

Internet of Things IoT is the connection of devices within everyday objects via the internet, enabling them to share data . there is no single definition for internet of Things IoT . the term is called a network of objects in your home or office that have sensors and software that enables them to communicate with each other .

IoT Components - Sensors can be real sensors or virtual sensors . they can be used to monitor energy consumption in homes, offices, vehicles, factories . sensors can check the soil moisture and temperature . a sensor can be a real sensor or a virtual sensor .

communication can be done using many types of protocols such as RFID, AD- HOC, Ethernet, Wi-Fi, 3G, 4G, Bluetooth, ZigBee, USB, WSN, and IPv6 . a level-1 IoT system has a single node device that performs sensing and/or actuation and local analysis .

Level-2 IoT systems are suitable for solutions where the data involved is big . primary analysis requirement is not computationally intensive . level-3 systems have a single node and can be done locally itself . a level-3 system has a node .

Level-3 IoT systems are suitable for solutions where the data involved is big and the analysis requirements are computationally intensive . a level-4 system has multiple nodes that perform local analysis . level-3 systems are able to analyse the data in the cloud .

Level-4 contains local and cloud-based observer nodes . Level-4 IoT systems are suitable for solutions where multiple nodes are required . the data involved is big and the analysis requirements are not computationally intensive . a level-5 system has multiple end nodes and one coordinator node .

coordinator node collects data from the end nodes and sends to the cloud . Level-5 IoT systems are

suitable for solutions based on wireless sensor networks . data is stored in the cloud and application is cloud-based .