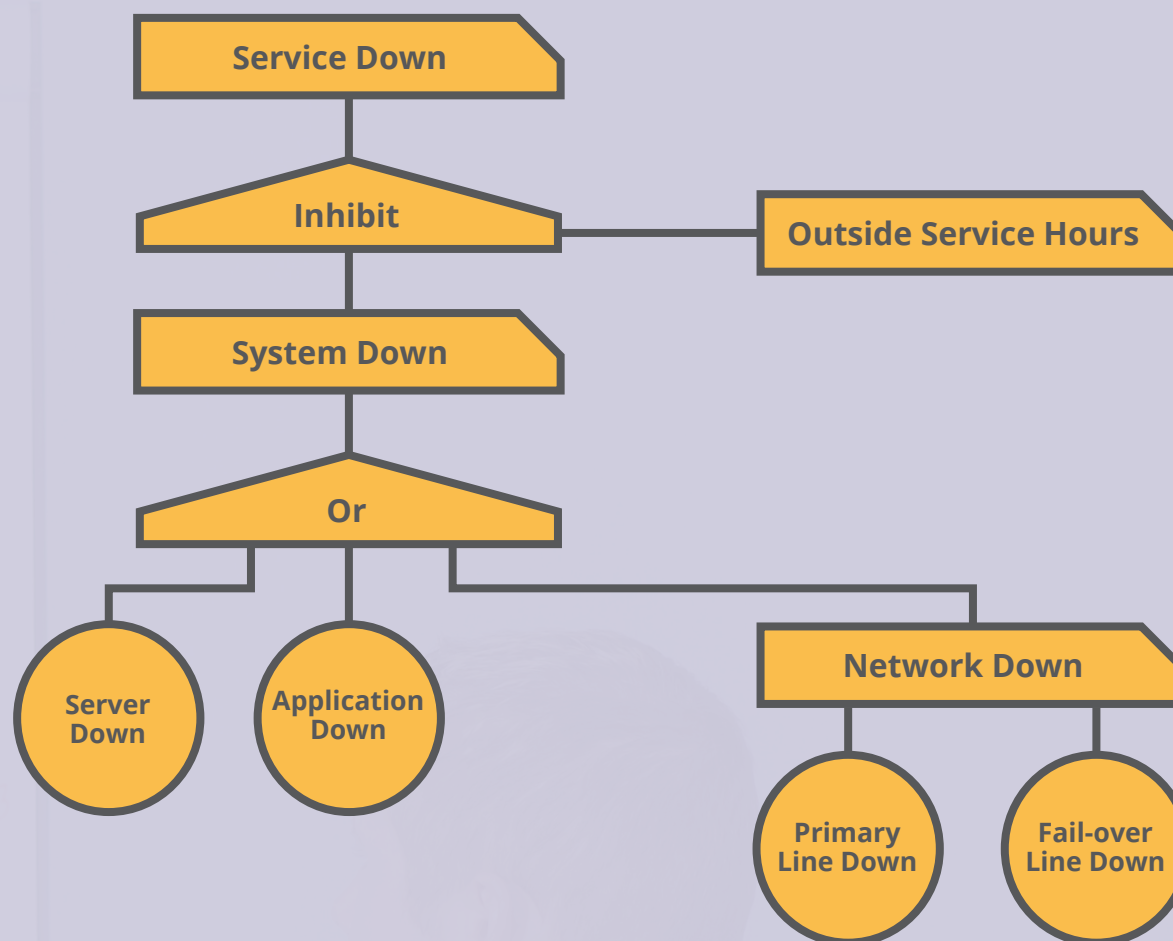


ITIL® Poster Series #28

Fault Tree Analysis

Fault tree analysis is a technique used as part of availability management. The technique is used to determine what happens as part of a sequence of events.

FAULT TREE ANALYSIS



FAULT TREE ANALYSIS (FTA) is a technique used to determine a chain of events that has caused an incident or may cause an incident in the future. It can be used to assess the availability improvement that can be achieved by individual technology component design options. FTA makes a representation of a chain of events using Boolean notation, as shown here.

BASIC EVENTS

These are terminal points for the fault tree – for example, power failure, operator error.

CONDITIONAL EVENTS

These only occur under certain circumstances or combinations of events.

RESULTING EVENTS

These result from a combination of events. May include IT service failure.

TRIGGER EVENTS

These cause other events – automatic responses etc.

The logic conditions are AND, where there must be simultaneous events for something to happen, OR which requires one or more events to occur or INHIBIT – when the condition is not met.

The diagram shows that both the primary AND fail-over lines must be down for the network to be down. There is also an 'OR' gate on the left of the diagram; if any one of the three listed events occurs, the system will be down. Finally, the 'INHIBIT' gate shows that only if the failure occurs during service hours will the service itself be considered to be down.

