Ground Loops

(Difference in ground potential in computer systems)

<u>Ground Loop</u>: An errant galvanic path within a system or instrument caused by unwanted circuit connections provided by the earth or chassis ground.

<u>Ground</u>: Common reference point having a potential that does not change as a function of current supplied to or withdrawn from it.

Ground loops are not stopped by TVSS (transient voltage surge suppressor) in fact some surge suppressors can introduce a ground loop to an already isolated circuit. Take the computer installation shown below as an example. Do you see the ground loop this installationt would create.

The Figure below shows an installation with two different ground references. There is a ground loop or difference in potential between the grounds.

