

A smiling family of three (a woman, a man, and a young girl) are sitting on a white leather sofa in a modern living room. The woman is wearing a pink top, the man is wearing a blue polo shirt, and the girl is wearing a white and blue striped shirt. They are all looking towards the camera with happy expressions. In the background, there is a warm-toned lamp and some kitchenware on a counter.

**devolo**

In partnership with  
**DIGITAL TV**

# Delivering the UHD Content Distribution Utopia

How to optimize the home network for the delivery of Ultra-High-Definition TV content



# Addressing the content distribution bottleneck

Main challenge for operators is to provide enough bandwidth in full coverage (100% of the home) to transport UHD content from the home gateway to any place within the home where the final customer wants to access those services.

But more and more households want to watch TV content high-bandwidth-requiring ultra-high-definition. At the same time, wireless devices like smartphones and tablets need to be constantly connected to the internet. Current 2.4 GHz networks are often overloaded, and became a bottleneck for content distribution and internet access alike.

To maintain highest customer satisfaction, and to address the needs for smooth IPTV signal next to the TV in combination with a wireless home network at the same time, a new approach to content distribution in home networks needed to be found.



# Delivering UHD TV and high-density content



# The home network utopia

**What is the ideal home network configuration for the standard home and what devices are needed to support it? How many devices are needed and what approaches should operators take?**

Operators face the challenge of guaranteeing the best service quality in different home network scenarios while delivering a solution that remains cost-effective across almost every kind of use case. In addition to that, WiFi coverage should be 100% everywhere in the home, and extremely reliable.

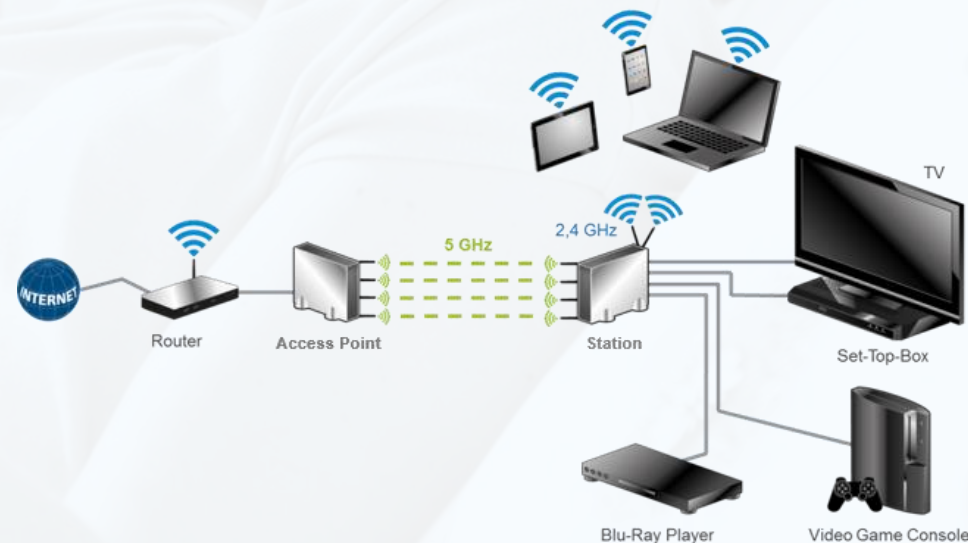
devolo offers scalable solutions for every use case, and for the highest level of performance. Its existing powerline and powerline + WiFi solutions support web surfing and the streaming of HD content to fixed and mobile devices. But to deliver UHD TV, devolo recommends its newly developed 4x4 IPTV Video Bridge solution with Multi-User MIMO Technology – the devolo OS WiFi Bridge.

This 'IPTV and WiFi dream team' offers end customers best triple play experience with high-speed WiFi connectivity and multi-room IPTV scenarios. It can either be used as a video bridge to distribute IPTV to every room, or as a crossband repeater when mobile devices have no connectivity to the WiFi home gateway.

# Use Case Scenario 1 – Video Bridge for HD/3D/4k IPTV Services

The OS WiFi Bridge Access Point of the video bridge is connected to the internet router via Gigabit Ethernet LAN and delivers the broadband signal in up to 1734 Mbps transmission speed over a 5 GHz WiFi network to the OS WiFi Bridge Station.

Smart-TV, set-top-box, Blu-ray Player and video game console are connected to the OS WiFi Bridge Station through four Fast Ethernet ports. Other devices such as smartphones, tablets and laptops can access the internet via a 2,4 GHz WiFi network, and therefore have no influence on the quality of the IPTV stream.

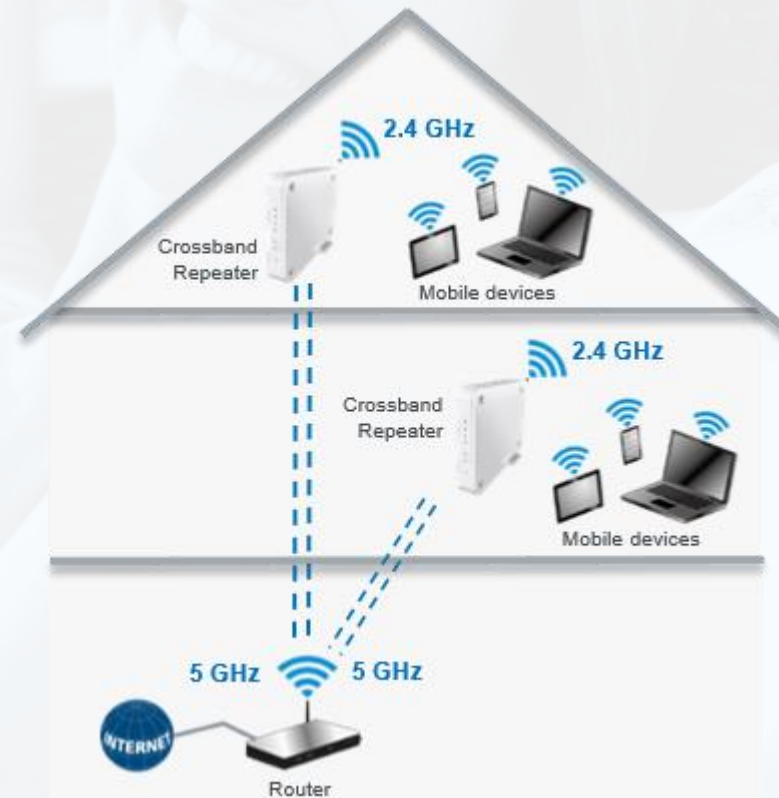




# Use Case Scenario 2 – Crossband Repeater for Extended Coverage

Existing home networks can be optimized by adding one or more crossband repeaters to the network.

Depending on the number of 5 GHz WiFi channels supported by the home gateway, flexible scenarios with multiple crossband repeaters provide best mobile connectivity for mobile endpoints in the whole home, guaranteeing 100% coverage combined with a stable connection.





# The home network challenge and the devolo solution



# How can devolo deliver the dream?

The main challenge for operators is to ensure the best possible UHD service quality and therewith highest customer satisfaction – no matter what technology the end customers' home network is based on.

With over 14 years of market-leading expertise in the operator market, devolo Operator Solutions is able to provide tailored solutions to every specific challenge operators face in different countries.

When operators are asked why they chose devolo products, they usually refer to these 5 reasons:



# How can devolo deliver the dream?

**Quality.** devolo offers carrier-grade quality products that ensure high reliability and low downtimes. Best possible TCO and highest customer satisfaction are devolo's targets. The aim is to archive low operation cost and return rates.

**Innovation & Simplicity.** devolo listens to the demand of operators to fully understand their needs. Based the findings, the Operator Solutions business unit develops new groundbreaking products that operators profit from by enabling them to roll out new and innovative services. The overall approach to simplicity can be found in every aspect of the product, resulting in innovative solutions for operators and their end customers' needs.

**Flexible Supply Chain & Forecast.** With an experience in logistics and warehousing over decades, as well as a well-trimmed and optimized value chain, devolo is able to provide products in time, on schedule and on demand. The end-to-end supply chain has a proven track record of ensuring best control in every segment, keeping the quality, quantity and time promise made.

# How can devolo deliver the dream?

**Best Performance.** With more than 14 years of experience as the market leader for home networking solutions on both the retail and operators market, devolo is able to offer an allround-carefree-package. This helps operator customers to concentrate on what is really important to them – and forget about product or support challenges. devolo products are valued by customers because of their ‚first time fix‘ nature, resulting in low call rates and a high NPS.

**Competency in Partnerships.** Employees working in the Operator Solutions business unit have the same background as their customers, and therefore really understand the specific KPIs of customers and the market alike. With its focus on home connectivity products, devolo is an expert and market leader for decades – and not a generalist with many product lines as certain competitors. This ensures that no matter how complex challenges that arise get – devolo Operator Solutions is most likely to solve them in a short turnaround time.

**Are you ready to tackle the home network challenge? devolo definitely is.**



# Contact us

**Thank you for your interest in our solutions.**

You have multiple options to reach out for us.  
For more information, you can

Visit [www.operator-solutions.com](http://www.operator-solutions.com)

Use our [online contact form](#)

Write an email to [sales@devolo.de](mailto:sales@devolo.de)

Call us under [+49 241 182 79-279](tel:+4924118279279)