Clearwater County

BROADBAND PROJECT

Broadband Committee

Jan 29 , 2024

clearwatercounty.ca

Open Access

- Open Access Key Points
- Open Access (No Roads Edition)

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Open Access Key points

What is open access ?

Open Access refers to shared network infrastructure where multiple service providers can offer their services to users.

It enables different companies to use the same network to deliver services like internet, phone, and TV.

Why is Open Access Important?

Diverse Services: Open access allows users to choose from a variety of service providers and offerings.

Competition: Multiple providers compete for users, leading to better service quality and lower prices.

Resource Efficiency: It reduces the need for redundant network infrastructure.

Key Players in Open Access

Infrastructure Owner/Operator: Builds and maintains the physical network infrastructure.

Service Providers: Offer services over the shared network, such as internet or telecommunications services.

Content Providers: Deliver specific content or applications over the network.

Advantages of Open Access

Consumer Choice: Users can select from various service providers and tailor services to their needs.

Innovation: Encourages innovation and the introduction of new technologies and services.

Competition: Fosters competition, leading to improved service quality and lower costs.

Your Role in Open Access

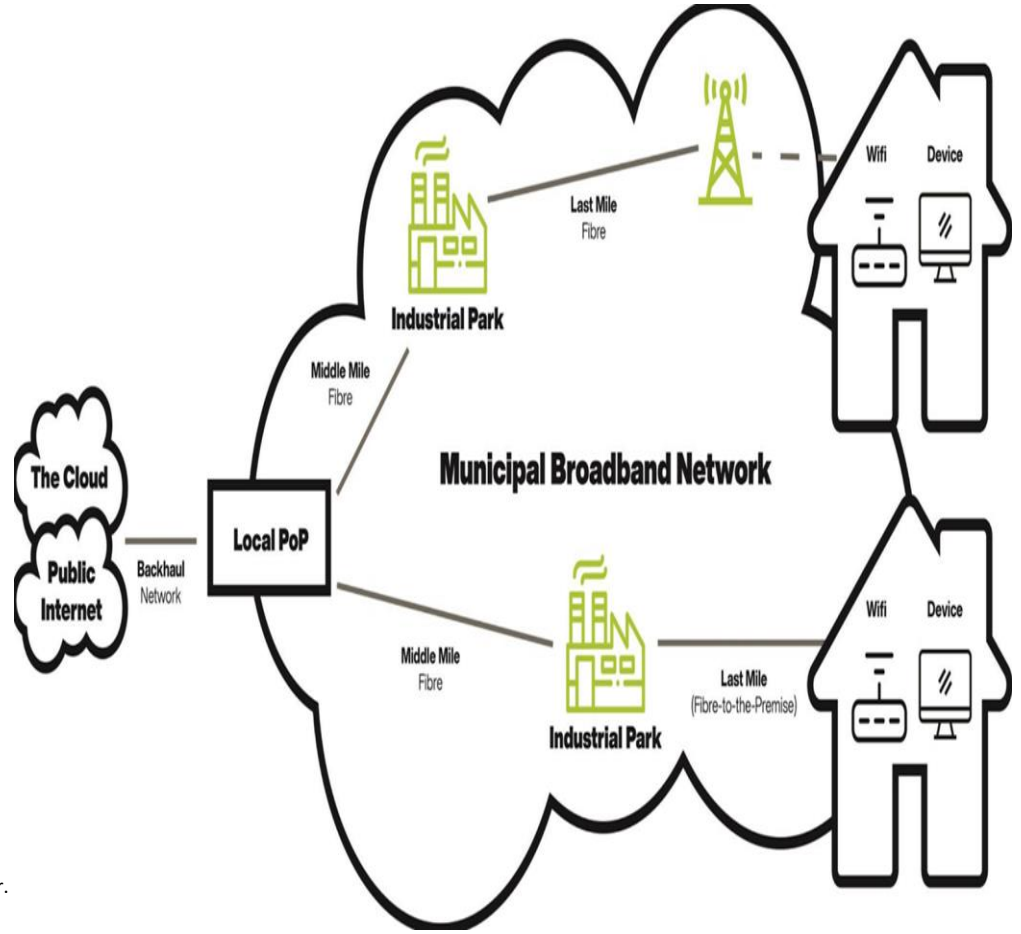
As a user, you have the freedom to choose service providers and customize your internet experience.

Open Access empowers you to make decisions about the services you use, like selecting software or apps.

Remember

Open Access optimizes network resources, promotes competition, and empowers users to choose the services they prefer.

It's a technical framework that creates a dynamic and competitive telecommunications environment.



*This technical key point sheet provides a deeper understanding of open access networks and their technical aspects. It can be useful for those interested in the technical underpinnings of telecommunications and network infrastructure.

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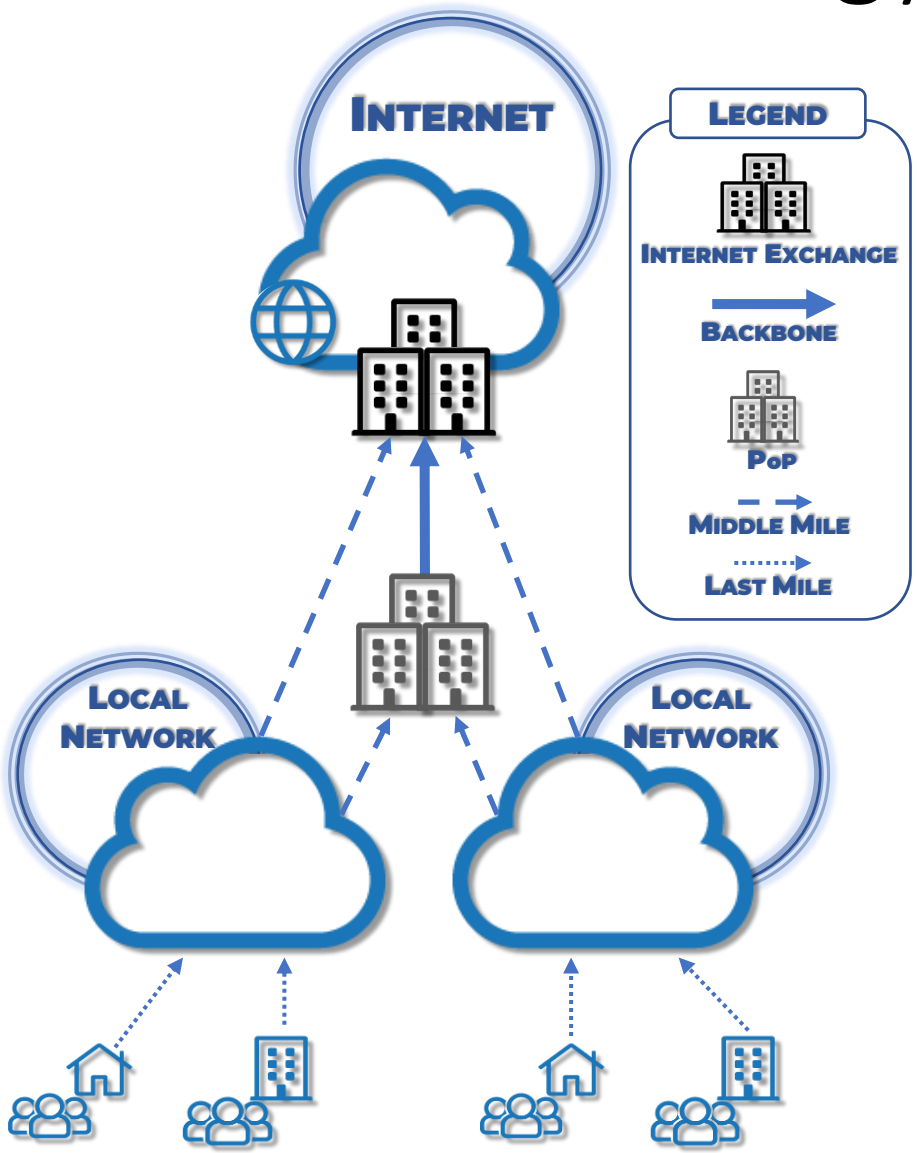
Network Terminology



Internet Exchange (IXP)DATAHIVE

An Internet Exchange is a generally neutral common location, where Internet Service Providers (ISPs) and other internet infrastructure companies exchange internet data.

Point of Presence (Pop)

A Pop is a location that providers uses to aggregate data connections.

Backbone

A large connection used to connect core network components.

Middle Mile

The connection between the Last Mile and internet connectivity.

Last Mile

The connection from a local network to the end user's location.

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Maybe

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To explain Open Access in the context of an airport analogy

- Think of Open Access broadband as an airport. Just like an airport is a hub that allows multiple airlines (service providers) to operate flights (internet services), Open Access broadband is a network infrastructure that allows multiple internet service providers (ISPs) to offer their services to customers.
- Airport Terminals (Physical Infrastructure):
- The airport terminals and runways are like the physical fiber optic cables and infrastructure. They are the essential facilities that planes need to land, take off, and serve passengers. In Open Access, the physical network is the essential infrastructure that ISPs use to deliver internet services to customers.
- Airlines (ISPs)
- Just as different airlines can use the same airport to offer their unique services to travelers, different ISPs can use the same Open Access network to offer internet services. The competition among airlines leads to a variety of flight options, destinations, and prices for travelers. Similarly, the competition among ISPs on an Open Access network can lead to a variety of internet plans, speeds, and prices for users.
- Air Traffic Control (Regulation and Management): Clearwater County
- Air traffic control manages the takeoffs, landings, and overall flow of aircraft to ensure safety and efficiency. Similarly, Open Access networks are regulated and managed to ensure that all ISPs have fair access to the infrastructure and that the network operates efficiently and reliably for all users.
- Duty-Free Shops (Value-Added Services):
- Just like airports have shops and restaurants that provide additional services to travelers, Open Access networks enable ISPs to offer value-added services such as streaming, cloud storage, or cybersecurity packages on top of basic internet access.
- Boarding Passes and Security (Access and Authentication):
- Travelers need boarding passes and must pass through security to access their flights. In an Open Access model, customers need to subscribe to an ISP, which ensures that they have access to the network and that their data is secure as it travels across the infrastructure.
- Baggage Handling (Data Management):
- Baggage handling systems transport luggage to and from planes efficiently. Similarly, data management systems on Open Access networks efficiently route data to and from users through the network infrastructure.
- * Using this analogy, Open Access is a way to be accessible to everyone for availability of broadband services, much like how an airport facilitates various airlines to serve a diverse group of travelers. It's about sharing essential infrastructure to benefit the larger community, ensuring that services are widely available, competitive, and efficient.

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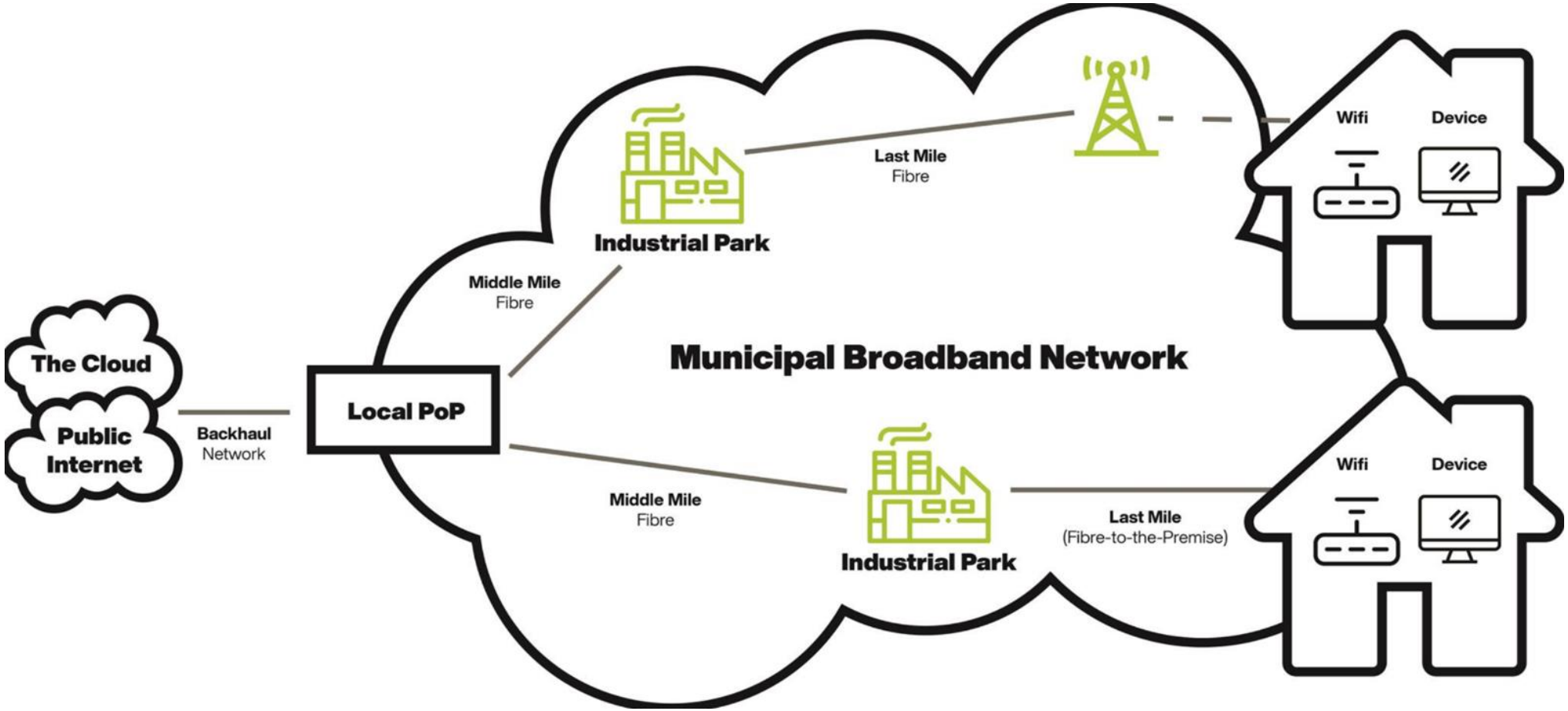
Open Access Concept Diagram



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THANK YOU

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