

Routing in Small-world/Power-law Networks

- Build shortest-path routes between every pair of vertices
- => Most of these routes will pass via the few high-degree vertices in the graphs
 - => High-degree vertices are heavily overloaded
 - High-degree vertices more likely to suffer congestions or crash
- Same phenomenon in Electric power grid
- Solution may be to introduce some randomness in path selection; don't always use shortest path