

Place product with respect two sets of places in net N

Let $A = \{a_i : i \text{ is in } I\}$ and $B = \{b_j : j \text{ is in } J\}$ will be two disjoint sets of places in net N. Place product of A and B is a net obtained by removing the places in the two sets and adding new places $C = \{c_{ij} : i \text{ in } I \text{ and } j \text{ in } J\}$.

- Every arc originally connected to place a_k , k in I is now replaced by arcs connected in the same way to $c_{k,j}$ for j in J .
- Every arc originally connected to place b_l , l in J is now replaced by arcs connected in the same way to $c_{i,l}$ for i in I .