Graph-Theoretic Property:  \( \text{atis} \text{CompletelyConnectedElements} \)

(Graph-theoretic properties are those properties that are part of the meta-theory and have been abducted from graph theory to be used as a tool to provide solutions concerning the theory. Those solutions may be assigned as values to components or relations of the theory and thereby become part of the theory.)

Completely-connected elements, \( ccE \), \( =_{df} \) Elements that are path-connected in both directions.

\[
ccE =_{df} \{(x,y) \mid \forall (x,y) [(x,y), (y,x) \in pcE]\}
\]

Completely-connected elements are defined as a set of ordered pairs such that the elements are path-connected in both directions.