



The Emergence of Edge/Fog Clouds

Introduction



Edge/Fog Clouds emerged as a solution to handle the increasing amount of data generated by IoT devices. These architectures allow processing and storage closer to the source, reducing latency and bandwidth usage.



Edge Computing

Edge Computing refers to the processing of data closer to its source, typically at the edge of the network. It allows for faster response times and lower bandwidth usage, making it ideal for latency-sensitive applications.

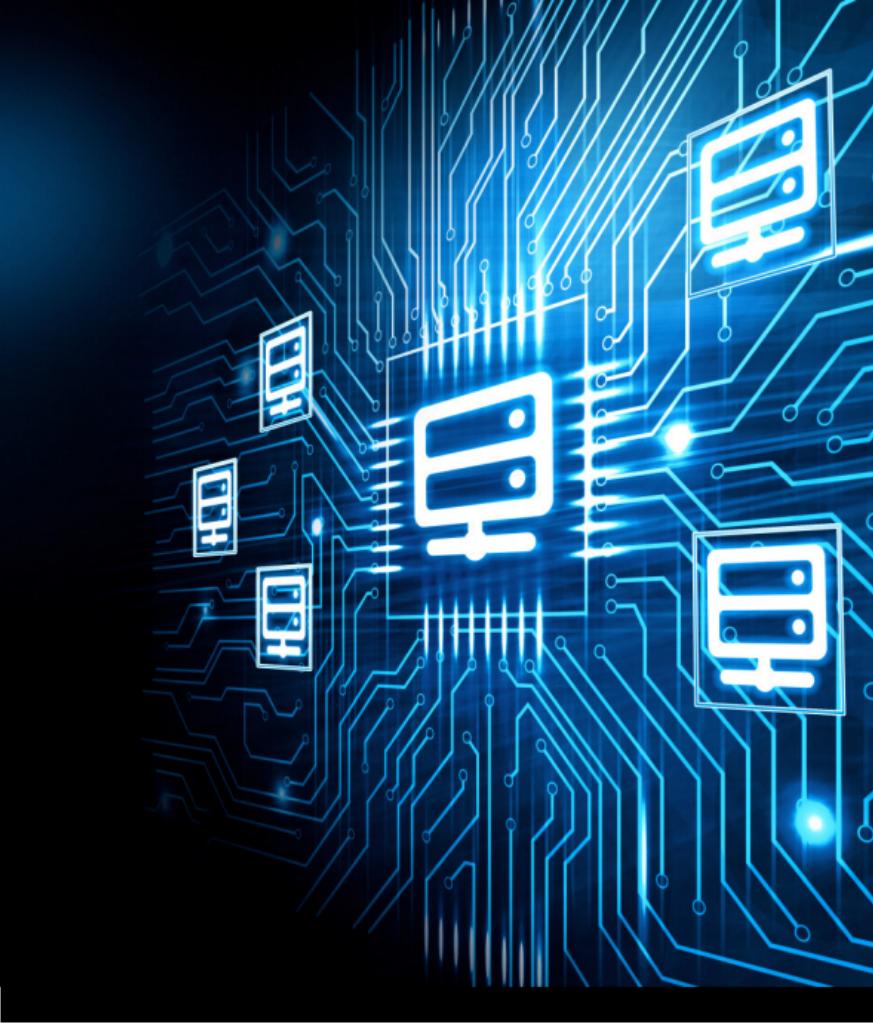
Fog Computing

Fog Computing refers to the extension of cloud computing to the edge of the network. It allows for distributed computing and storage resources, enabling data processing closer to the source while leveraging cloud capabilities.



Architecture

Edge/Fog Clouds are composed of three layers: **edge devices**, **edge servers**, and **cloud servers**. Edge devices collect data and perform basic processing, edge servers perform more complex processing, and cloud servers provide storage and additional processing capabilities.





Challenges

Edge/Fog Clouds face several challenges, including the need for **security** measures to protect data at the edge, **scalability** to handle increasing amounts of data, and **interoperability** to ensure compatibility between different devices and platforms.

Conclusion

Edge/Fog Clouds offer a promising solution to the challenges presented by IoT, enabling faster response times, lower bandwidth usage, and distributed computing and storage resources. However, further research and development is needed to ensure the scalability, security, and interoperability of these architectures.

Thanks!