

# OFDM- Article no. 5372

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## Introduction

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### Extra Credit

Extra Credit procedures are additional information which is not necessary for troubleshooting but could help explain how some more advanced items work. Some of the concepts and language may be more advanced than you might encounter in your day-to-day work.

## Resolution Steps

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### OFDM

**Orthogonal Frequency Division Multiplier** is a way of encoding digital data across multiple frequencies. **OFDM** is the technology behind **MOCA** and our latest speed upgrade to **Gigabit Internet**.

You will observe this as a drop down in **Merlin**.

This is different from **DOCSIS 3.0** specifications of using wideband channel spacing and behave differently. The efficiency and redundancy of OFDM vs. FDMA (The Technology behind DOCSIS 3.0) is phenomenal. **OFDM** allows for a much more efficient use of bandwidth available over any given network.

Essentially, by **eliminating the space** between **separate channels**, we are able to more efficiently use our equipment to provide superior speeds. If we look at the chart below we can see the same amount of channels in a comparison of subcarriers.

Online URL: <https://agentx-astound-kb-qa.hgsdigital.com/article.php?id=473>