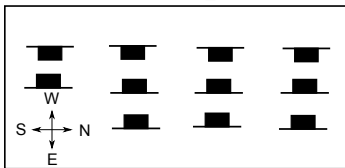


step 1 Choice of parameters



Fault evidence



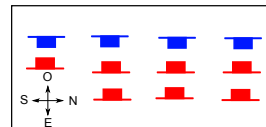
Association rules



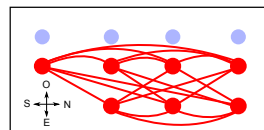
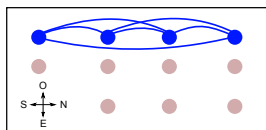
Family rules

step 2 Creation and segmentation of the possibility graph

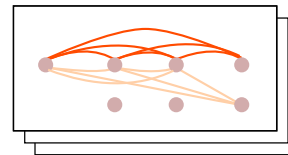
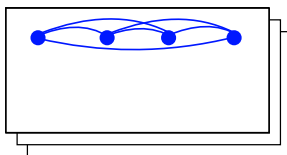
step 2.1 Compute association likelihoods using prior geological knowledge to form the possibility graph



Possible associations per families



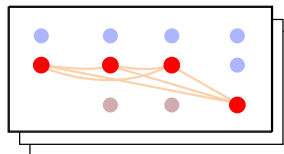
step 2.2 List all maximal structures (Bron-Kerbosch)



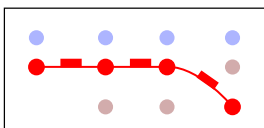
(only two maximal cliques are shown here but 8 can be found)

step 3 Stochastic fault association and downscaling

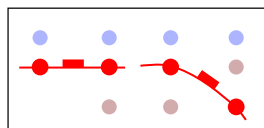
step 3.1 Draw one of the possible fault



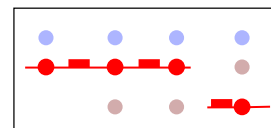
step 3.2 Apply downscaling



or



or



step 3.3 Update graph data structure and remaining maximal cliques

step 4 Display association scenarios and export to geomodelling workflow

While some pieces of evidence have not been assigned to a fault