Bluetooth Understanding

# Concept Behind Bluetooth

Hi,

Thanks for choosing me as Tutor.

To Answer that Question first we have to understand what is Bluetooth?

**Bluetooth is a device which has two parts one is software and Other is Hardware.**

It is used for sharing files in wireless mode, Prior to Bluetooth we share the files through Wire. So Bluetooth is a wireless connection.

Here Files means anything it can be picture, movie, audio etc.

When we say sharing files let’s think about what are the processes to share a file.

**Step 1.** To share file first step is Bluetooth has to know who is Sender and who is receiver. so it's need a Source and a destination to work with.

**Step 2**: Identify the File to share, File is nothing but documents store in your memory i.e hard-disk of your Phone or Computer.

Each document has a particular MIME type by which we can understand what kind of documents it is i.e.  Picture, Video, Audio or Text.

**Step3**:  Transmit the selected Files in the Air. This is most challenging step, as we need to send file contents in the air.

So if a File contains " I am a good boy" text it has to send somehow in the Air. The technique is used to send files is

**signal**. Signal is nothing but Steam of bits that is 1 or 0 combination and send in a certain frequency.

As you know in Digital world everything should be either 1 or 0 , series of 1/0 (pattern)identify a element.

Let’s say: I represent as 0001 in Digital world

A: 0002 and M: 0003

So,” I AM " phrase transmitted as 0001 0002 0003-byte stream.

Bluetooth software takes care of this Transformation. **Document form** to **Signal form**and send the Signal.

Step 4: Now it is work for Other party that means the Destination to receive the signal.  Frequency is needed so two party can communicate through a certain channel. Now Destination Bluetooth Software receives the signal and again transform to

Document.

Here Reverse process is happening

i.e. 0001 -> I 0002->A 0003->M

then send the files to Hardware so it can store it or do certain action on this file.

**So in Bluetooth perspective**

**Step 1. Each device must have the Bluetooth device.**

**Step2: Bluetooth Sender Identify the destination and paired with him through Piconet .**

**Step3: Send the Files as Signal by Bluetooth Software.**

**Step 4: Bluetooth Receiver receives the Signal.**

**Step 5: Bluetooth software again Transform signal to document form**

**Step 6. Store it in to Bluetooth Hardware. Or take action on it.**

If you need more clarification, please raise your question. I am happy to answer it.