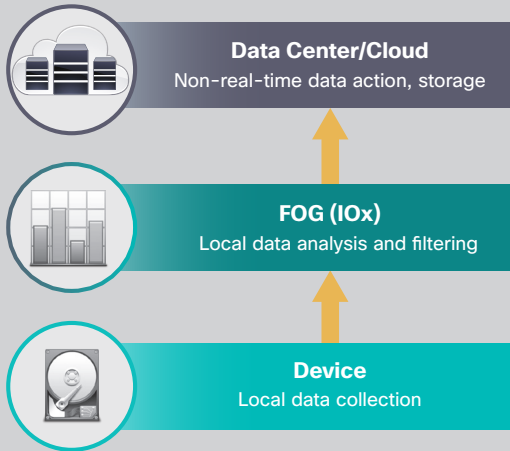


IoT with Fog Computing



What You Can Do:

- Analyze and act on data right at the network edge
- Use bandwidth and storage capacity more efficiently by sending only relevant information to the cloud
- Develop and deploy custom IoT applications faster
- Connect any protocol or device through an open platform
- Continually integrate new technologies into your connected environment

Cisco Fog Computing with IOx

Turn IoT Data into Immediate Action

Traffic cameras in a congested city detect an approaching ambulance. What if they could automatically trigger traffic signals along the ambulance's path to move traffic out of the way so the ambulance could reach the emergency faster?

A sensor on a remote oil pipeline detects a critical pressure change. What if it could send an instant command to the pumping station to immediately slow down pumping and dispatch a repair crew?

Machine decisions like these could save billions of dollars and potentially human lives. But they're not widely deployed. That's because cloud computing alone just isn't efficient enough to analyze and act on the torrent of data generated by the Internet of Things (IoT) in real time.

There's no viable way to transmit the exabytes of data generated each day to the cloud for analytics. It's more efficient for your network to analyze sensor data locally. Then decide what should be passed onto the cloud and what requires immediate action.

It's a concept called fog computing. And Cisco® makes it possible today with the Cisco IOx platform. Cisco IOx takes the best of Cisco IOS® Software capabilities, combines them with compute, storage, and memory at the network edge, and makes them accessible through an open environment. So you can develop your own smart applications to capitalize on the power of fog computing right now.

Unleash Innovation

Cisco IOx provides an open, extensible environment for hosting your OS and applications at the network edge. You also get an SDK and middleware services so you can:

- **Bring Your Own Application:** Deploy customized business logic and the capabilities to support it in the network device closest to the one gathering data for immediate action. It's all bundled into a hardened 3G/4G-connected router, with no need for additional hardware.
- **Bring Your Own Interface:** Connect your application with any protocol, interface, or device you choose, right away, instead of waiting months for vendors to build it for you.
- **Analyze Data Locally in Real Time:** Create and apply custom rules for processing sensor data locally with Cisco Data in Motion, the IOx middleware analytics and policy engine.

Next Steps

Ready to learn more about what fog computing can do for your business? Visit www.cisco.com/go/iox.