Kendall's Notation for Queueing Models

A/B/n/p/k

- *A* refers to the **arrival process**.
  Assumption: IID interarrival times.
  Interarrival time distribution:
  - M = exponential (memoryless)
  - D = deterministic
  - G = general
- *B* refers to **service times**.
  Assumption: IID service times.
  Service time distribution:
  - M = exponential (memoryless)
  - D = deterministic
  - G = general
- *n* = nr of (parallel) servers
- *p* = nr of system places
  = nr of servers + waiting places

- *k* = size of customer population
- Default values (usually omitted):
  - $p = \infty, k = \infty$
- Examples:
  - M/M/1
  - M/D/1
  - M/G/1
  - G/G/1
  - M/M/n
  - M/M/n/$n+m$
  - M/M/∞ (Poisson model)
  - M/M/n/n (Erlang model)
  - M/M/k/k/k (Binomial model)
  - M/M/n/n/k (Engset model, $n < k$)

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