3RD Generation ONT

Technology Introduction

Chorus is introducing a new ONT in March that will replace the older 2nd Generation ONT for the majority of NGA connections. You will need to be aware of the differences between the ONTs and the exception senarios.

We have put this guide together to assist frontline staff in understanding the change and have informed conversations with customers.

3rd Generation ONT overview

- Sleeker more compact appearance with updated branding and a Wi-Fi antenna
- Light switch to disable indicator lights (except power)
- QR Code - Initially this will replicate the QR code on the 2nd Generation ONT. Further development will be done on this at a later stage
- Integrated mounting bracket and fibre jack (ITP)
- Single voice ATA port
- 12V Power supply with standard connector.

Features and differences

2nd Generation ONT (G-240G-P)

Added to Chorus Inventory: June 2015

Ports: 4 x LAN / 2 x ATA

Products Supported: BS2, BS3 & Voice

Power Supply Unit (PSU): Molex connector

Australasian Use: Manufactured by Nokia for NBN in Australia & Chorus in NZ only - Combined this volume is less that 1% of the world ONT volume.

Additional Detail: Will remain in use for BS3 connections / QR code functionality

3rd Generation ONT (G-140W-C)

Added to Chorus Inventory: March 2019

Ports: 4 x LAN / 1 x ATA / 2 x USB

Products Supported: BS2 & Voice

Power Supply Unit (PSU): Coaxial (barrel) connector - Used widely for consumer electronics.

Worldwide Use: Newly designed ONT which has been selected by both China Mobile & Bharti Airtel India (Worlds largest & 3rd largest mobile operators) as their high volume ONT's for their fibre networks.

Additional Detail: Wi-Fi & RGW Capable / Switch to turn off LED lights / 'Do Not Remove' Labelling on ONT & PSU / QR code functionality/ USB port

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Power supply

The 3rd Generation ONT utilises a standard 12V power supply that will be labelled with "Do not remove". The issue of vanishing power packs won't go away so we continue to look at better ways of dealing with replacements.

In March we are launching a new process for ordering replacement power supplies for ONTs:

- A web form will be hosted on Chorus.co.nz
- RSPs and end customers will be able to use this form and it will complement our current processes
- A replacement ONT power supply will be dispatched directly to the end customer.

A QR Code on the side of 3rd Generation ONT

- 3rd Generation ONT will have 2 QR codes on the side.
- One of the QR codes is for future functionality Wi-Fi and will direct you to your Wi-Fi Settings however these will not be turned on at this stage.
- The other QR code will have information on the 3rd Generation ONT with an updated picture and information as per the current QR code on 2nd Generation ONT. This currently points to this webpage Chorus.co.nz/q.

Exception scenarios

There are a few scenarios that the 3rd Generation ONT won't support. In these instances the 2nd Generation ONT will be supplied.

These scenarios are as follows:

- Bitstream 3 or 3A
- Use of the 2nd ATA port on the ONT

The Chorus exception scenario processes will:

- Let the technicians know to install a 2nd Generation ONT for new BS3 orders.
- Get Chorus provisioning to contact the RSP provisioning team to get an order resubmitted with a truck roll to change to a 2nd Generation ONT where required.

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Frequently asked questions

1. Will the 3rd Generation ONT have Wi-Fi?

Although the new ONT has Wi-Fi capability, this function will NOT be enabled at this stage. However this is on the roadmap for future development.

2. Will the 3rd Generation ONT fit into a communications cabinet with the aerial extended?

Yes it does, however other items that are also housed in the cabinet may prevent this. It is worth noting that the initial Wi-Fi testing has indicated that Wi-Fi performance is better when the aerial is in the horizontal position. However, steel cabinets will affect Wi-Fi performance.

3. Will there be any changes to the port configuration?

This will remain the same as today, with the exception that the 3rd Generation ONT only has 1 x ATA port.

4. Will Chorus swap out a 2nd Generation ONT to a 3rd Generation ONT at faults when applicable?

Yes, the plan is to proactively swap out a faulty 2nd Generation ONT to a 3rd Generation ONT where the service allows. Non-faulty ONTs will not be swapped out.

5. Will end customers be able to log into the ONT in the same way they do with a router to configure Wi-Fi access points?

While the ONT is being used in bridge mode, as today, there will be no option to log into the ONT. In the future if the residential gateway functionality is introduced, there would be an option for a customer to log in to a similar landing page that they would see today with their residential gateway/modem.

6. The 3rd Generation ONT has 2 x USB ports. Will these be functional?

The 3rd Generation ONT is to be introduced into the network as an ONT. Today, while the ONT is being used in bridge mode, the USB ports & aerial will be non-functional. These ports are associated with the residential gateway functionality and there are plans to consult with RSPs around future Wi-Fi & residential gateway functionality in the future.

7. What value do end customers/RSPs see from this delivery?

Initially this will be an ONT for ONT hardware lifecycle replacement, so the benefits/difference will be minimal. Future services and innovation that will be part of the product roadmap will provide value for both end customers & RSP's however at this early stage, this is still to be defined.

8. What is the billing impacts to RSP's for the exception scenarios?

RSPs may potentially see a truck roll for the exception scenarios. These will have billing adjustments applied to credit the truck roll charges so that there is no cost to RSPs for these scenarios.

9. Can customers turn off the LED lights on the ONT?

Yes there is a switch on the new ONT that allows all LED lights to be turned off apart from the Power LED which will remain on.