Graph-Theoretic Property: $_{atis}$FlexibleComponentsSet

(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.)

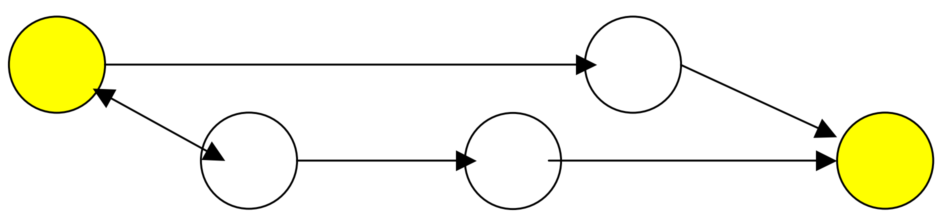
Flexible-connected components set, ${}_F\mathcal{C}$, $=_{Df}$ A set of initiating connected components or receiving connected components that are connected by more than one connection of the same type.

$${}_F\mathcal{C} =_{df} \mathcal{X} = \{x \mid x \in \mathcal{R} \subset \mathcal{S}_0 \wedge \exists y \in \mathcal{R}[x \neq y \wedge \exists i,j((x,y)_i \neq (x,y)_j \wedge [(x,y_i),(x,y_j) \in_{uc} \boldsymbol{E} \vee (y_i,x),(y_j,x) \in_{uc} \boldsymbol{E}])]\}$$

Flexible-connected components set is a set of components, x; such that the components, x, are in a subset of the object-set, and there exist distinct components, y, of the subset, and there exist indices i and j, such that, $(x,y)_i$ and $(x,y)_j$ are distinct and are unilaterally connected or $(y,x)_i$ and $(y,x)_j$ are distinct and are unilaterally connected.

The following diagram depicts a *Flexible-Connected Components Set*.

Flexible-Connected Components Set



The "yellow" components are in the flexible connected components set.