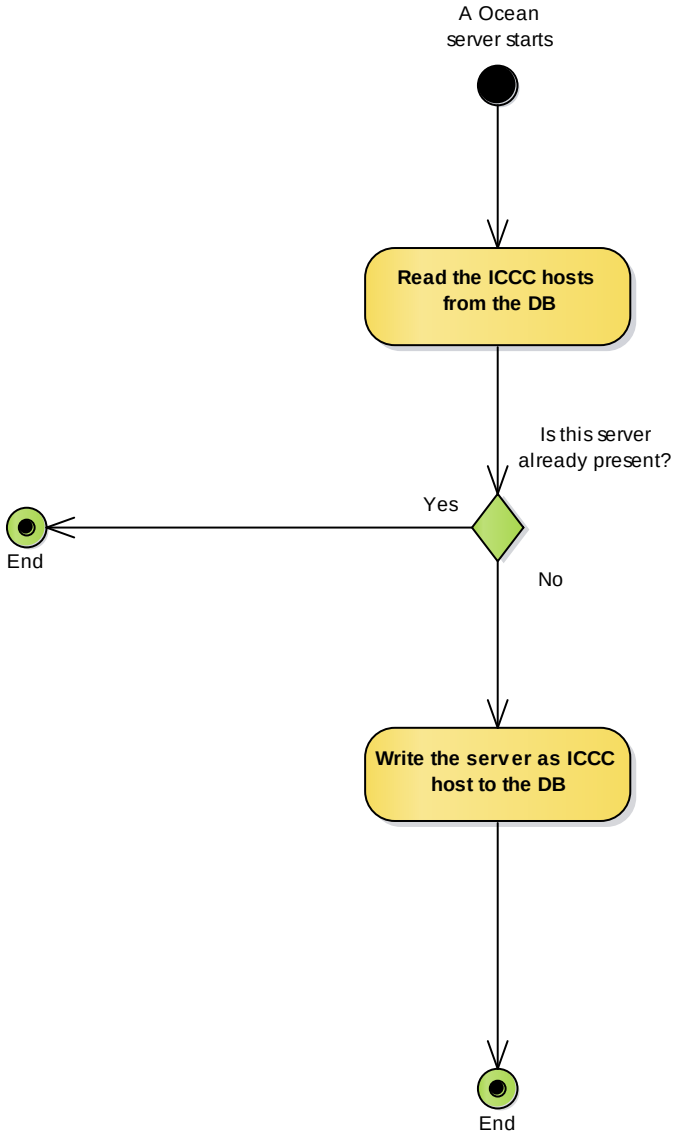
Ocean's ICCC Terminologies

Listener := An ICCC command at a given channel which is located on any or all of the servers

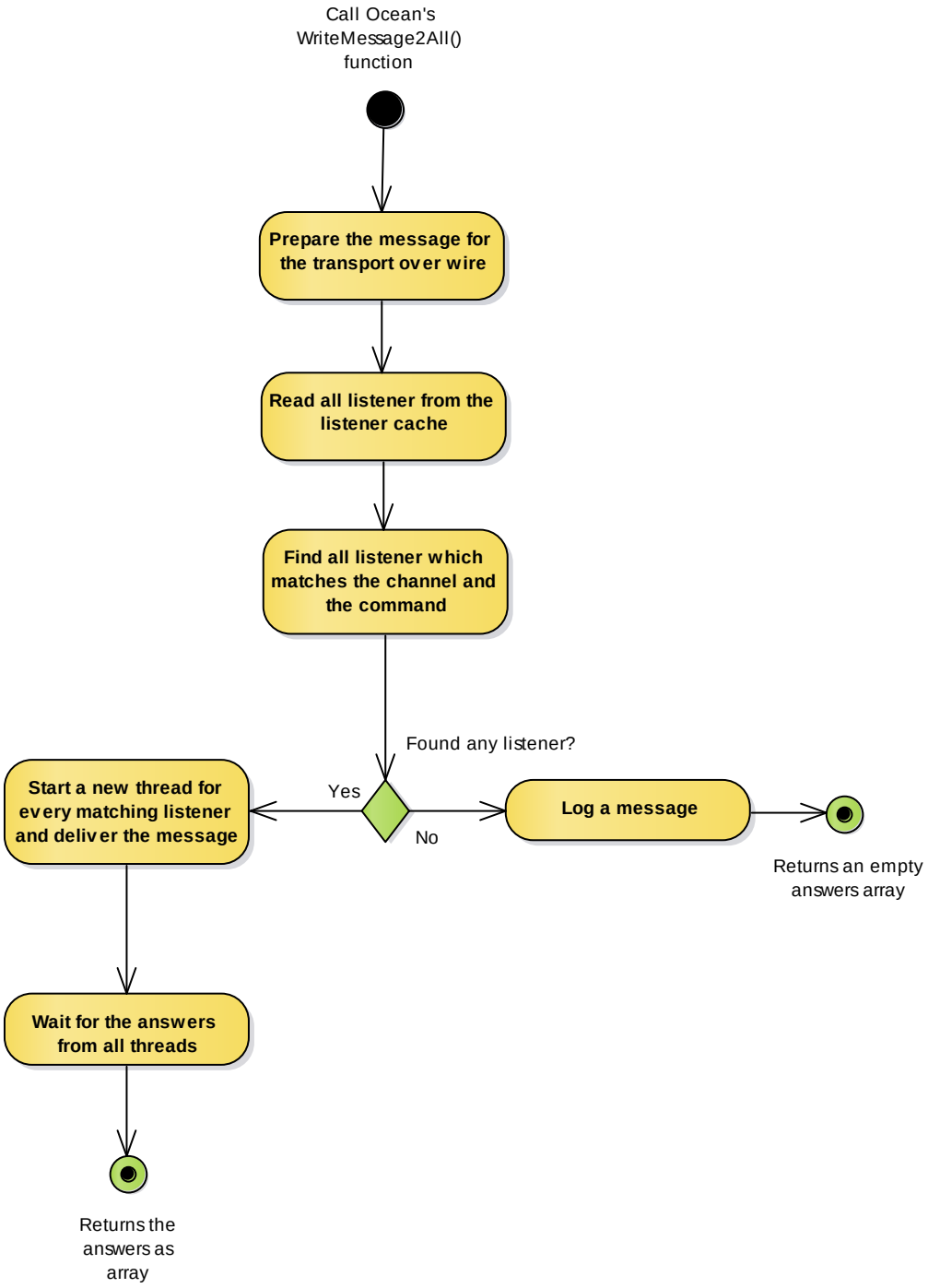
Host := An ICCC host is a server which provides at least one ICCC command. Thus, any host provides at least one listener.

Ocean's ICCC start-up

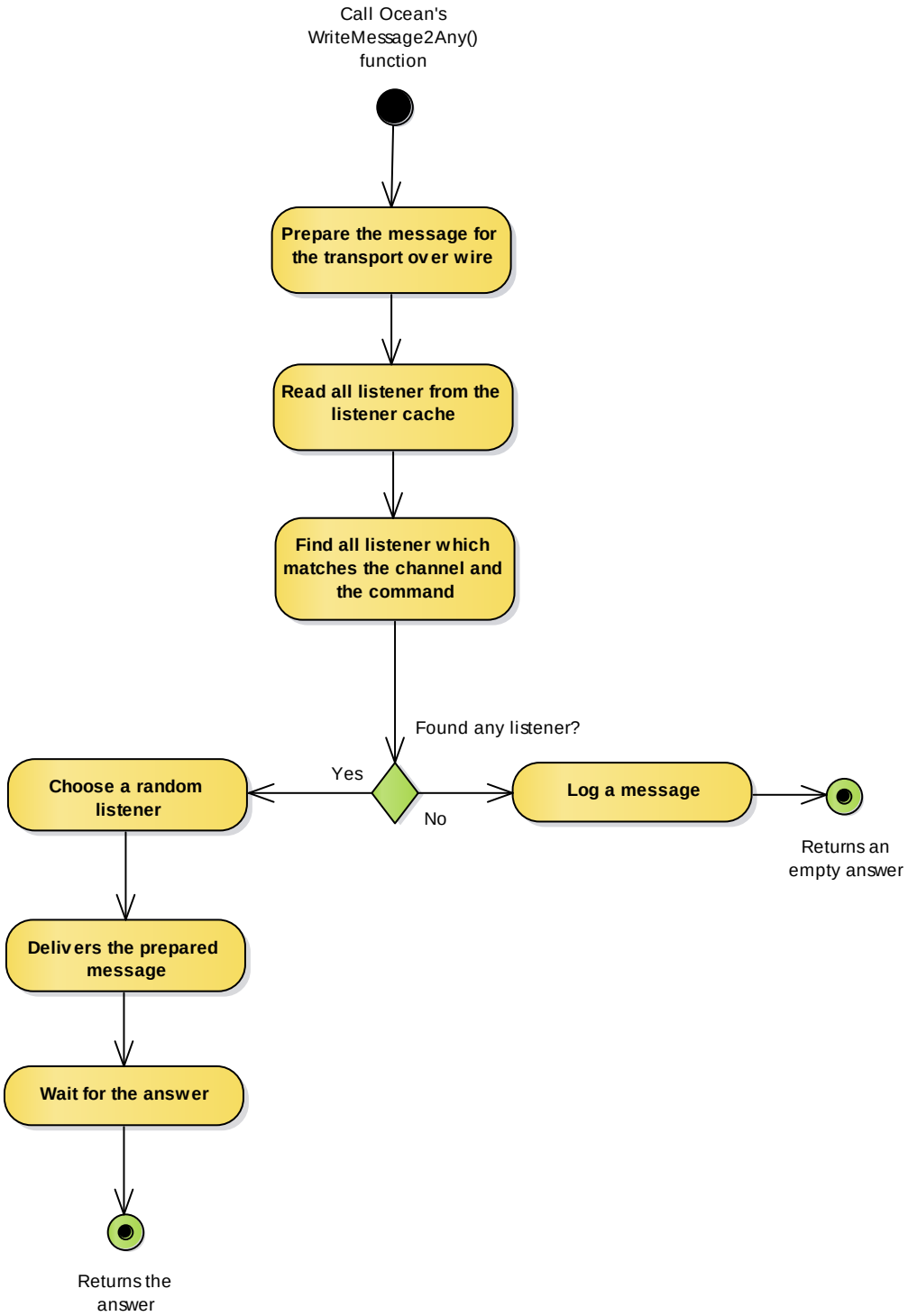


This diagram shows only the ICCC parts of Ocean's start-up process! Further, this diagram is only for Ocean true -- other external ICCC components e.g. with C#/.NET, Python, etc. are setting up differently.

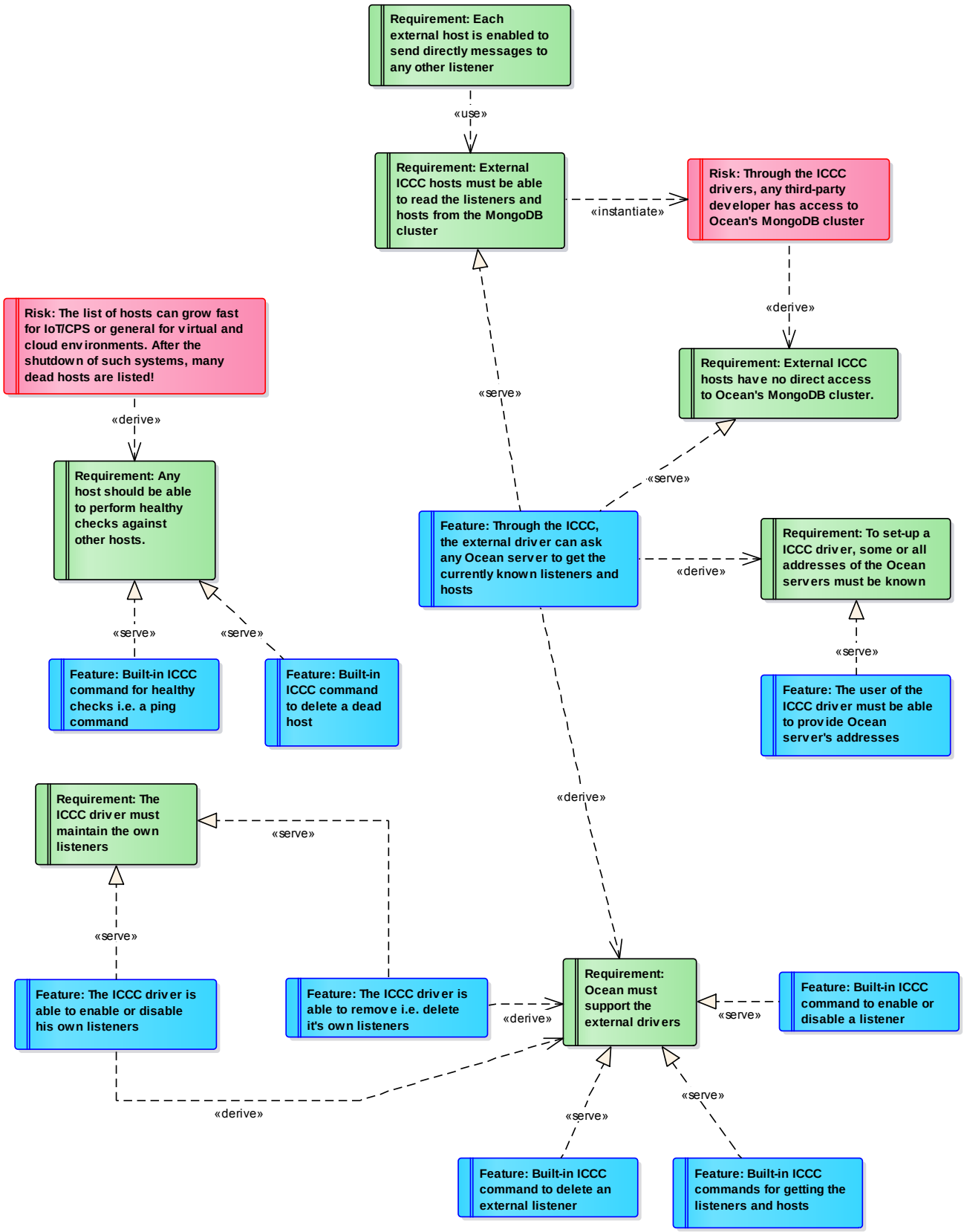
Ocean's WriteMessage2All() function



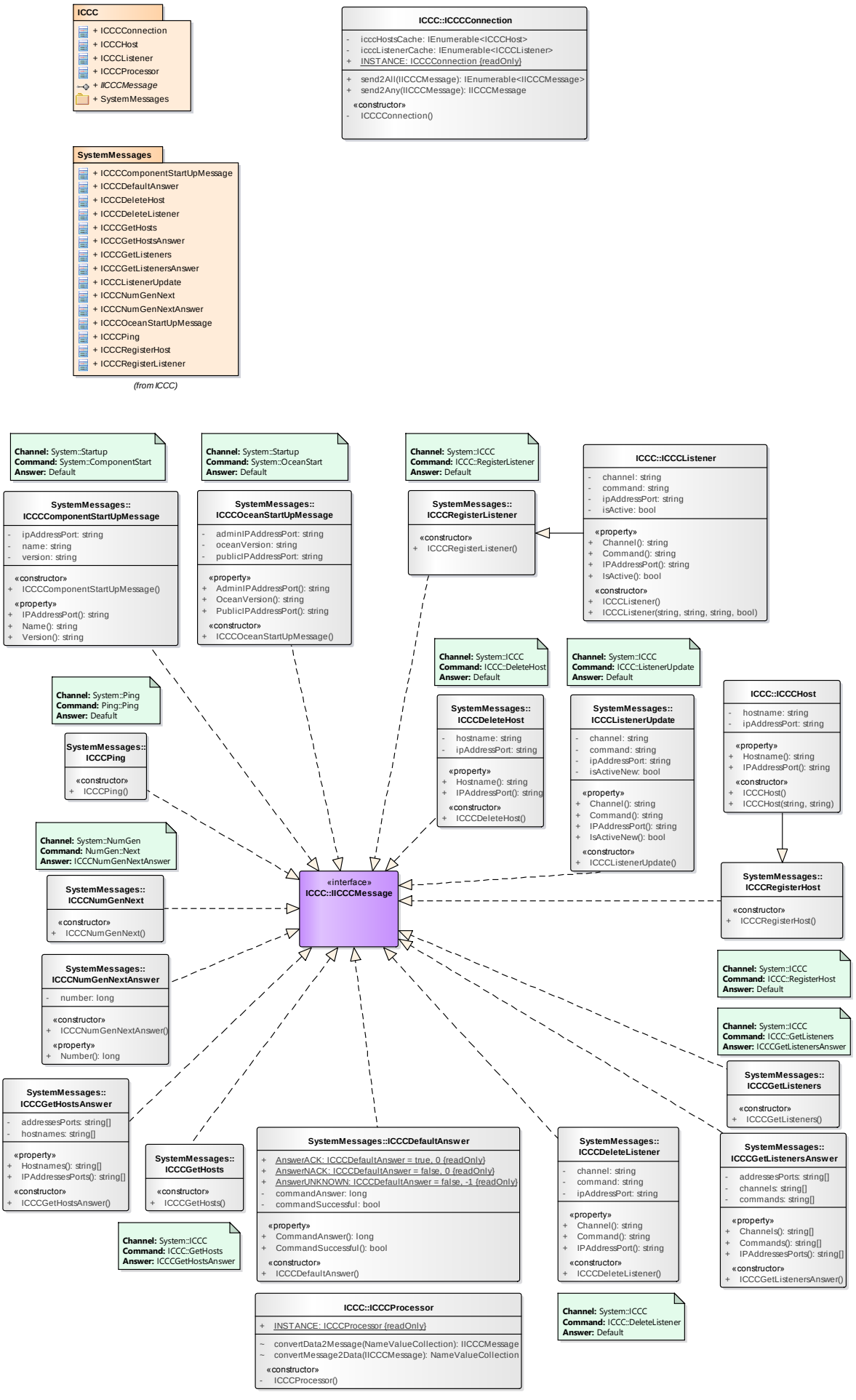
Ocean's WriteMessage2Any() function



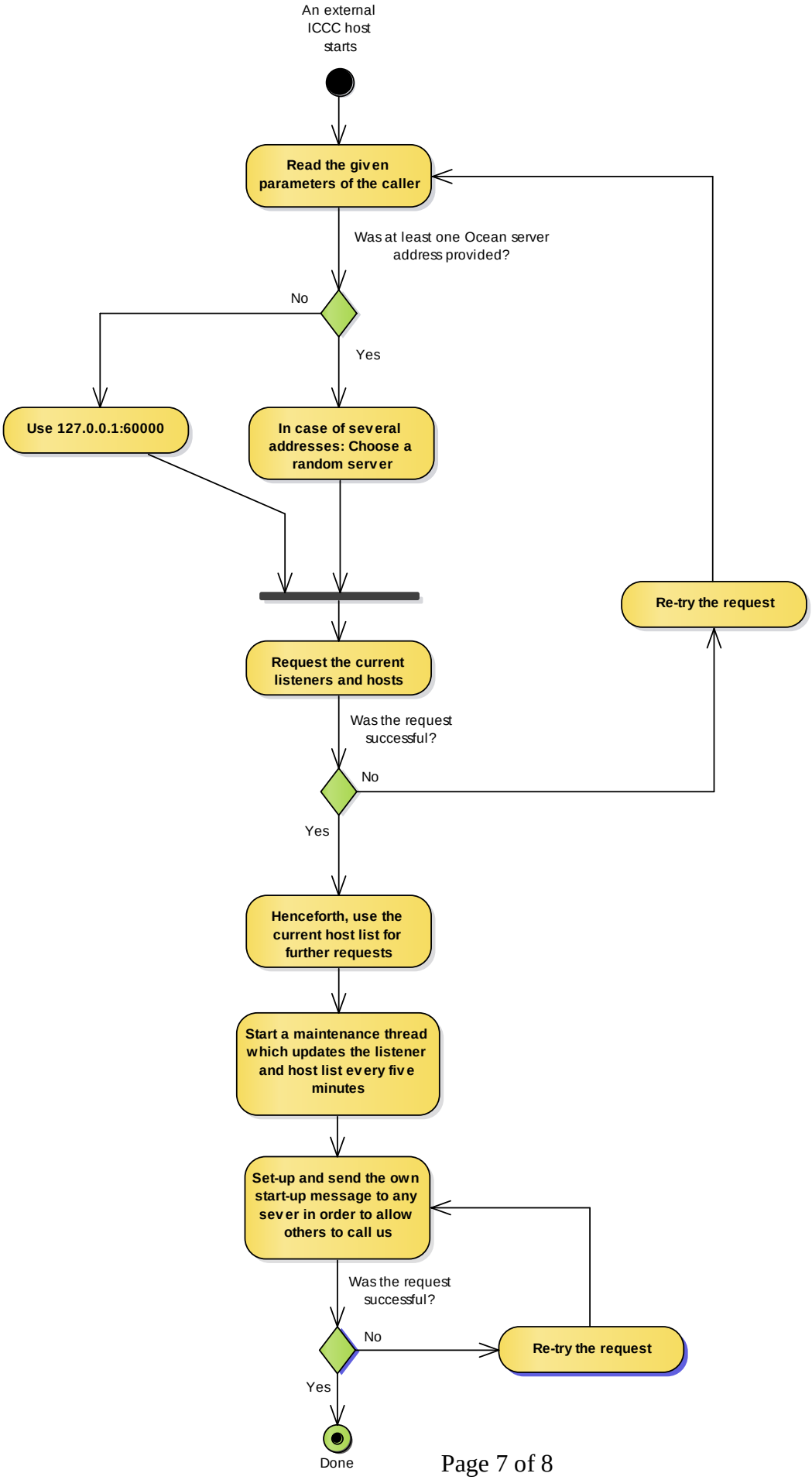
Requirements for ICCC drivers



Class diagram for an Ocean ICCC driver



Start-up process for a external ICCC driver / host



Documentation for ICCC Messages

Message: ICCCComponentStartUpMessage

Channel: System::Startup
Command: System::ComponentStart
Answer: Default

Behavior Ocean internal:
... Send: Never
... Receive: Log the content

Behavior external components:
... Send: After start-up
... Receive: Logging is possible

Message: ICCCOceanStartUpMessage

Channel: System::Startup
Command: System::OceanStart
Answer: Default

Behavior Ocean internal:
... Send: After start-up of any Ocean server
... Receive: Log the content

Behavior external components:
... Send: Never
... Receive: Logging is possible

Message: ICCCRegisterListener

Channel: System::ICCC
Command: ICCC::RegisterListener
Answer: Default

Behavior Ocean internal:
... Send: Never, will use internal function
... Receive: Register the listener

Behavior external components:
... Send: Anytime to register own listeners.
... Receive: Never

Message: ICCCDeleteHost

Channel: System::ICCC
Command: ICCC::DeleteHost
Answer: Default

Behavior Ocean internal:
... Send: To delete a dead host entry
... Receive: Delete the host

Behavior external components:
... Send: To delete own or dead host
... Receive: Never

Message: ICCCListenerUpdate

Channel: System::ICCC
Command: ICCC::ListenerUpdate
Answer: Default

Behavior Ocean internal:
... Send: Never
... Receive: Update the IsActive status for this listener

Behavior external components:
... Send: To update known listeners
... Receive: Never

Message: ICCCPing

Channel: System::Ping
Command: Ping::Ping
Answer: Deafult

Behavior Ocean internal:
... Send: To check the status of other hosts
... Receive: Assume the host as healthy

Behavior external components:
... Send: To check the status of other hosts
... Receive: Assume the host as healthy

Message: ICCCNumGenNext

Channel: System::NumGen
Command: NumGen::Next
Answer: ICCCNumGenNextAnswer

Behavior Ocean internal:
... Send: Never, will use internal function
... Receive: Delivers a new unique number

Behavior external components:
... Send: To obtain a unique number
... Receive: Never

Message: ICCCGetHosts

Channel: System::ICCC
Command: ICCC::GetHosts
Answer: ICCCGetHostsAnswer

Behavior Ocean internal:
... Send: Never, will use internal function
... Receive: Delivers current known hosts

Behavior external components:
... Send: To obtain all known hosts
... Receive: Never

Message: ICCCDeleteListener

Channel: System::ICCC
Command: ICCC::DeleteListener
Answer: Default

Behavior Ocean internal:
... Send: Never, will use internal function
... Receive: Deletes the listener

Behavior external components:
... Send: To maintain listeners
... Receive: Never

Message: ICCCGetListeners

Channel: System::ICCC
Command: ICCC::GetListeners
Answer: ICCCGetListenersAnswer

Behavior Ocean internal:
... Send: Never, will use internal function
... Receive: Provides all known listeners

Behavior external components:
... Send: To obtain all listeners
... Receive: Never

Message: ICCCRegisterHost

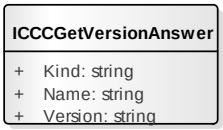
Channel: System::ICCC
Command: ICCC::RegisterHost
Answer: Default

Behavior Ocean internal:
... Send: Never, will use internal function
... Receive: Registers the host

Behavior external components:
... Send: To register own host
... Receive: Never

Message: ICCCGetVersion

Channel: System
Command: System::Version
Answer: ICCCGetVersionAnswer

Behavior Ocean internal:
... Send: On admin's request
... Receive: Reports own version

Behavior external components:
... Send: On admin's request
... Receive: Reports own version & name