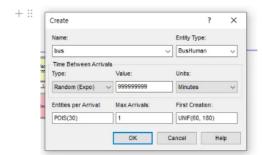
## 1 리틀의 법칙

- tally: 사람의 수로 나눈 통계값
  - average waiting time, system 체류 시간 등
- time persistant statistic: 시간으로 나눈 통계값
  - average queue length 등
- $\lambda_q = \lambda w_q$
- NR: Busy or Idle
- MR: Scheduled or not
- N: in system or not
- Q: wait or not
- u(t): if M(t) > 0 ?  $\frac{B(t)}{M(t)}$  else 0
- B(t): busy?
- M(t): scheduled?
- Instantaneius utilization:  $\int_0^t u(t) dt * \frac{1}{t}$
- Scheduled utilization:  $\frac{\int_0^t B(t)dt}{\int_0^t M(t)dt}$

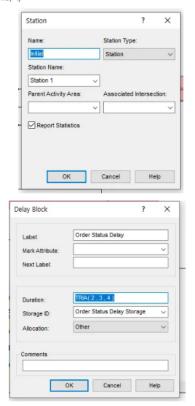
## 2 Resource

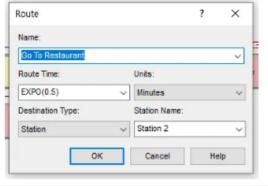
- ignore: 하던거만 마무리 + 늦어도 제 때 복귀
- wait: 하던거만 마무리 + 늦은 만큼 더 쉬기
- preemt: 하던거 중단 + 제 때 복귀

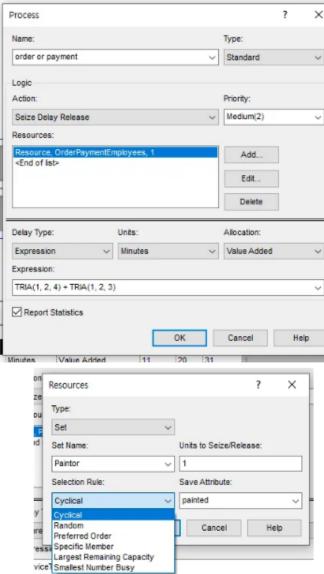
## 3 Modeules

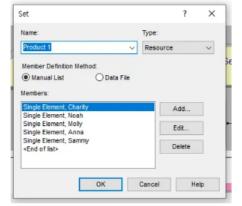


DISC(0.2, 1, 0.5, 2, 0.8, 3, 1.0, 4)

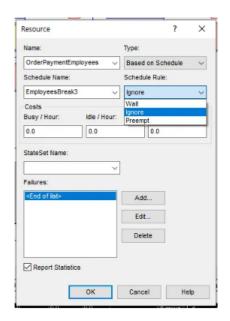




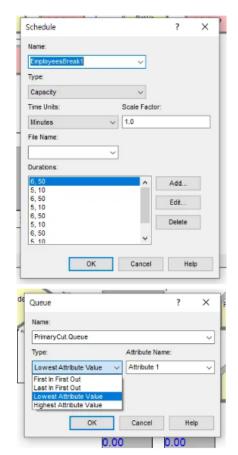




resource가 들어감



or fixed capacity



shared value도 선택 가능

• variable rows, cols, initial values 선택 가능

