BACKGROUND

Simulation languages are (or should be) more than extensions of general purpose programming languages designed to ease the burden of programming simulation problems. The influence of a good simulation language should be felt during the specification and model design stages of simulation as well as during computer implementation. If the "world-view" of the simulation language is well understood and if that world-view is appropriate for a given problem then the language should aid immeasurably in reducing the effort (and consequently elapsed time) in transforming model from concept to realization.

I. SIMSCRIPT II.5 World View

SIMSCRIPT is a discrete-event language. Actions are modelled in terms of events. Sequences of events describing actions of a single object (or entity) are modelled as processes. Many important relationships are described statically in terms of entities-attributes-sets. This very powerful data structuring is one of the unique features of the language. The implementation in SIMSCRIPT of the classical simulation problems such as small queueing models or job-shop simulations have been described elsewhere.

II. The Tutorial

This tutorial will highlight an area for which SIMSCRIPT is particularly well-suited, a complex network of dissimilar process - each described at an appropriate level of detail. This model has been used, with appropriate variations, for applications as wide-spread as aircraft maintenance modelling, combat system architecture modelling, waterways network modelling and crude-oil transportation studies. This later application will be used to illustrate the powerful data structuring and model-building techniques of SIMSCRIPT.

III. SIMSCRIPT II.5 Literature


