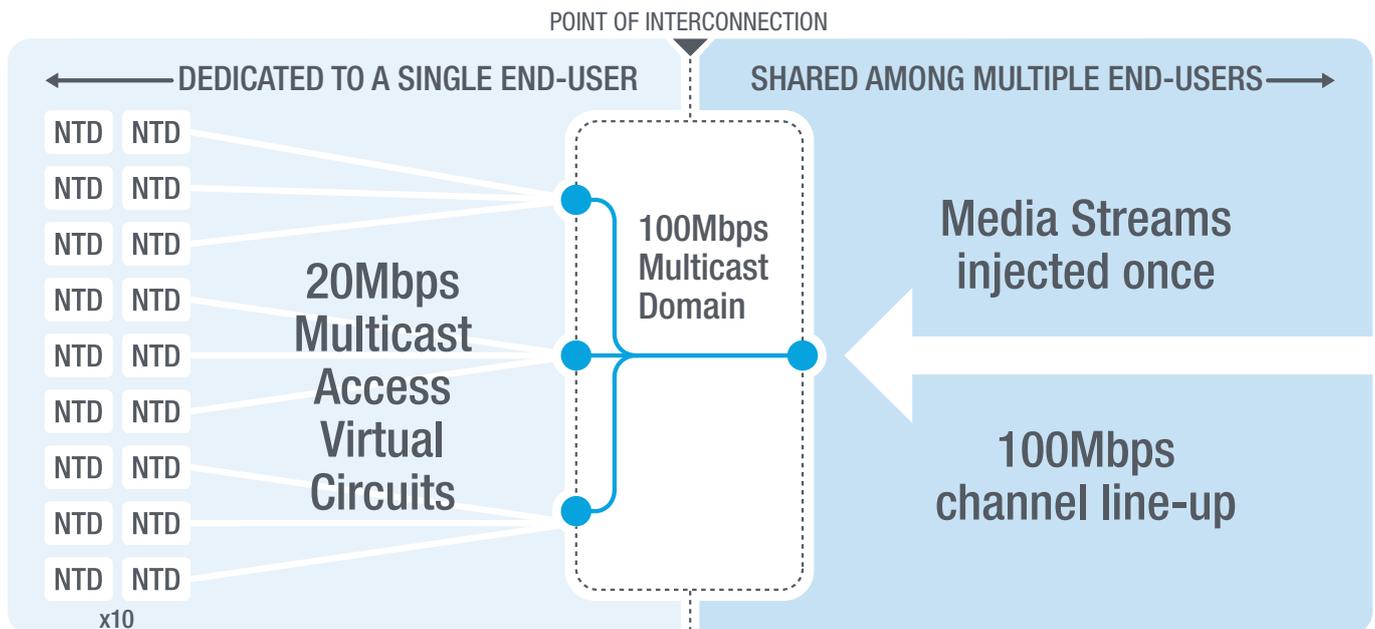


Figure 1: Multicast replication

To illustrate this, figure 1 shows 180 end users, each receiving a 20 megabits per second media stream over the NBN Co fibre network. Multicast is designed to enable the service provider to inject the media streams only once at the point of interconnection.

Using a standard data service, the service provider would need to inject each individual end user's media stream 180 times at the point of interconnection, consuming approximately 3600 Mbps of bandwidth, compared to the 100 Mbps required when using the Multicast feature.

# Why Multicast?

There are many ways customers could potentially benefit by moving scale video delivery to NBN Co's Multicast platform including:

## **Quality of Service (QoS)**

Dedicated Multicast bandwidth per household is designed to ensure uninterrupted, quality linear streaming - not affected by any other activity in the household (eg. downloads, Skype). Multicast traffic is treated as a higher priority than general internet traffic.

## **Accurate audience measurement**

Using Multicast could enable every channel-change request to be captured, enabling exact audience measurement.

## **Localised advertising**

As NBN Co has 121 points of interconnect throughout Australia, Multicasting different versions of a channel to each point could enable localised advertising opportunities.

## **Interactive and audience participation innovation opportunities**

The associated NBN Co internet service could allow innovative audience interactivity opportunities via multiple devices (second screens).

## **Increased market share**

End users will be able to purchase triple play opportunities from service providers offering bundled services (internet, telephony and IPTV) and receive broadcast quality TV, movies and interactivity through their NBN connection by using compatible equipment.

## **Only send currently viewed channels**

If a channel is not actively being watched or recorded within a point of interconnect area, it does not require backhauling, creating cost and network efficiencies compared with a standard data service.

## **Other uses**

Multicast is not just about IPTV, the technology can replicate any data to thousands of homes. So, for example, an electricity smart meter update could be injected once per point of interconnect and everyone would receive it.

# What does Multicast mean for your end users connected to the NBN?

## **Choice**

Viewers are expected to have the ability to watch premium live HD channels across IPTV and on other devices connected to the home network.

## **Quality**

Multicast will have dedicated bandwidth over the NBN giving the high quality of service that consumers demand.

## **Interactivity**

Combined with the Ethernet Bitstream product and other devices, viewers could potentially interact or even participate with their favourite shows or pull down exclusive additional content in premium quality.

## **Ready for tomorrow**

The Multicast feature is expected to be able to adapt and support the television resolutions of the future, including Ultra High Definition TV.

# How do I get further information on the Multicast feature?

If you would like more information about the Multicast feature please talk to your NBN Co account manager or contact NBN Co on [sales@nbnco.com.au](mailto:sales@nbnco.com.au).