Scheduling of a Cyber-Physical System Simulation

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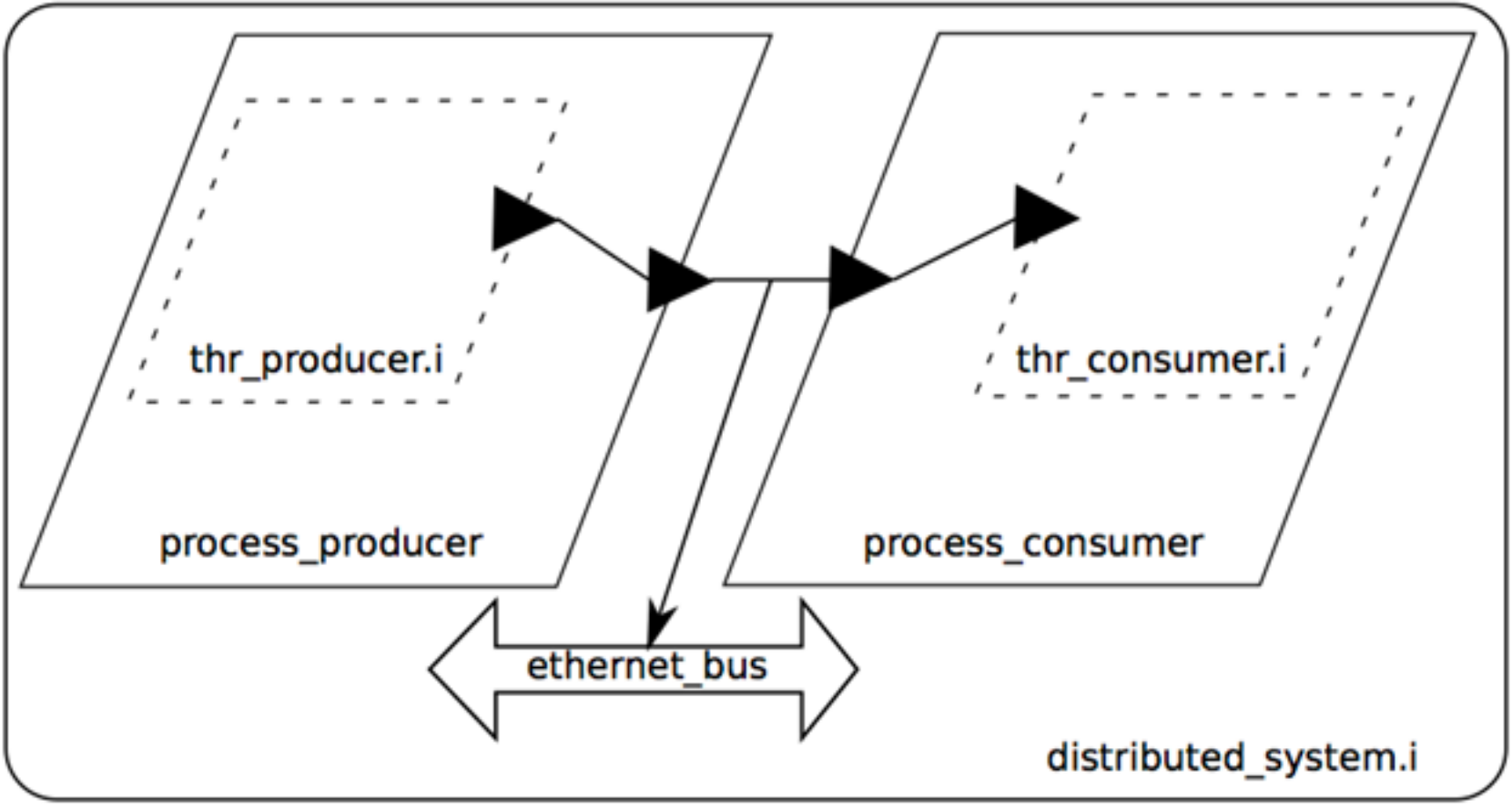
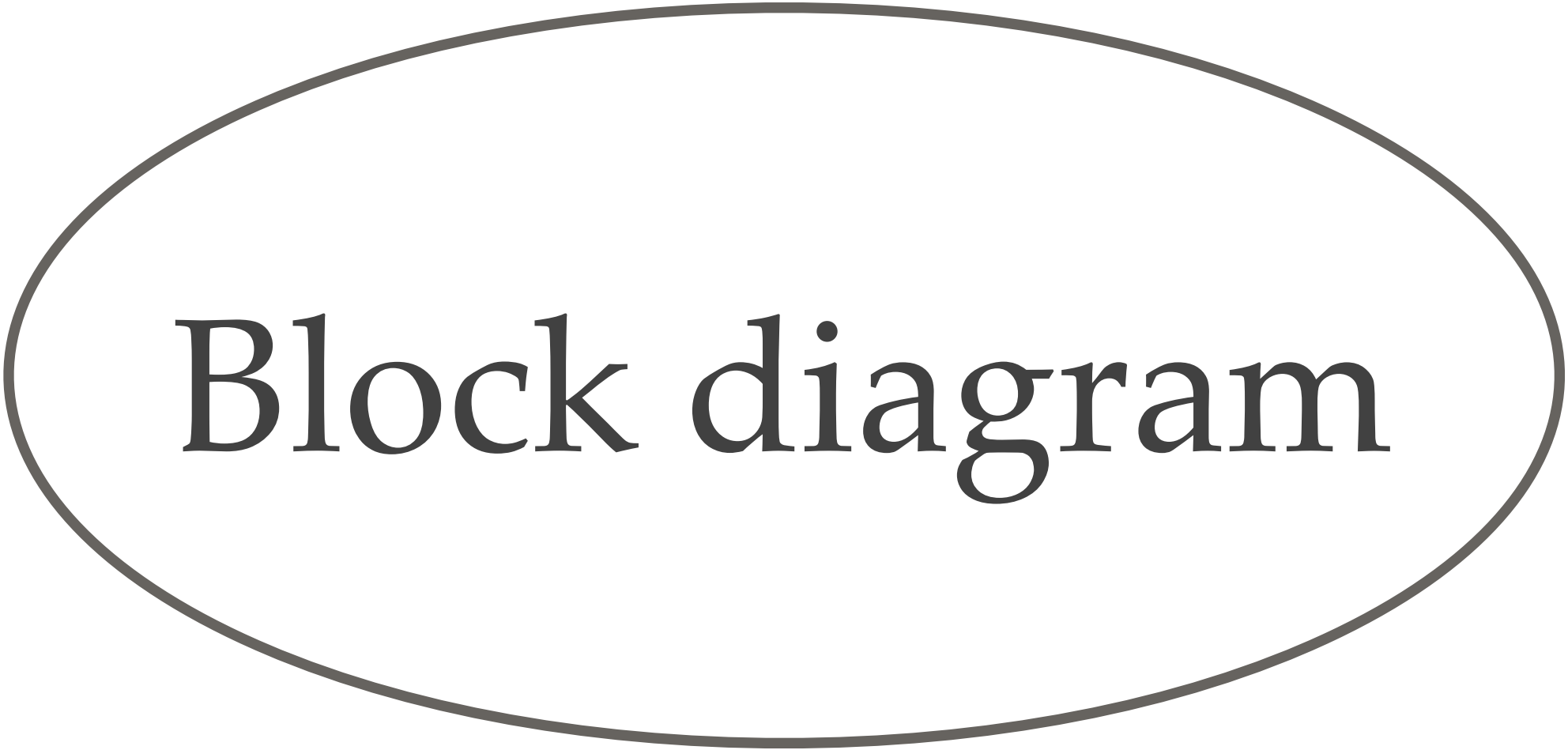
Presentation of the allocation tool

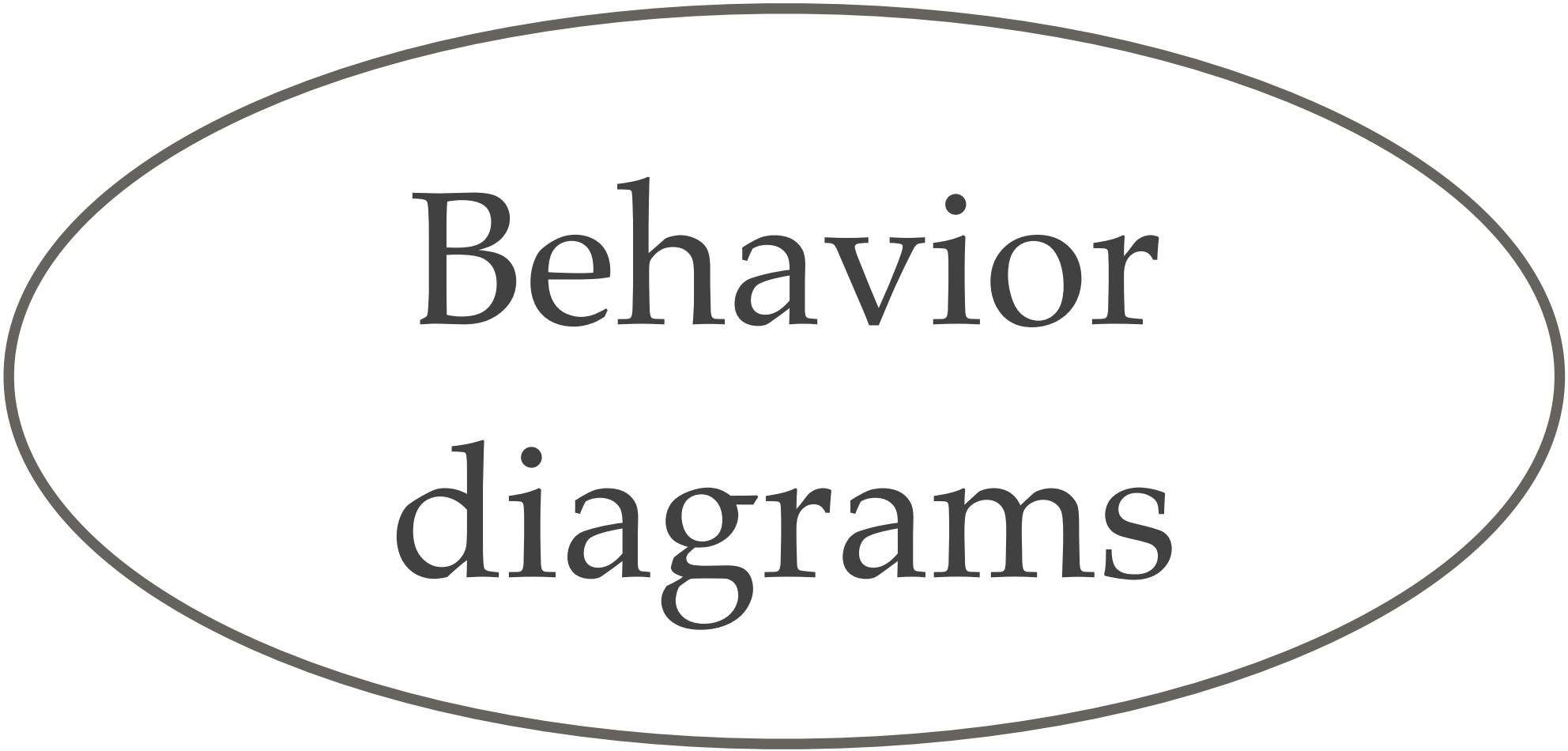
Design and implementation of the solution

35

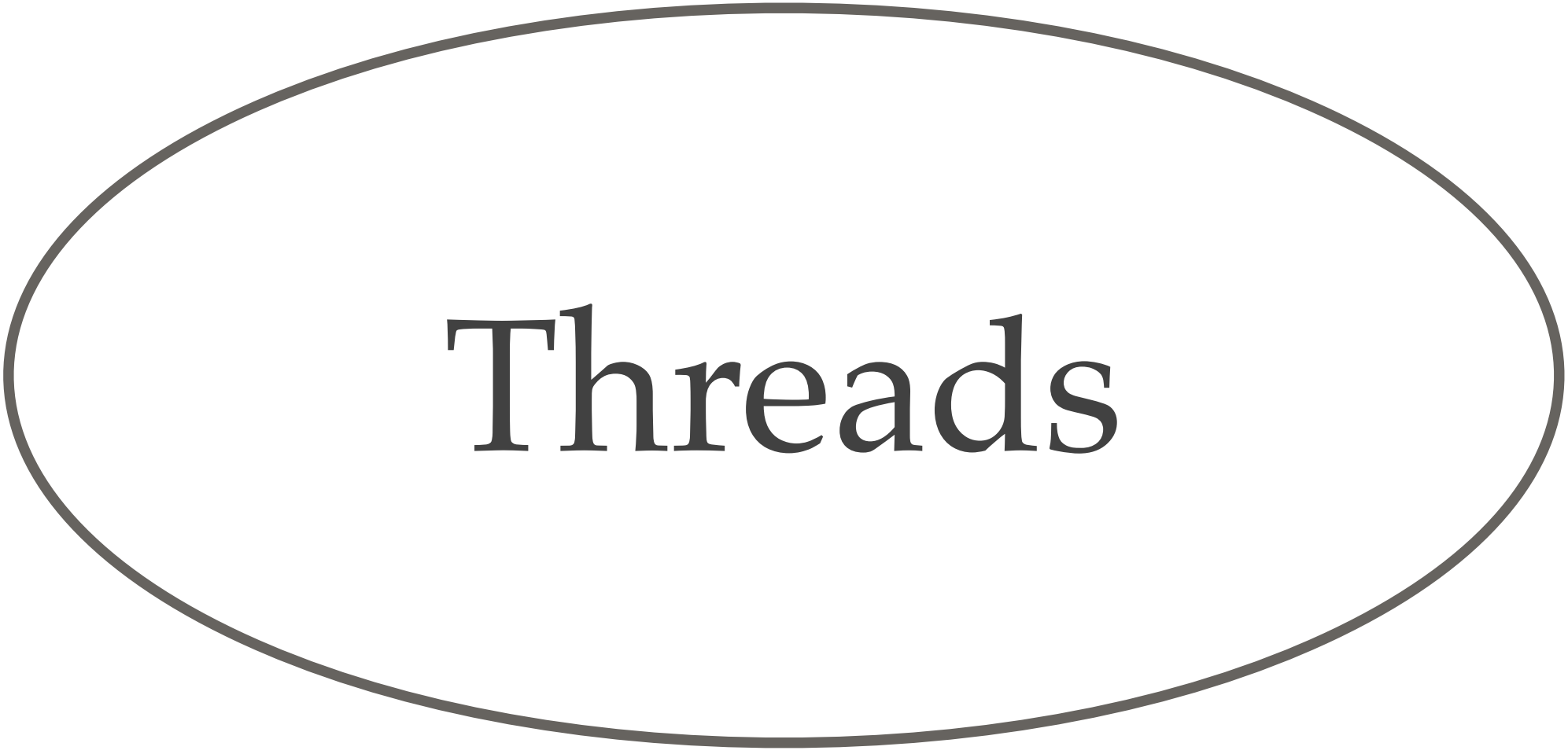

thr_producer.i
thr_consumer.i
process_producer
process_consumer
ethernet_bus
distributed_system.i

AADL


Block diagram


Behavior
diagrams

Requirements

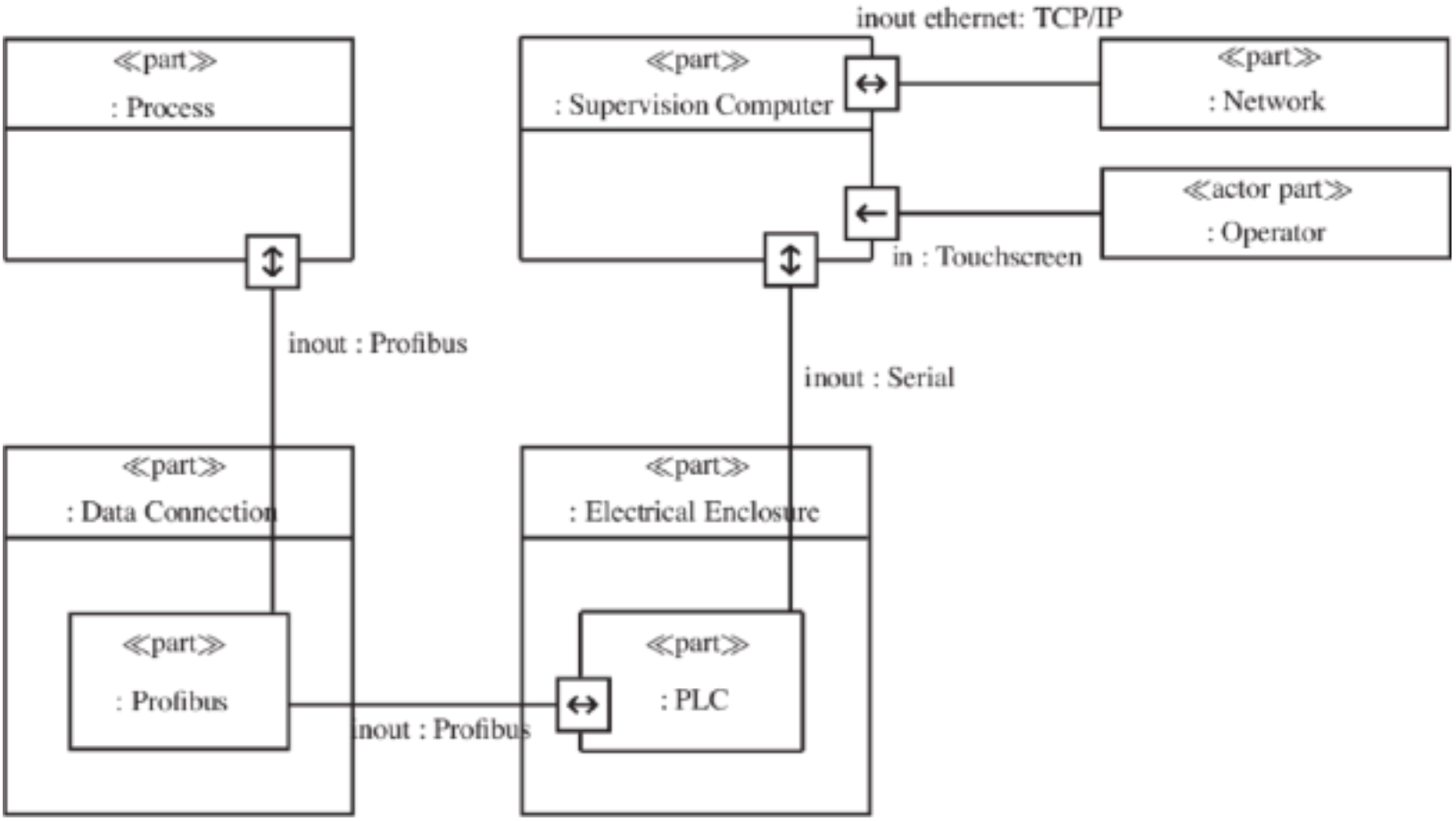

Threads

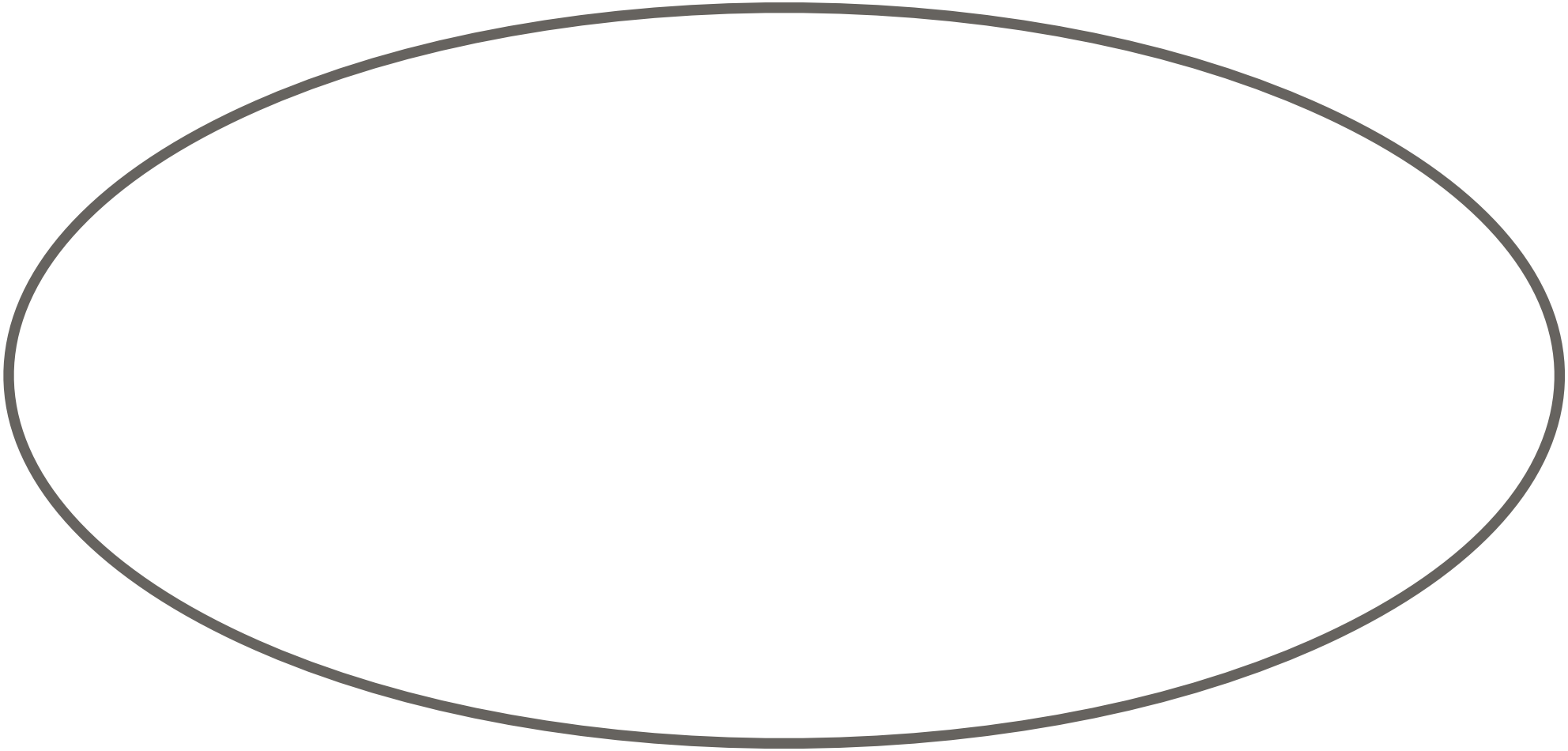
Communications

Processes

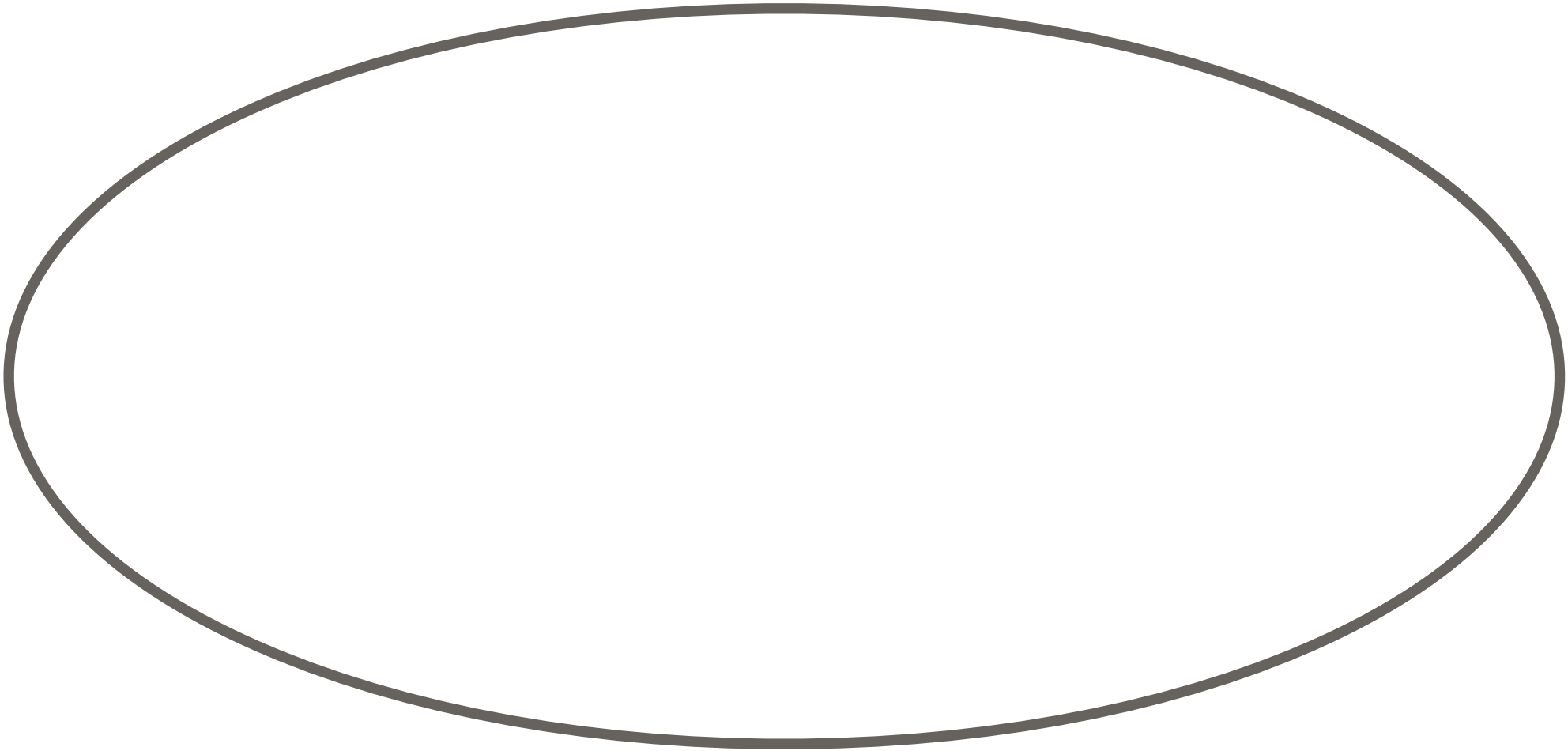
Scheduler

SysML


inout ethernet: TCP/IP
≪part≫
: Process
≪part≫
: Supervision Computer
≪part≫
: Network
≪actor part≫
: Operator
in : Touchscreen
inout : Profibus
inout : Serial
≪part≫
: Data Connection
≪part≫
: Electrical Enclosure
≪part≫
: Profibus
≪part≫
: PLC
inout : Profibus

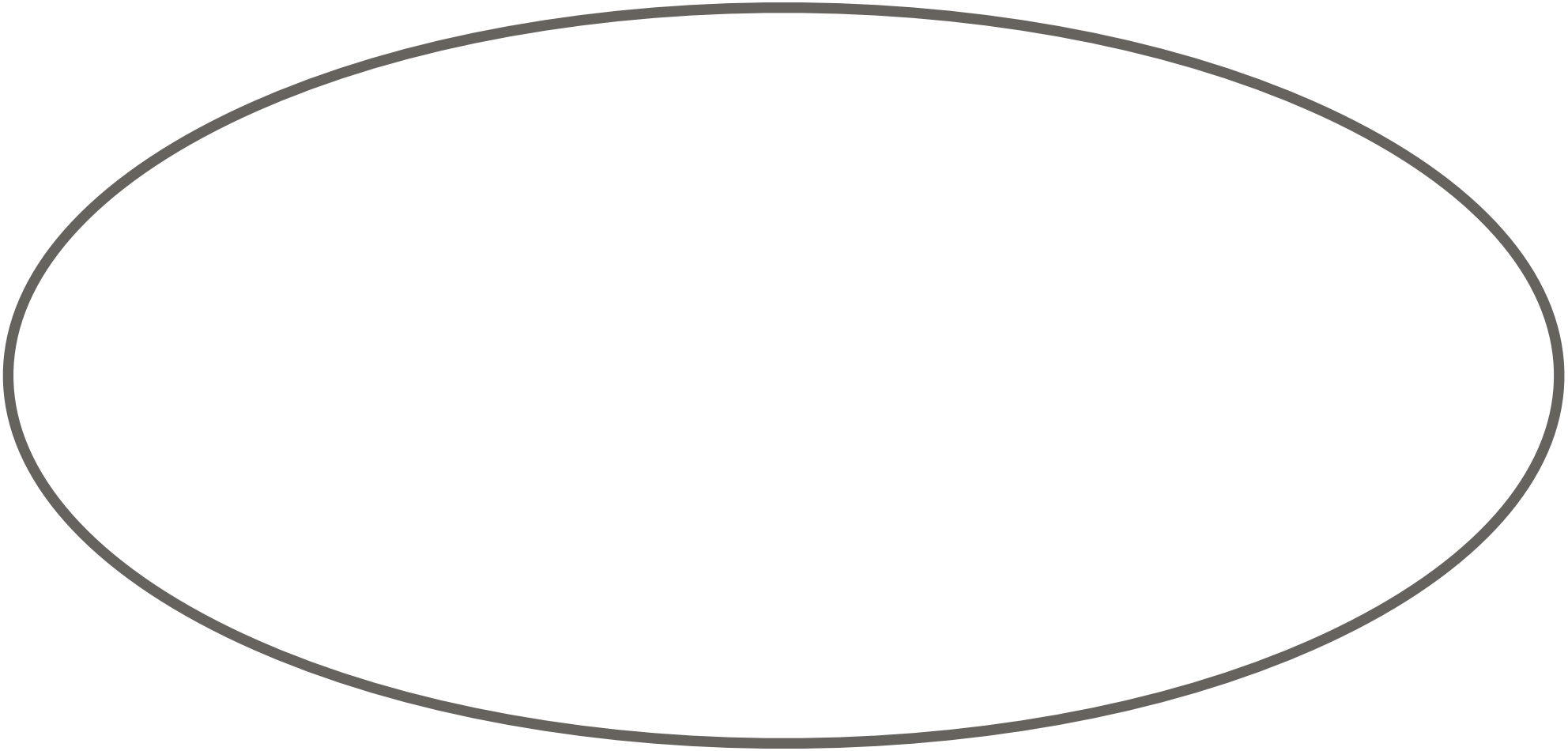


Block diagram

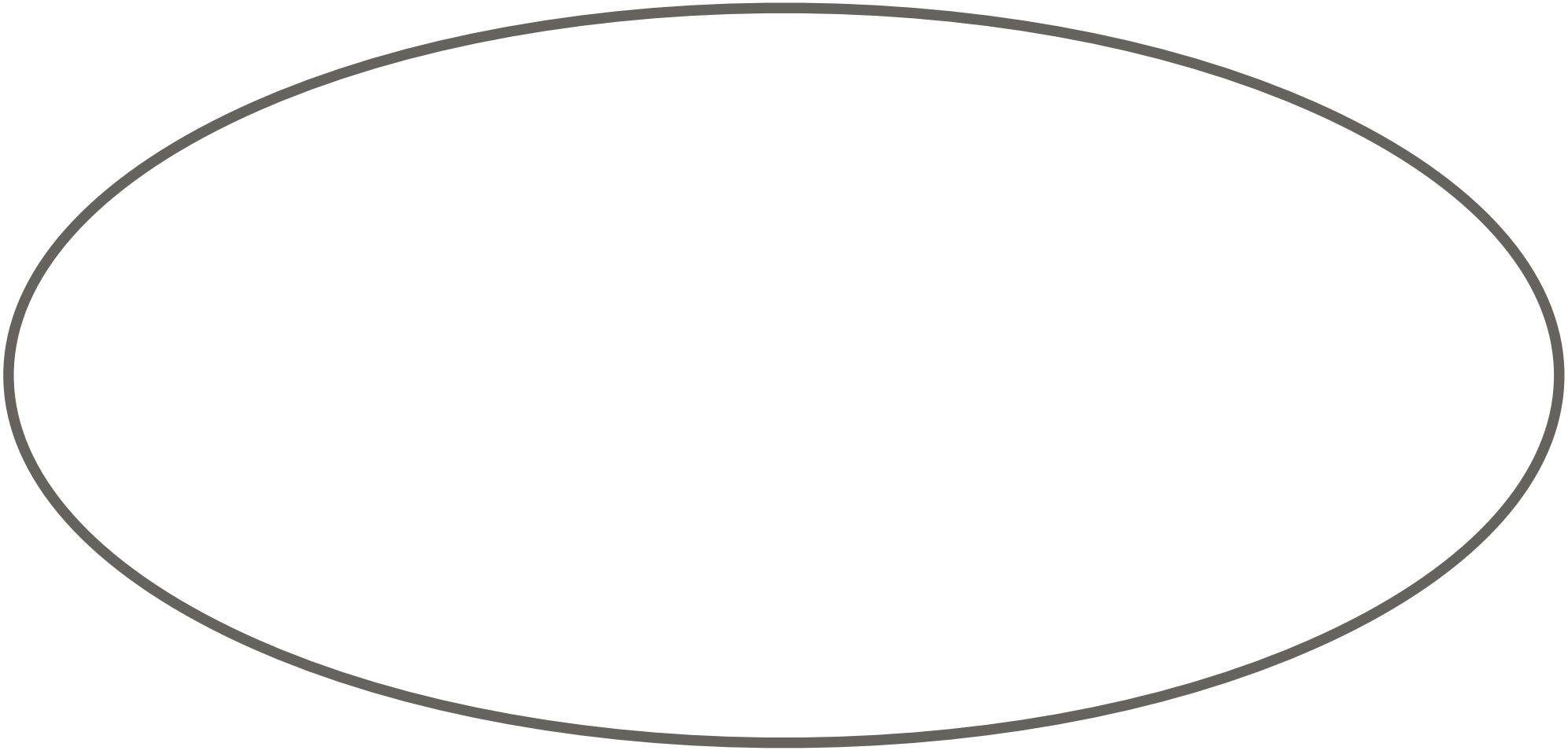


Behavior

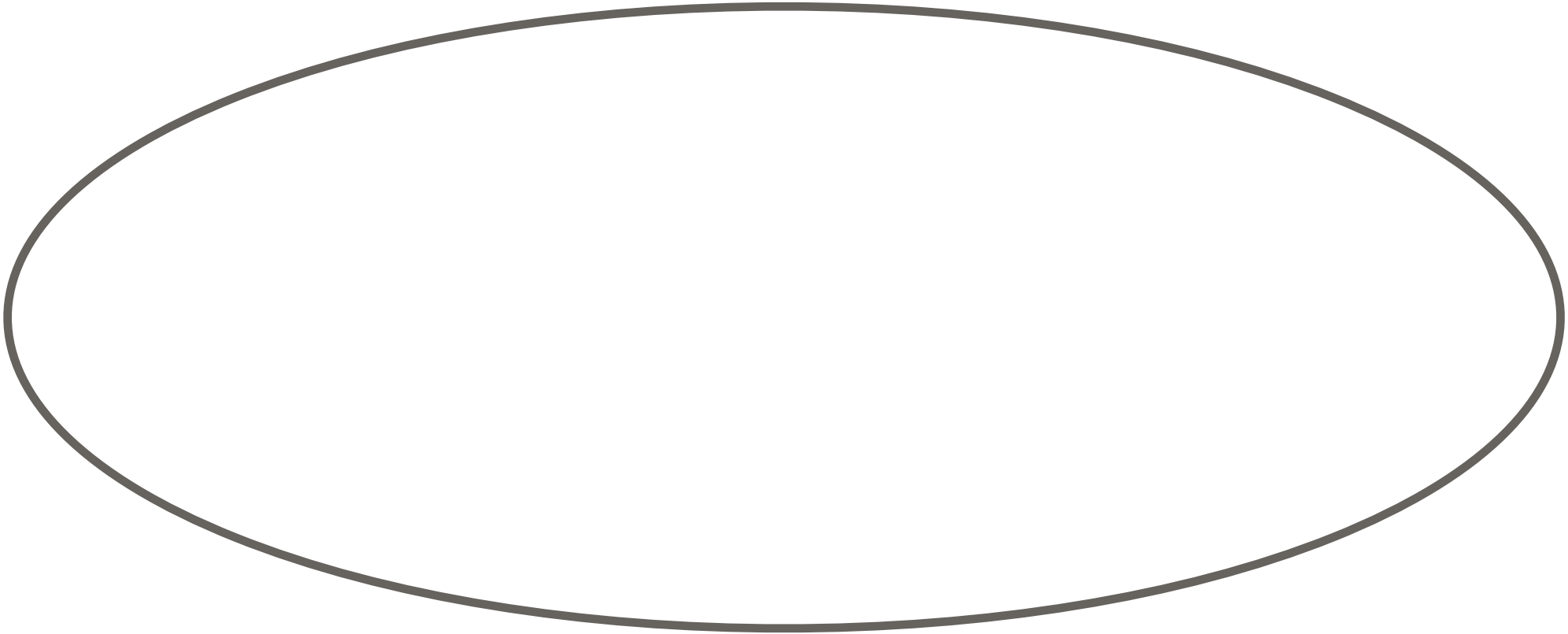
diagrams



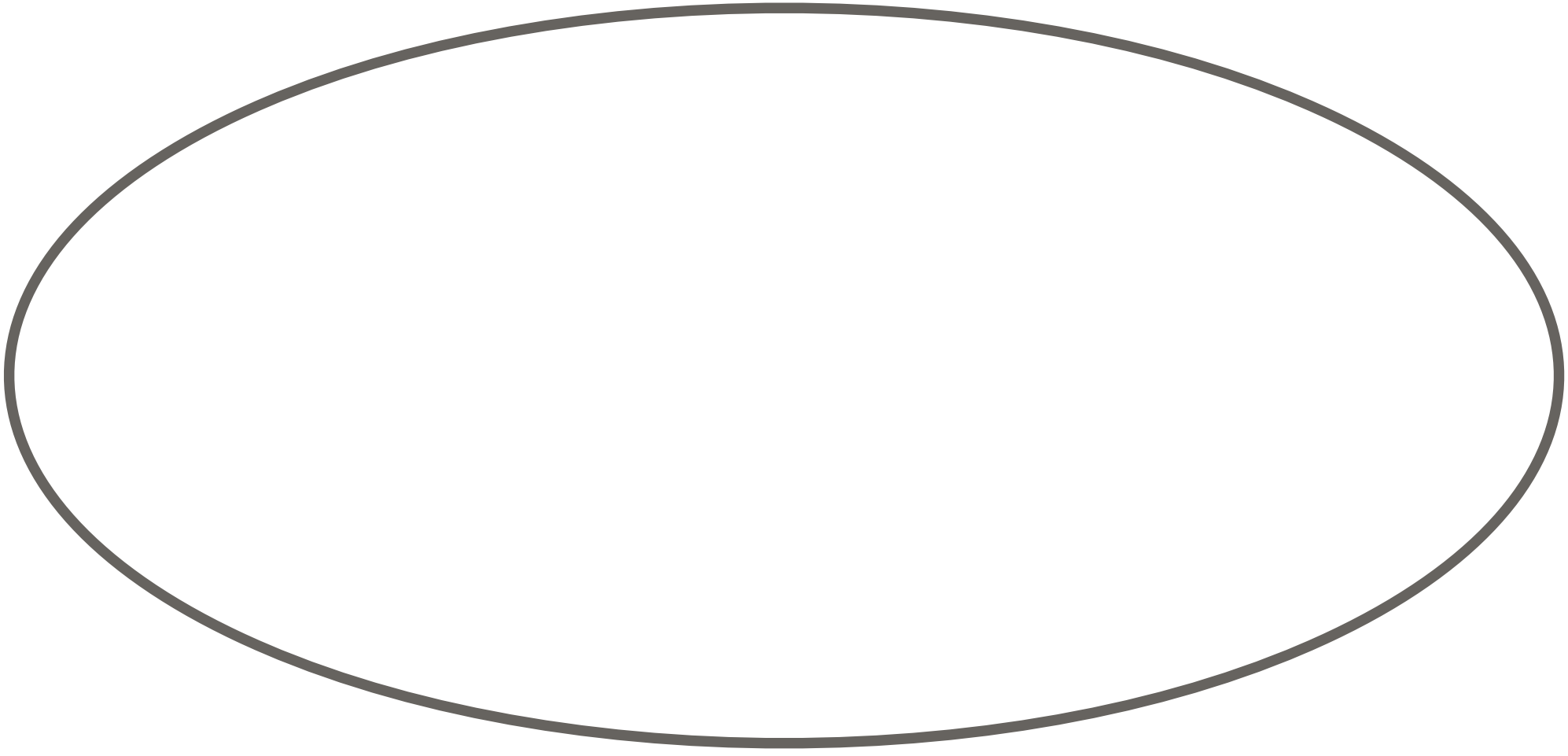
Requirements



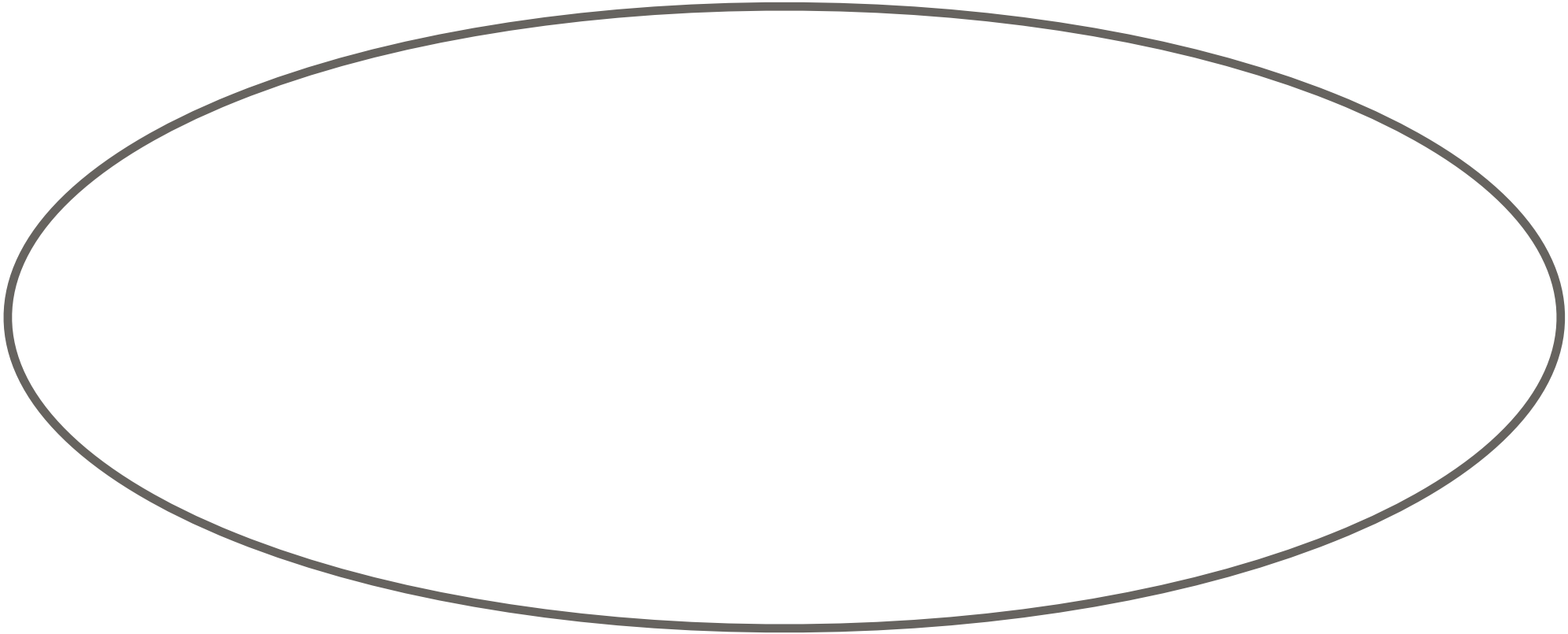
Threads



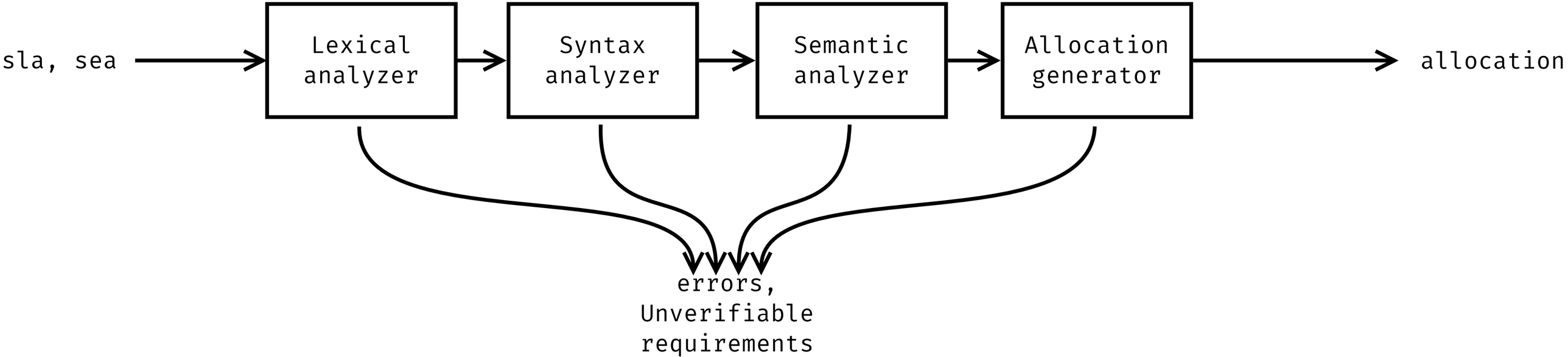
Communications



Processes



Scheduler


sla, sea
Lexical analyzer
Syntax analyzer
Semantic analyzer
Allocation generator
allocation
errors, Unverifiable requirements

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