

# IoT Edge: there is no spoon

One of the current IoT trends is to talk about the edge: edge devices, functionality at the edge, security at the edge, and so on. As happens with many other IoT trends, it's not clear what's exactly the edge in the IoT context. The answer to this confusion might be that [there is no edge](#) at all.

The edge is traditionally defined as the border between the core network and the end users. However, many people visualize the edge as the division between secure networks and insecure networks. This might have created a false sense of security: the good guys are inside and the bad guys are outside. When we read about [insider threats](#) representing around the 50% of the attacks, we realize this separation between networks might not be a good idea. To make things worse, the notion that "security beyond the edge is not my business" hovers over the minds of many IT professional. These perceptions applied to the IoT ecosystem could be the source of some of DDoS attacks using IoT devices.

Can we really exclude the sensors from our core network? Wouldn't be more secure to manage them as part of the core network? With some exceptions, such as using your smartphone to gather data, an IoT designer would -and should- manage the sensor's OS, its communication channels and the data it's allowed to send and receive. So, why treat the sensor device as an outsider of the IoT system? Do we need an edge at all?

Maybe the right question to ask is a more generic one: can we just import the current IT framework and terminology aimed to connect people to the IoT ecosystem? Aren't we going to inherit all our past bad experiences with networks to IoT systems by doing so?

The IoT field is so new that we are just starting to understand their use cases. It's very tempting to try to apply the concepts already used in traditional networks so we can go forward, however the current concepts, architectures, protocols, etc. could not be the best answer for IoT systems. Before embracing blindly a technology already deployed, we should ask ourselves first if it really solves the problems we are facing or if we are just adapting the problem to the tools we have at hand.

Then we will be able to blend the spoon.