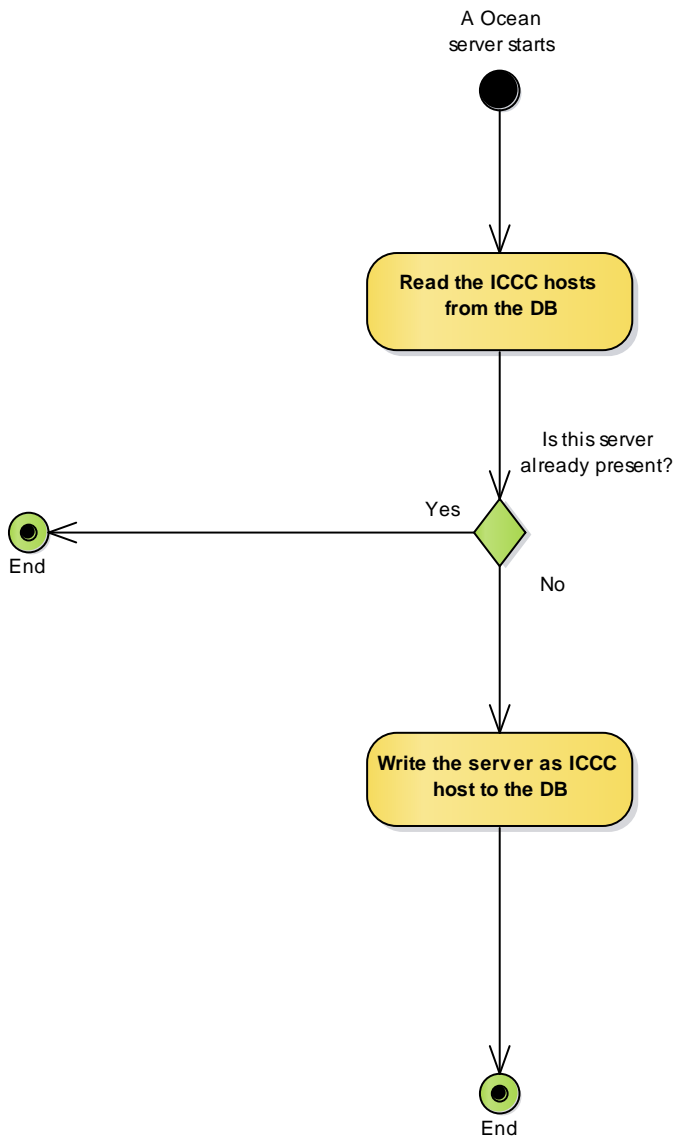


Ocean's ICCC Terminologies

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

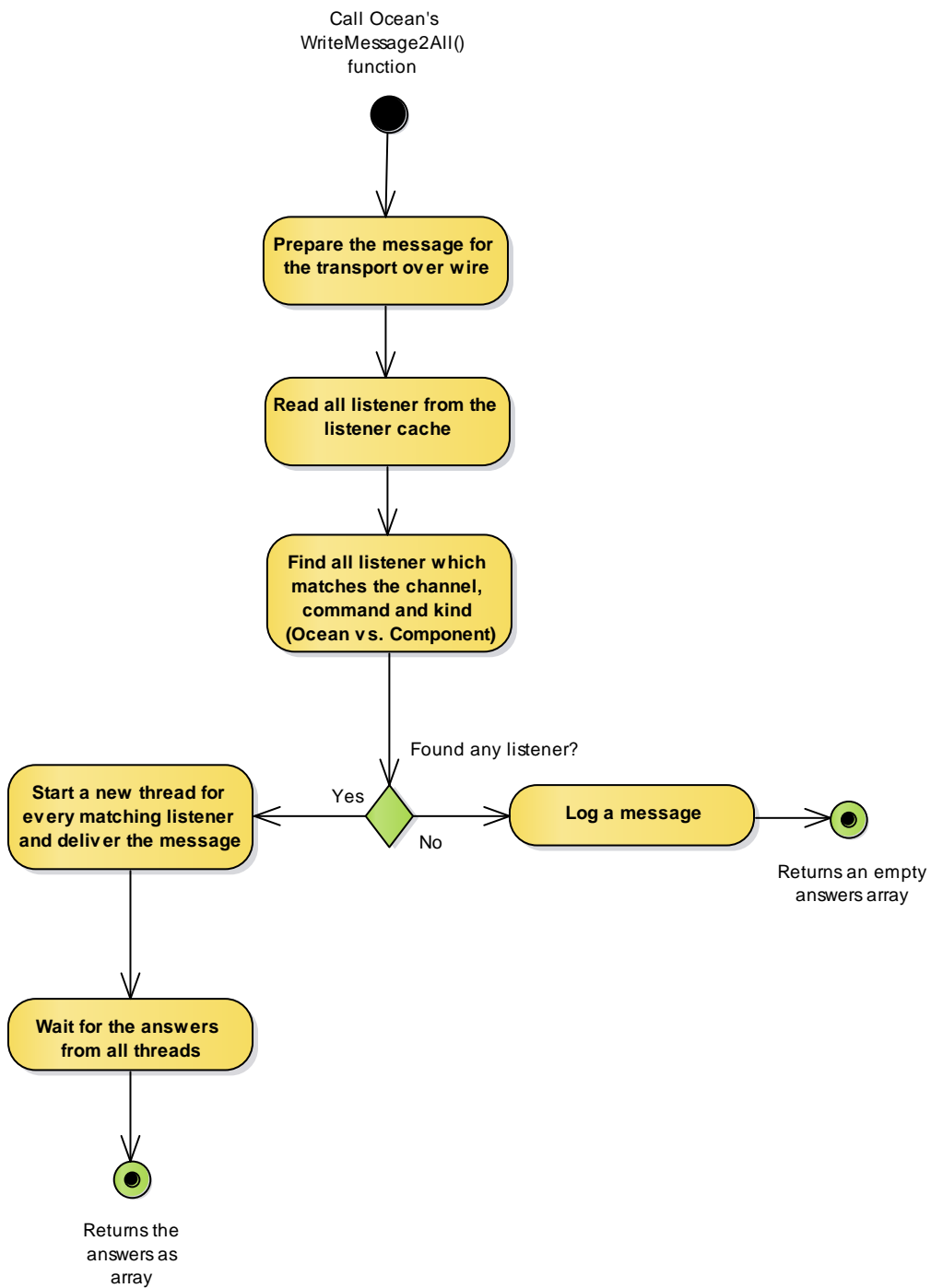
Host := An ICCC host is a server which provides at least one ICCC command. Thus, any host provides at least one listener.

Ocean's ICCC start-up

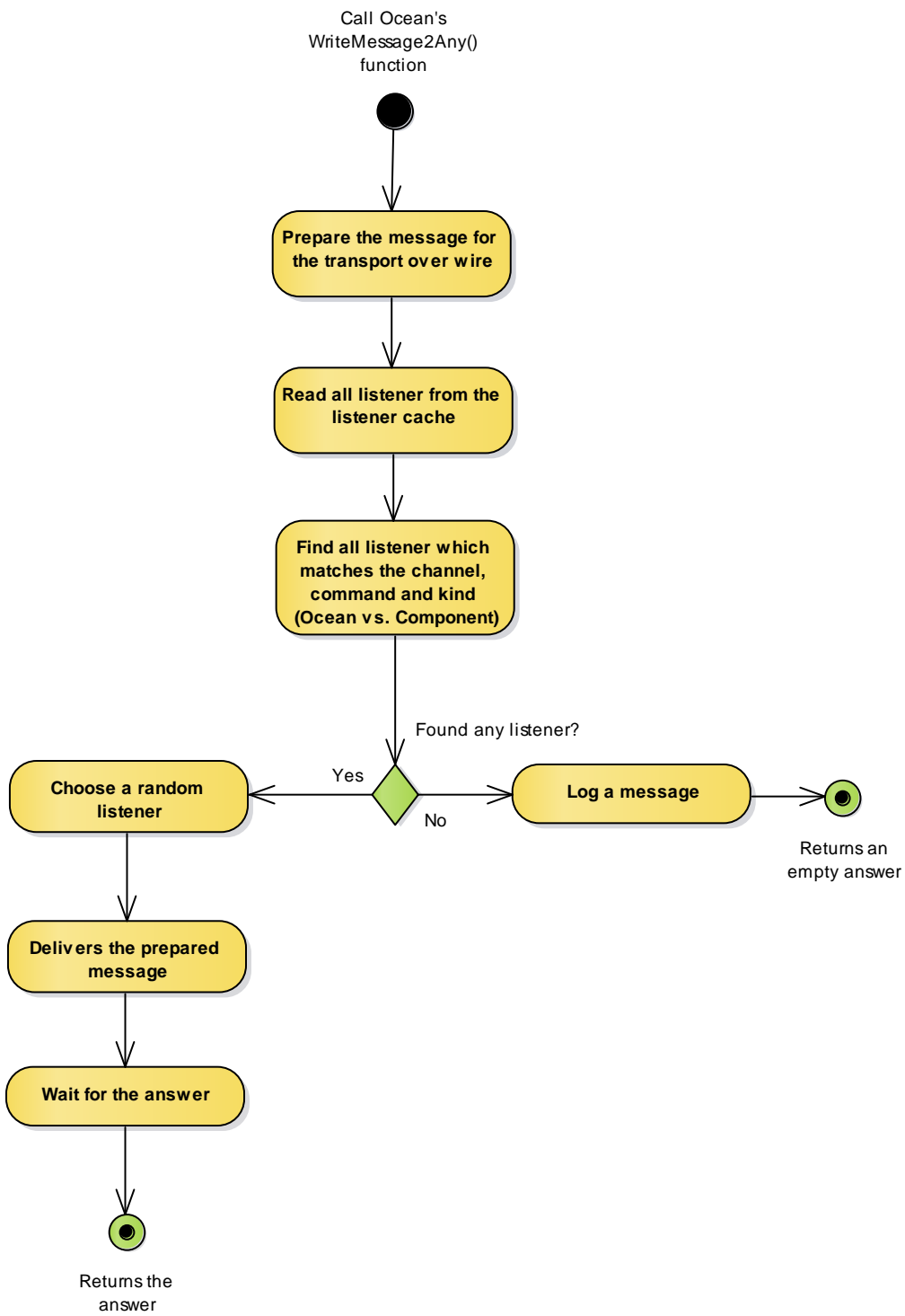


This diagram shows only the ICCC parts of Ocean's start-up process! Further, this diagram is only for Ocean true -- other external ICCC components e.g. with C#/.NET, Python, etc. are setting up differently.

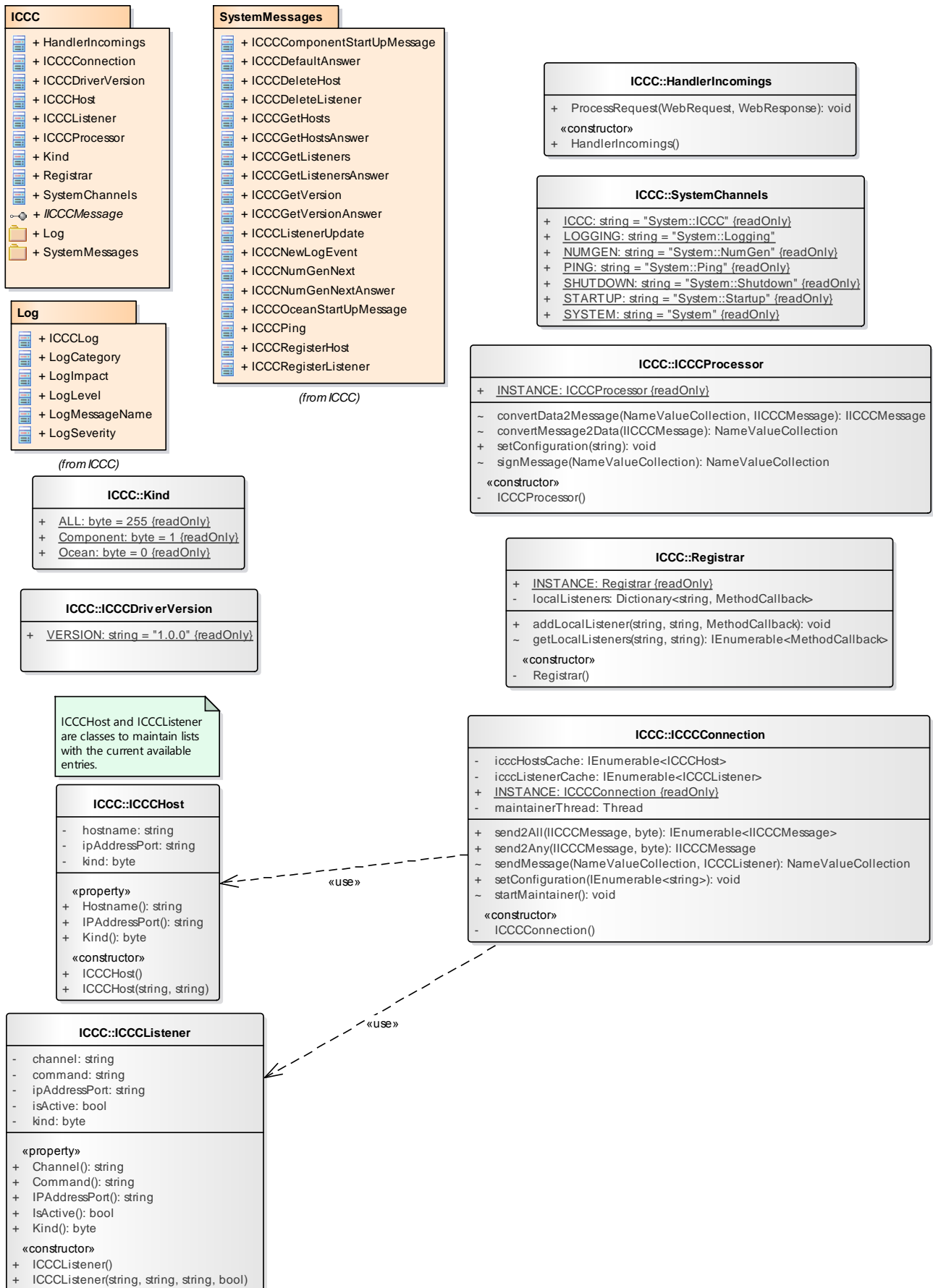
Ocean's WriteMessage2All() function

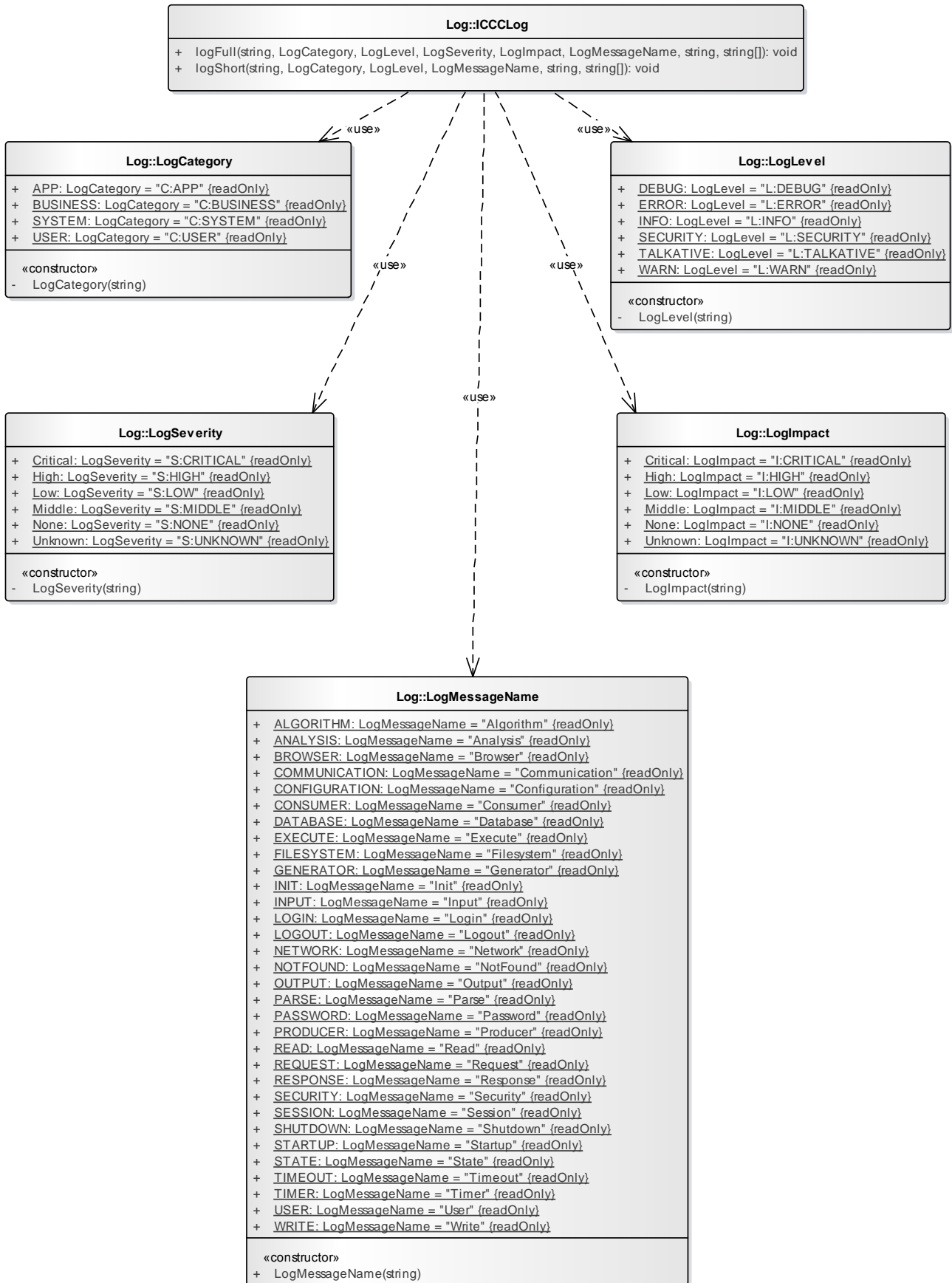


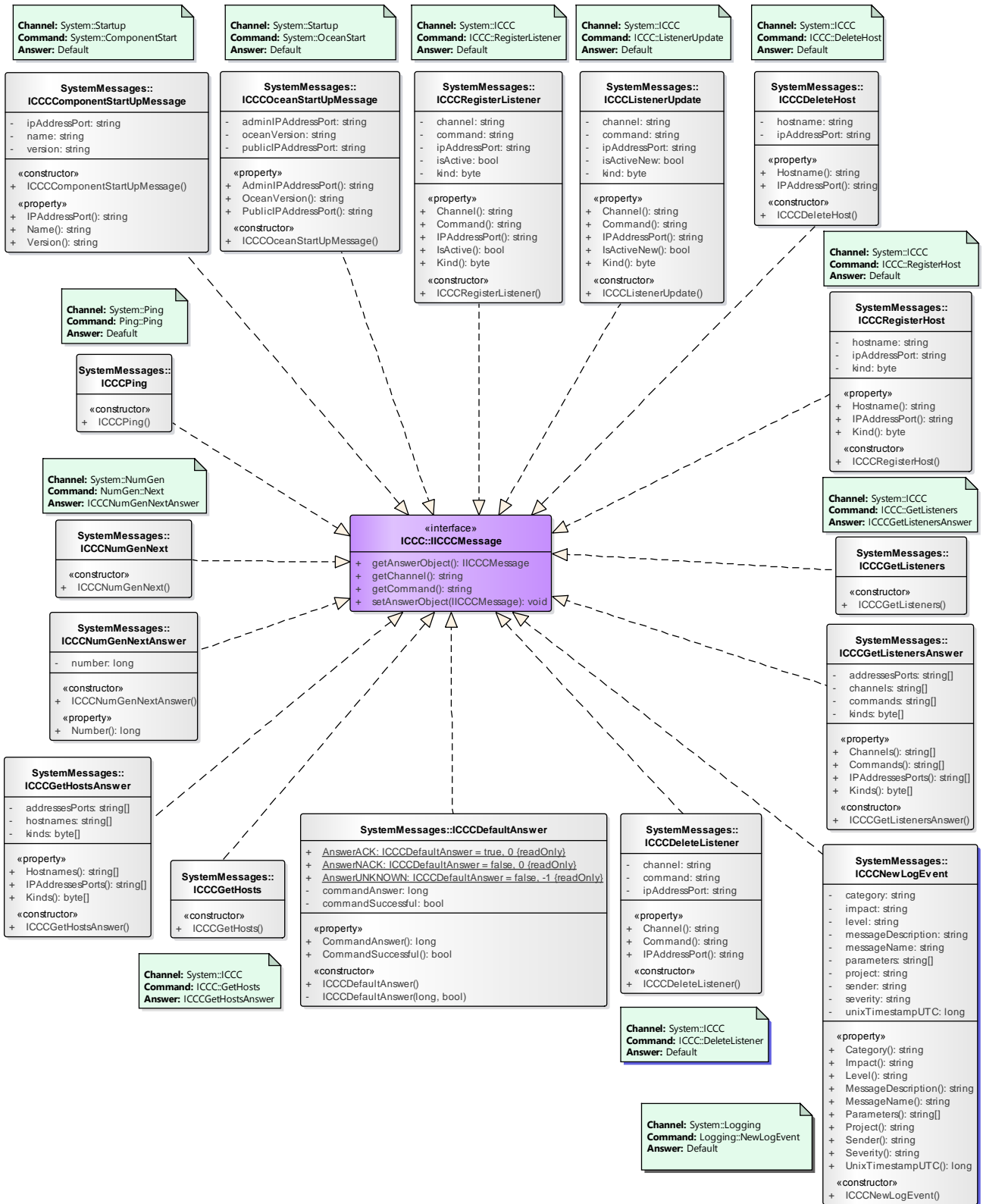
Ocean's WriteMessage2Any() function

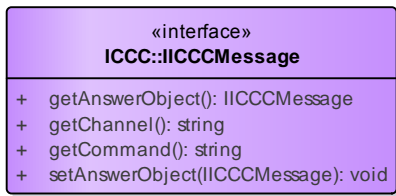


Class diagram for an Ocean ICC driver

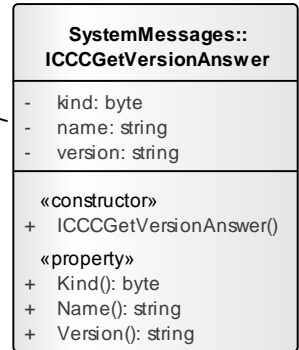
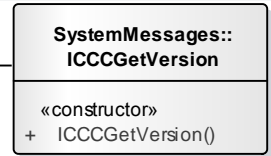




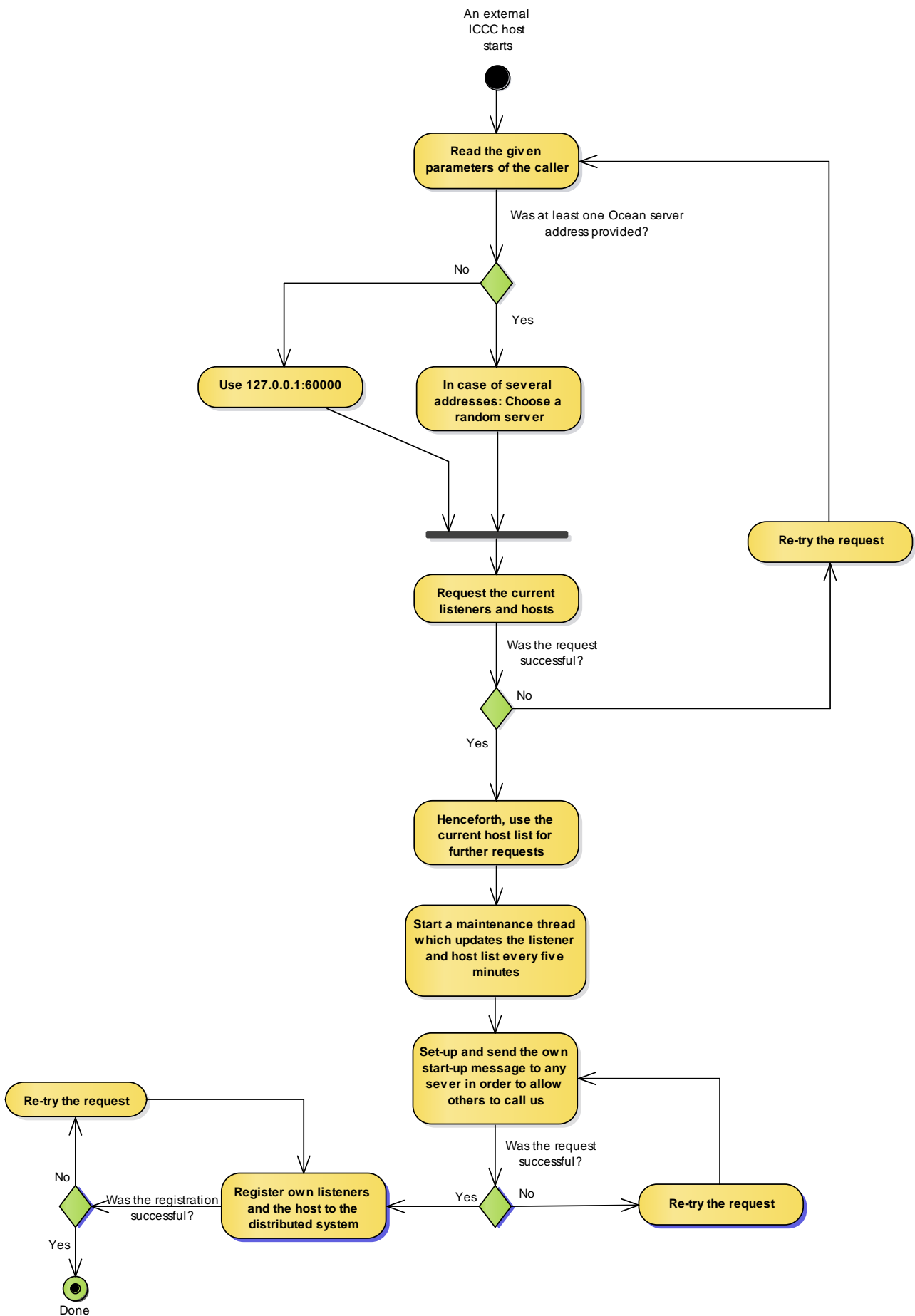




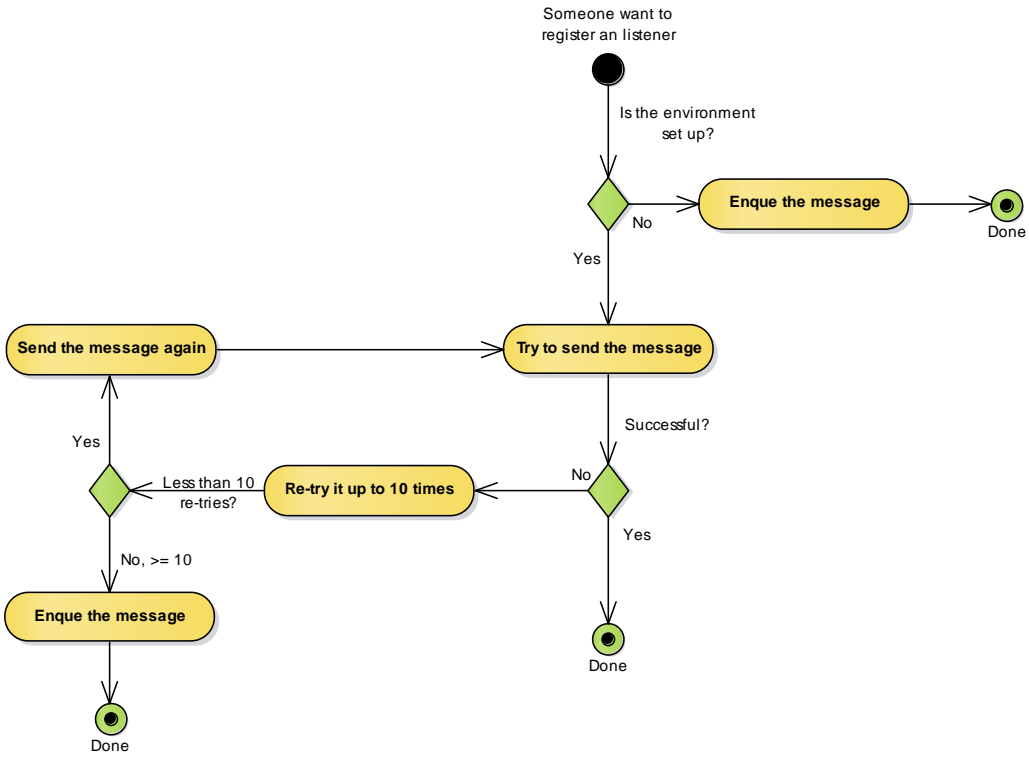
Channel: System
Command: System::Version
Answer: ICCCGetVersionAnswer



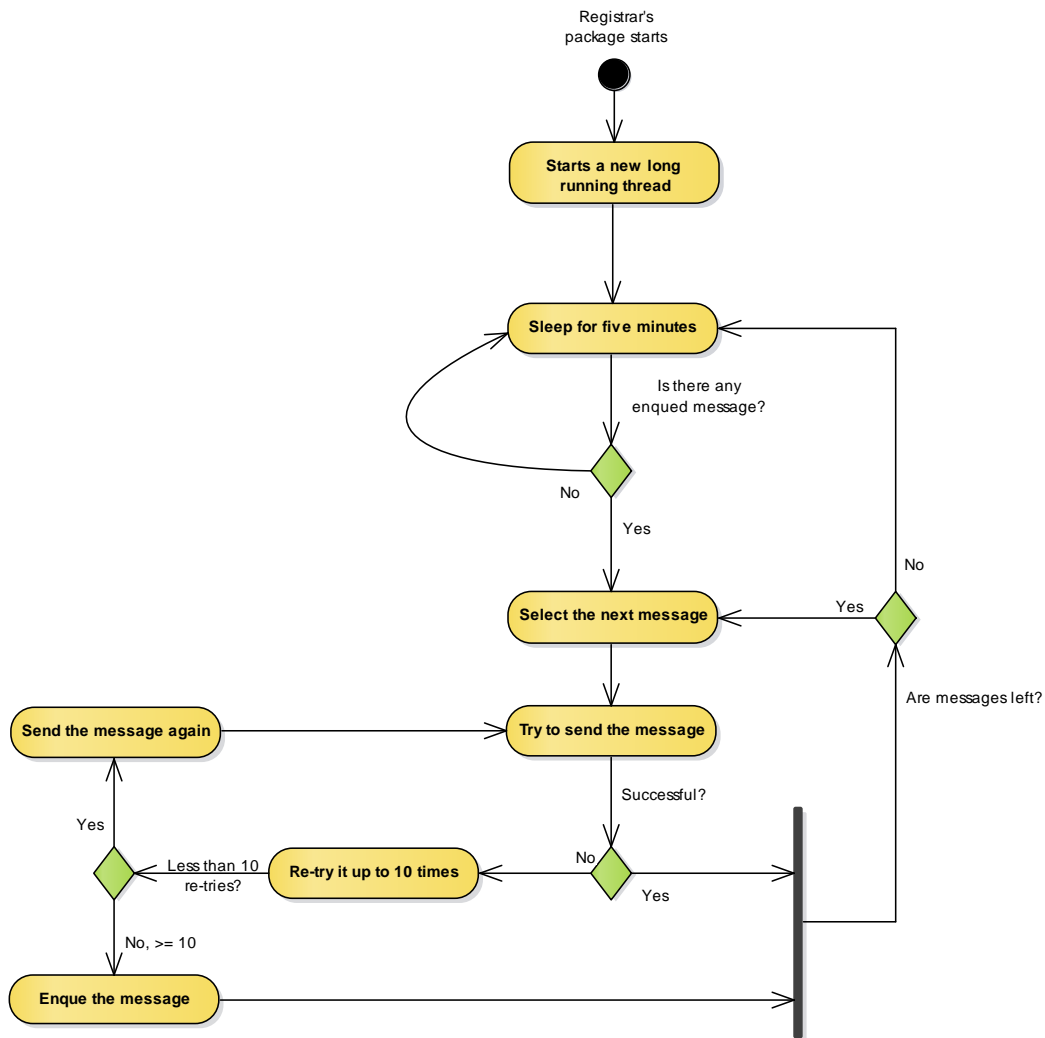
Start-up process for a external ICCC driver / host



Register an internal ICCC listener on the driver's side



Re-try enqueued messages



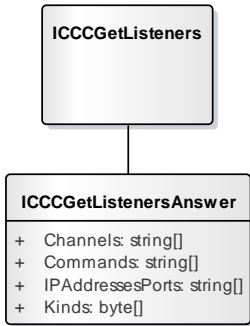
Documentation of ICCC Messages

Message: ICCCGetListeners

Channel: System::ICCC
Command: ICCC::GetListeners
Answer: ICCCGetListenersAnswer
Mandatory for driver: Send

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

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

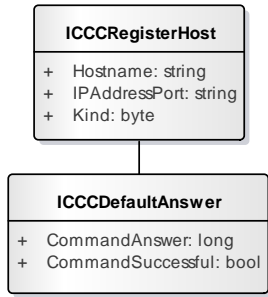


Message: ICCCRRegisterHost

Channel: System::ICCC
Command: ICCC::RegisterHost
Answer: Default
Mandatory for driver: Send

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

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

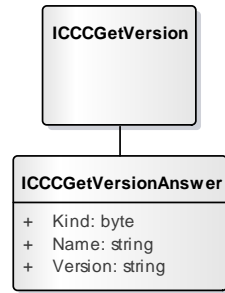


Message: ICCCGetVersion

Channel: System
Command: System::Version
Answer: ICCCGetVersionAnswer
Mandatory for driver: Receive

Behavior Ocean internal:
 ... Send: On admin's request
 ... Receive: Reports own version; Kind=Ocean; Name=Hostname

Behavior external components:
 ... Send: On admin's request
 ... Receive: Reports own version as 'own version@driver's version'; Kind=Component; Name=Component's name

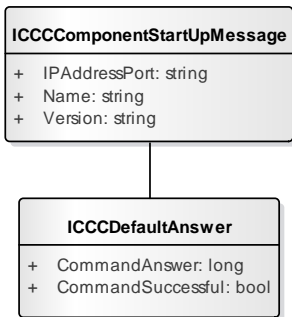


Message: ICCCComponentStartupMessage

Channel: System::Startup
Command: System::ComponentStart
Answer: Default
Mandatory for driver: Send

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

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

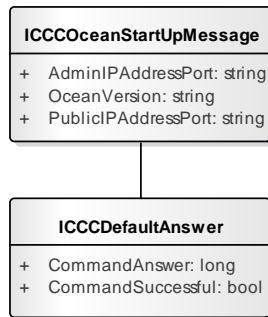


Message: ICCCOceanStartupMessage

Channel: System::Startup
Command: System::OceanStart
Answer: Default
Mandatory for driver: No

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

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

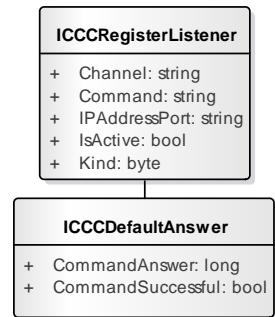


Message: ICCCRRegisterListener

Channel: System::ICCC
Command: ICCC::RegisterListener
Answer: Default
Mandatory for driver: Send

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

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

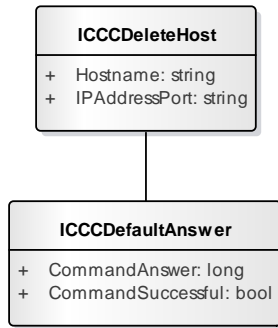


Message: ICCDeleteHost

Channel: System::ICCC
Command: ICC::DeleteHost
Answer: Default
Mandatory for driver: No

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

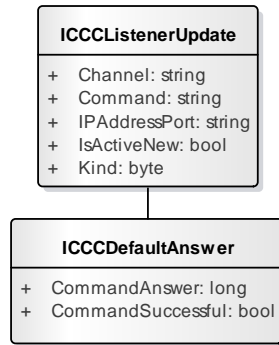


Message: ICCListenerUpdate

Channel: System::ICCC
Command: ICC::ListenerUpdate
Answer: Default
Mandatory for driver: Send

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

Behavior external components:
... Send: To update known listeners e.g. for the shutdown
... Receive: Never

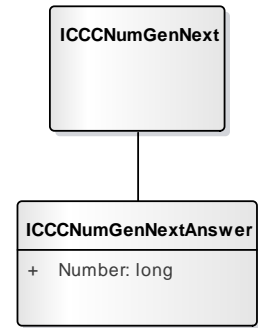


Message: ICCNumGenNext

Channel: System::NumGen
Command: NumGen::Next
Answer: ICCNumGenNextAnswer
Mandatory for driver: No

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

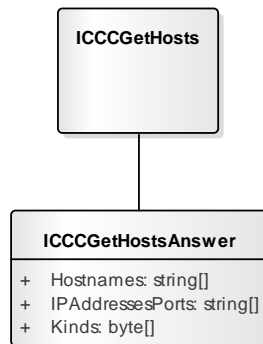


Message: ICCGetHosts

Channel: System::ICCC
Command: ICC::GetHosts
Answer: ICCGetHostsAnswer
Mandatory for driver: Send

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

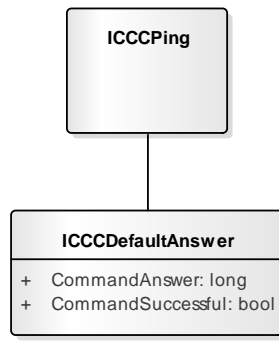


Message: ICCPing

Channel: System::Ping
Command: Ping::Ping
Answer: Default
Mandatory for driver: Receive

Behavior Ocean internal:
... Send: To check the status of other hosts
... Receive: Answer to show own healthy

Behavior external components:
... Send: To check the status of other hosts
... Receive: Answer to show own healthy

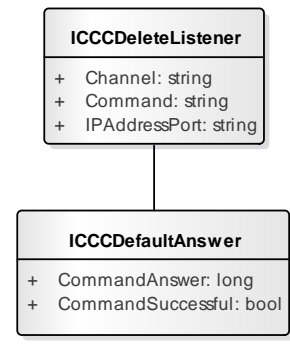


Message: ICCDeleteListener

Channel: System::ICCC
Command: ICC::DeleteListener
Answer: Default
Mandatory for driver: No

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

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



Message: ICCCNNewLogEvent

Channel: System::Logging

Command: Logging::NewLogEvent

Answer: Default

Mandatory for driver: Send

Behavior Ocean internal:

... Send: Never

... Receive: Bring-in the event to the logging

Behavior external components:

... Send: Anytime an interesting event occurs

... Receive: Never

