Hubs, as discussed in this paper, are special nodes that are part of a network, located in such a way as to facilitate connectivity between interacting places. Hubs are examined from the spatial organization viewpoint: that is, the linkages, hinterlands, and hierarchies formed by hub-and-spoke networks are described. Features of the hub-and-spoke system that make them different from basic facility location problems are emphasized. Special attention is paid to the contrasts between air passenger and air express freight applications. The paper discusses various broad types of models that are appropriate for network analysis. The paper includes a simulation exercise with a hypothetical network. The data are for interactions between 100 city pairs in the US, and the characteristic features of the hub network under three alternatives scenarios are developed. Although there is not a perfect correspondence between any of these models and the ‘reality’ of actual air freight and air passenger nets, a rudimentary matching is suggested. The single hub allocation model would be a especially inconvenient network for passengers, but might be ideal for regional freight or communications systems. The multiple assignment model has much less passenger inconvenience. While the network appears to be ideal for the passenger system, it seems to make a miscalculation about the nature of flow economies of scale. In the final model flows must be deliberately routed to make up economical bundles, and the incentives are stacked in favor of large flows.