

Chapter 1 – Introduction to Arena

1.1 Introduction

We will use Arena simulation software as an introduction to simulation modeling. The parent company for Arena is Rockwell Software. As part of their continuous improvement efforts, upgrades are made every couple of years. Most of the features are the same from one version to the next; however, both obvious and subtle differences do exist between versions. The user must pay great attention to detail in construction a simulation model from using the modules in each panel to using the data modules to adding both static and dynamic animation features to defining the run length to de-bugging a model. Developing a new model from scratch can be a very tedious, but also very rewarding, experience once the model runs to completion.

1.2 Arena Simulation Software

Arena is a user-friendly software package that is based on, and includes, the SIMAN simulation language. Arena provides interchangeable *templates* of graphical simulation-modeling and analysis *modules* that can be used to build a wide array of simulation models. The modules are typically grouped into *panels*. By switching panels, you gain access to a different set of modeling constructs and capabilities. In most cases, modules from different panels can be used in the same simulation model.