



## IOT Map Device

An IOT (Internet of Things) map device is a device that is connected to the internet and is capable of gathering and transmitting location-based data to other devices or systems. These devices typically use a combination of GPS (Global Positioning System), Wi-Fi, Bluetooth, and cellular technologies to determine their location and transmit that information to a central server or cloud-based system.

IOT map devices can be used for a variety of purposes, such as tracking the location of assets, vehicles, or people. They can also be used for geo fencing, which involves setting up virtual boundaries around a specific area and triggering alerts or actions when a device enters or leaves that area.

The Internet of Things (IoT) is growing rapidly with an estimated 23 billion connected devices deployed worldwide in 2018 [28]. These devices range from expensive infrastructure components, such as actuators in smart cities, through to low-cost commodity devices such as radio frequency beacons (e.g. iBeacons).



## IOT Map device

Deployment strategies for such IoT devices range from carefully controlled large-scale rollouts with significant organizational support through to ad-hoc deployments by individuals. While the number of devices, and the degree of connectivity is growing, it is striking that as a society we are increasingly unaware of the locations and purposes of such devices. In keeping with Weise's vision of technology that fades into the background, much of the IoT technology being deployed is essentially designed to be invisible. This lack of awareness both limits the services that can be provided and raises concerns for users and system owners.

Fully harnessing the capabilities of IoT deployments while avoiding potential disadvantages, e.g. related to privacy and security concerns, requires knowledge about available devices, their locations, and capabilities. In other words, IoT devices should be mapped. While there have been previous attempts at cataloguing IoT devices these have mostly focused on registering networked devices without providing detailed information about the locations and capabilities of devices.

