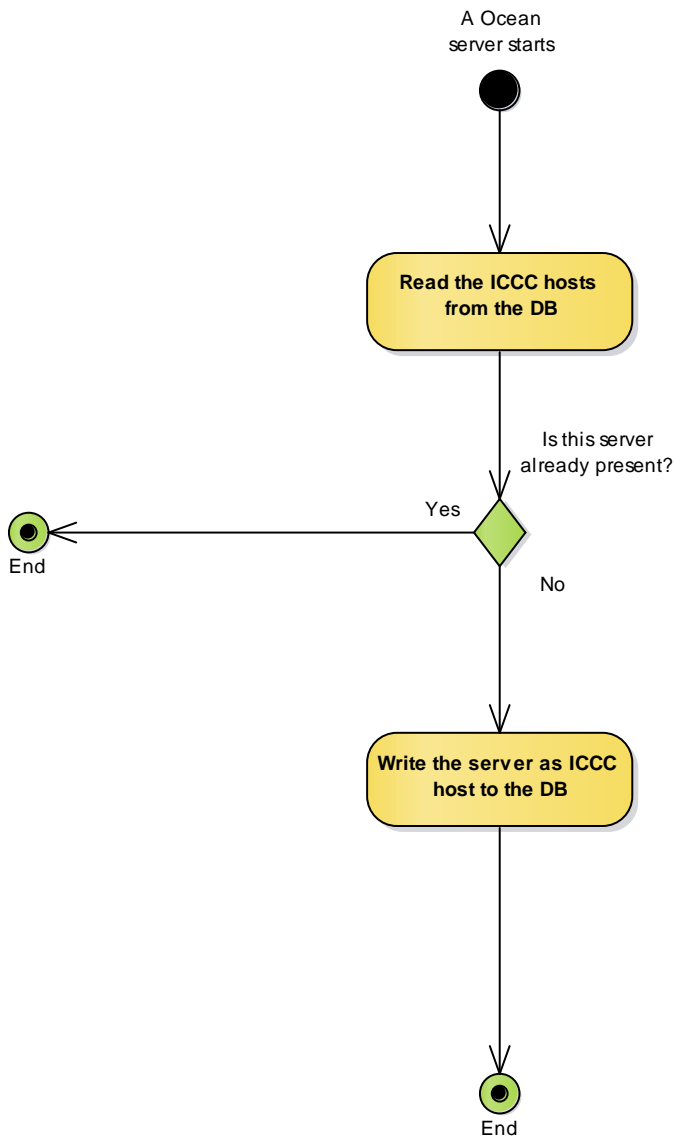


## Ocean's ICCC Terminologies

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

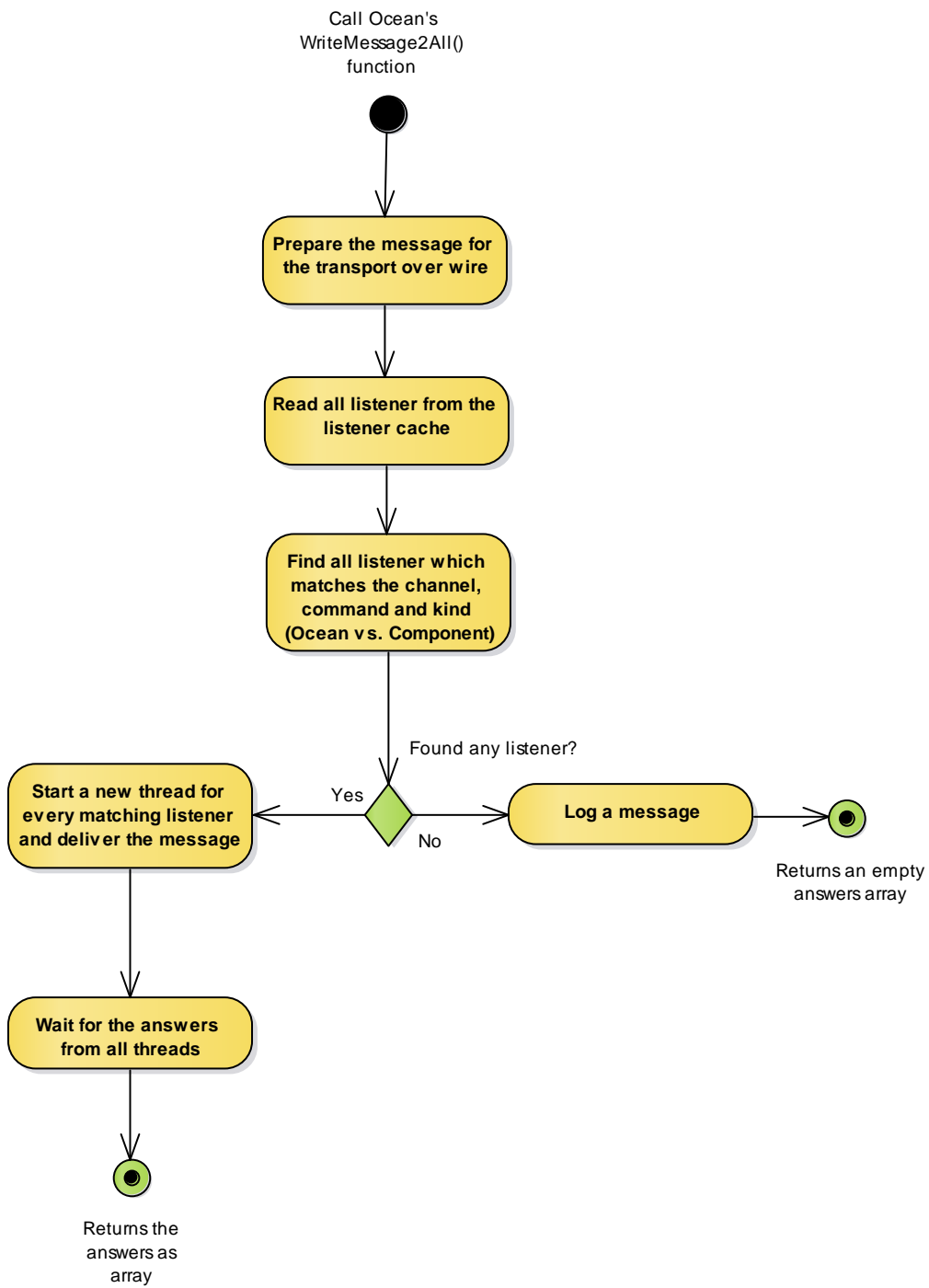
**Host** := An ICCC host is a server which provides at least one ICCC command. Thus, any host provides at least one listener.

# Ocean's ICCC start-up

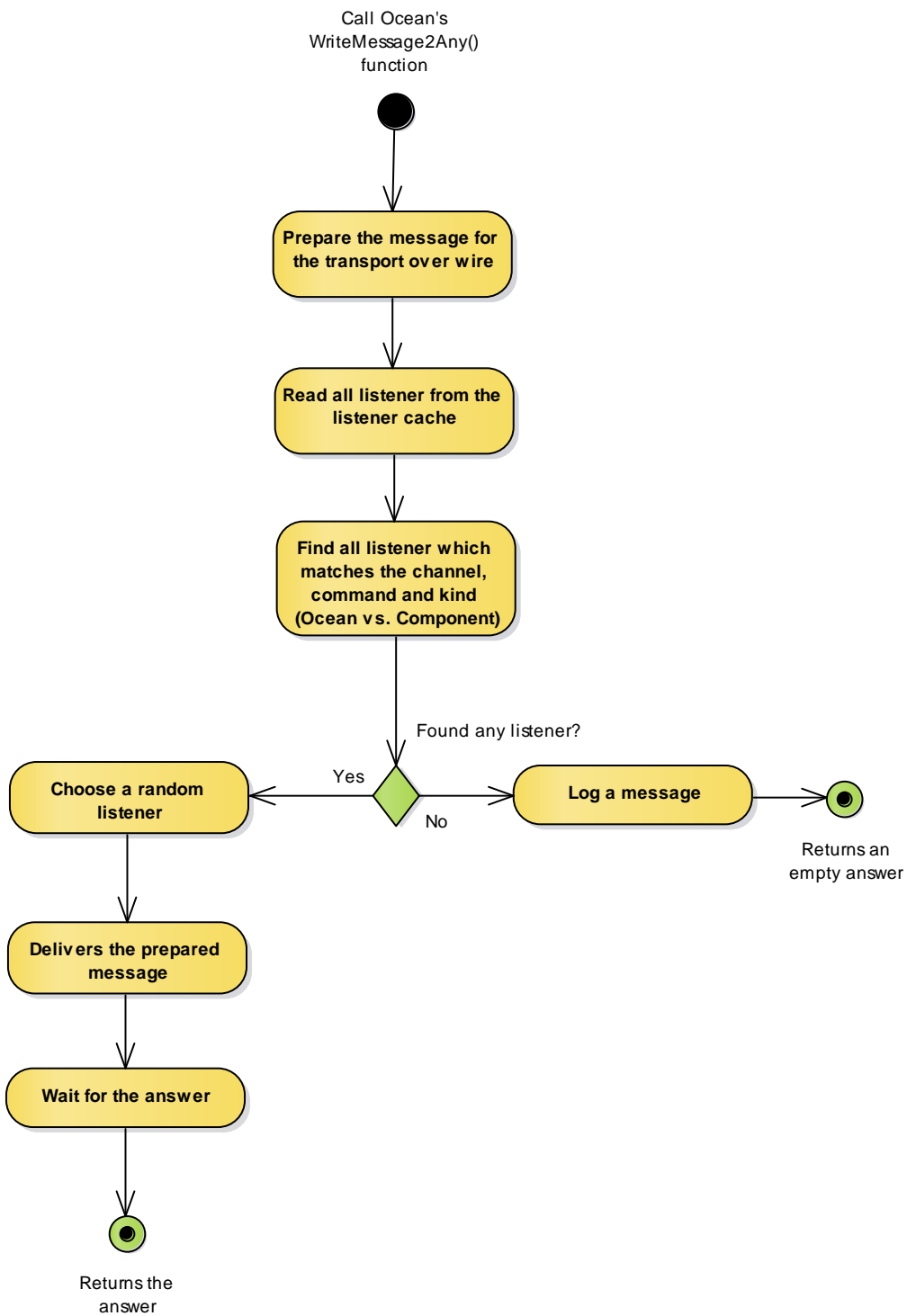


This diagram shows only the ICCC parts of Ocean's start-up process! Further, this diagram is only for Ocean true -- other external ICCC components e.g. with C#/.NET, Python, etc. are setting up differently.

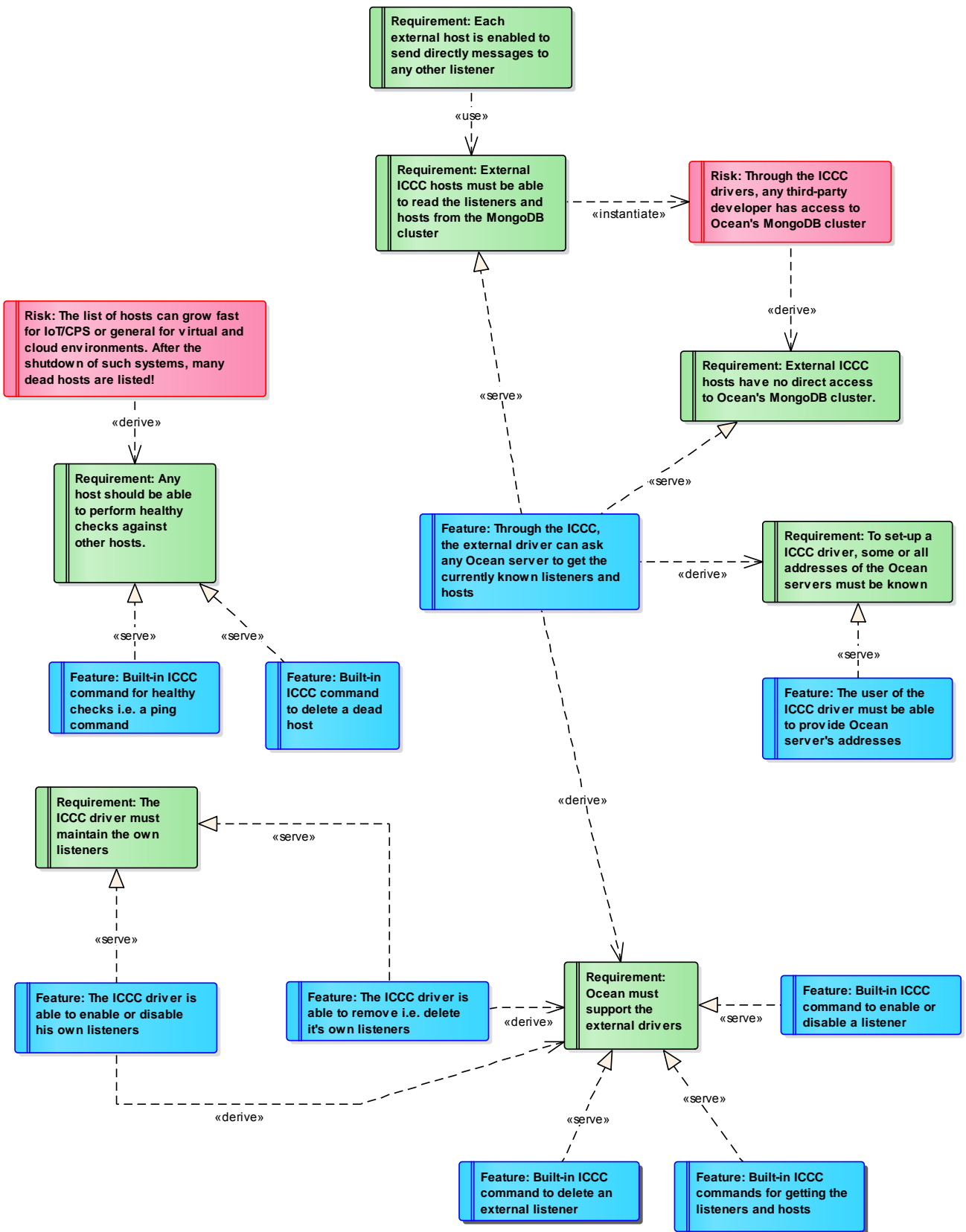
# Ocean's WriteMessage2All() function



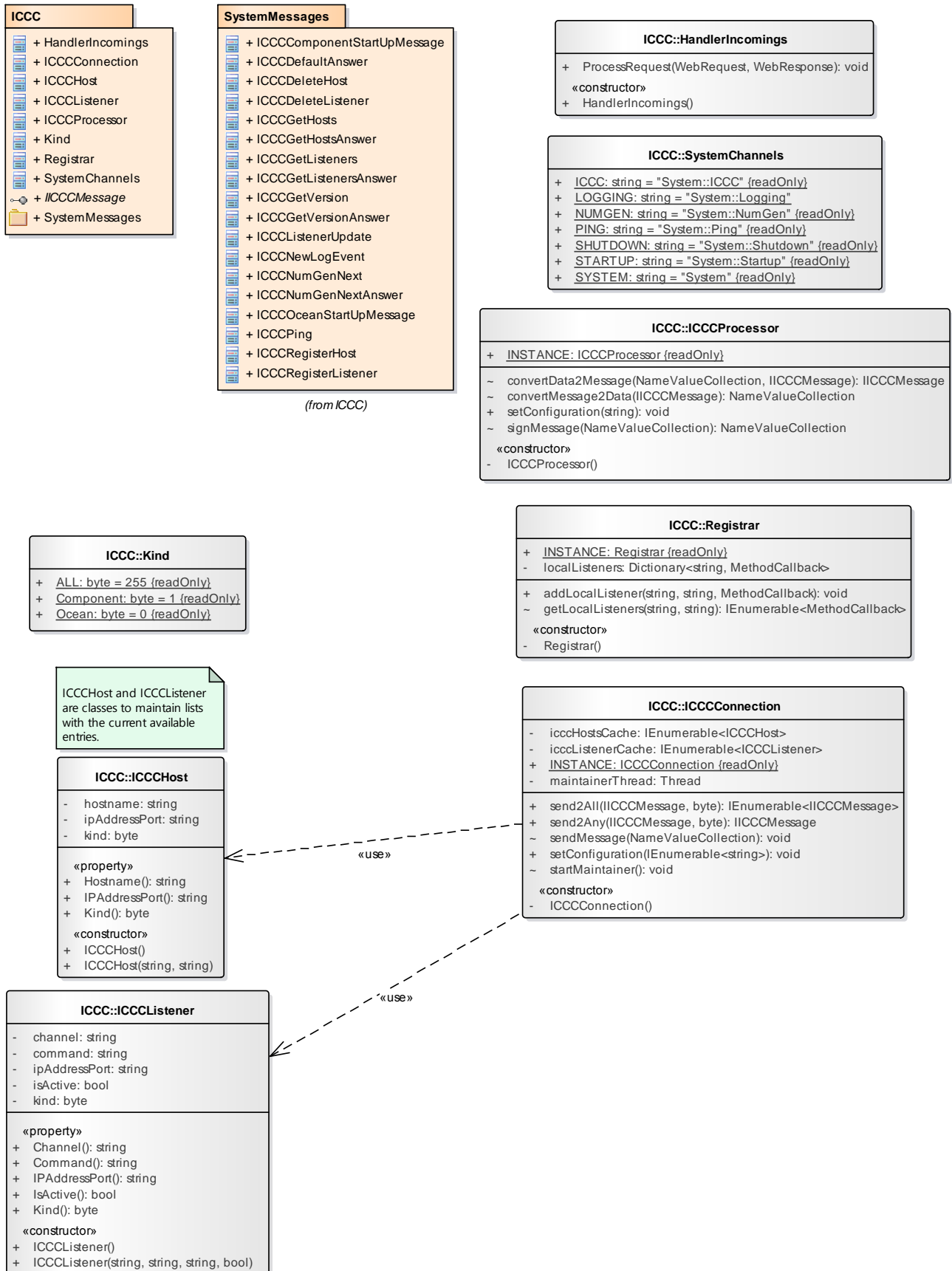
# Ocean's WriteMessage2Any() function

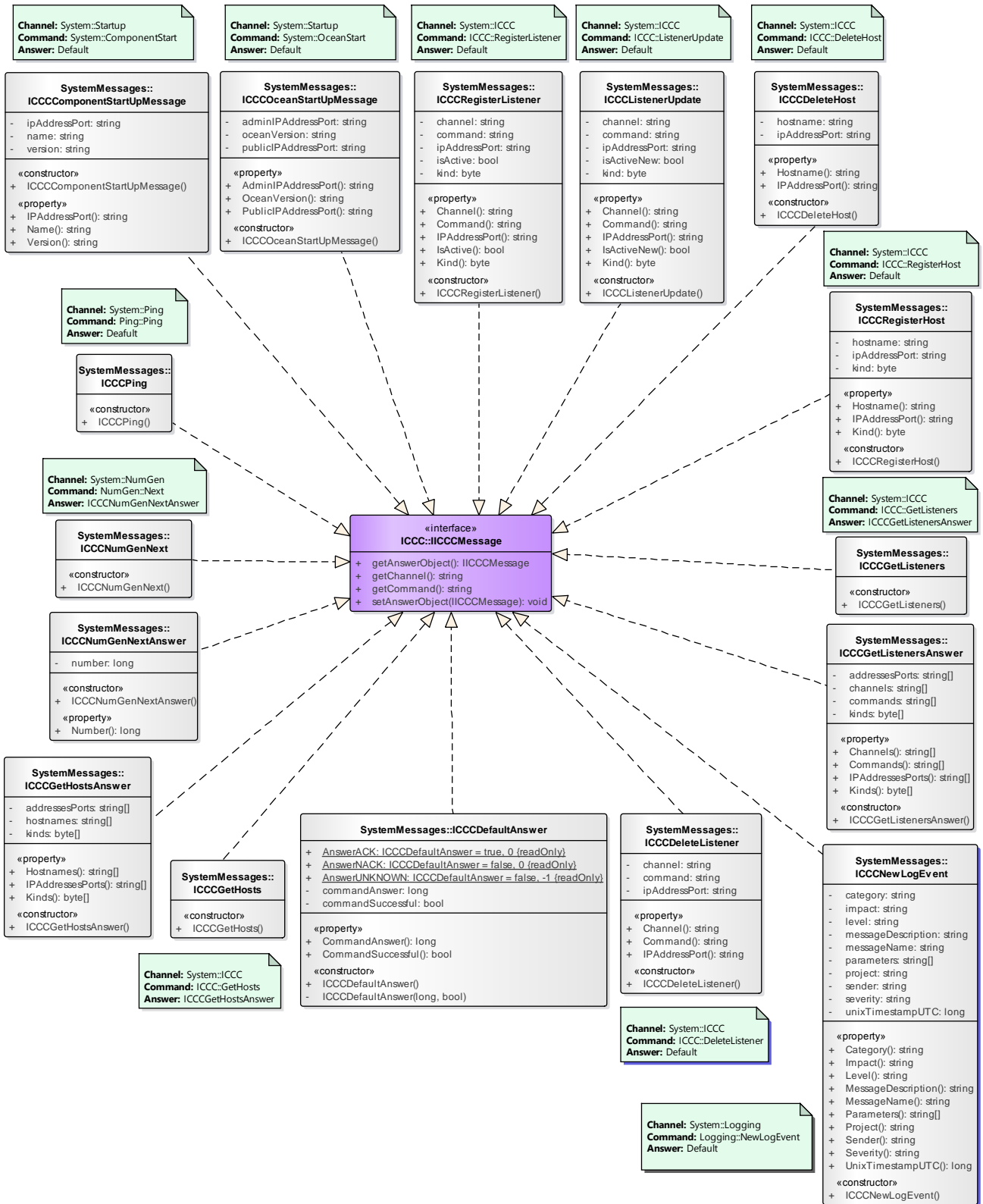


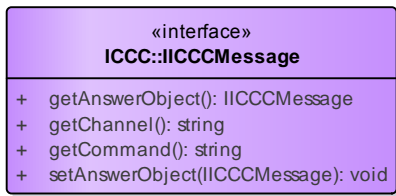
# Requirements for ICCC drivers



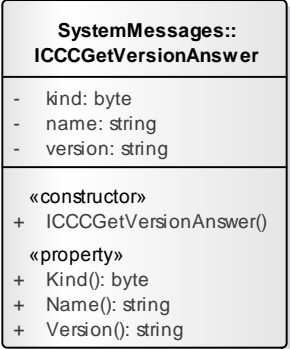
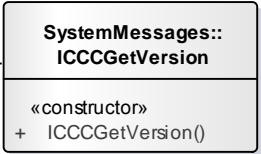
# Class diagram for an Ocean ICCC driver





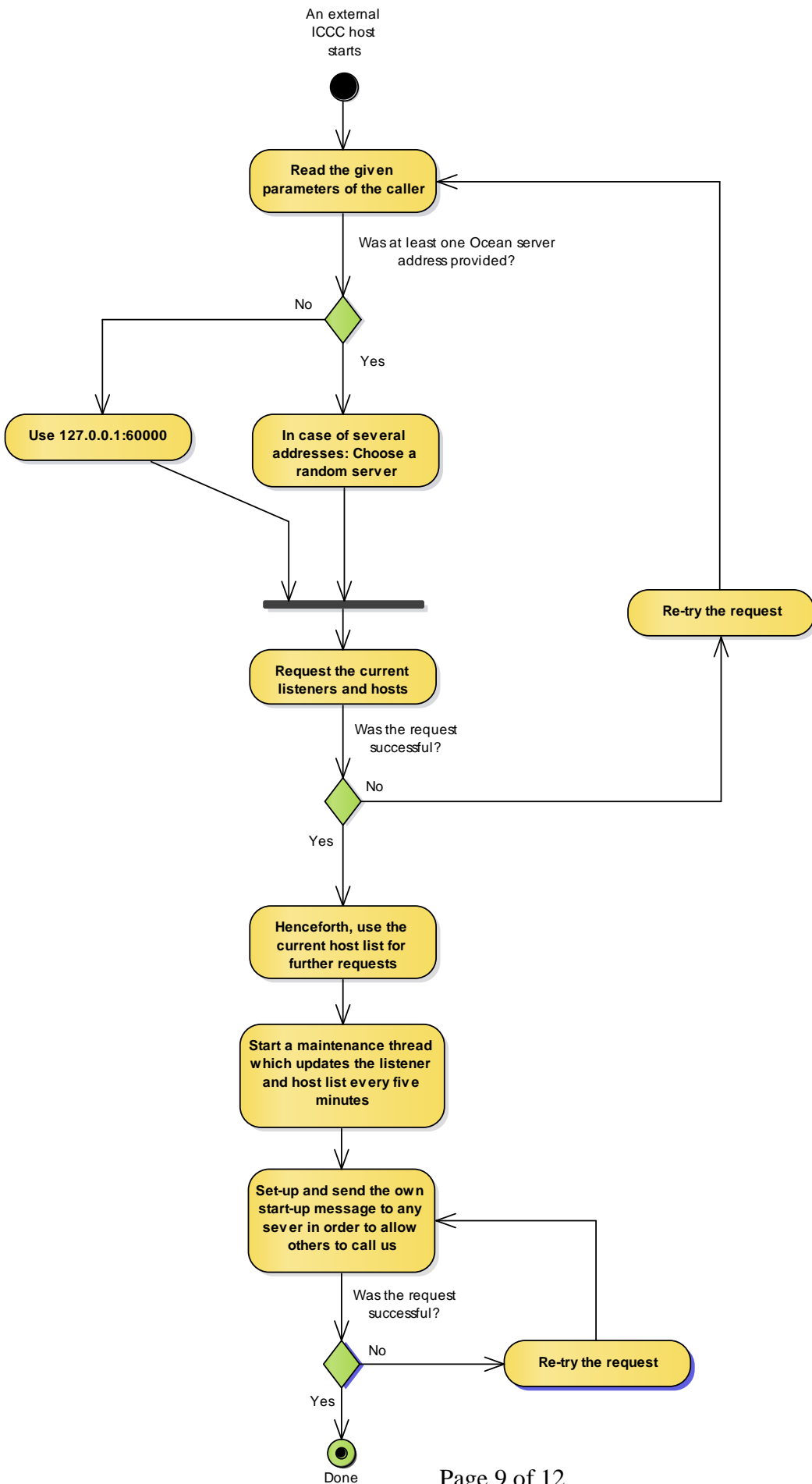


**Channel:** System  
**Command:** System::Version  
**Answer:** ICCCGetVersionAnswer





# Start-up process for a external ICCC driver / host



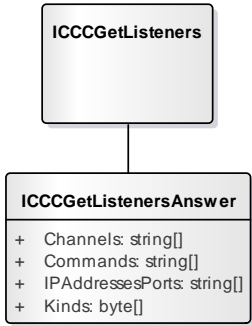
# Documentation of ICCC Messages

**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

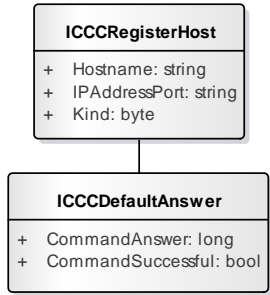


**Message: ICCCRestHost**

**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

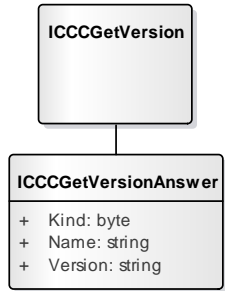


**Message: ICCCGetVersion**

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

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

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

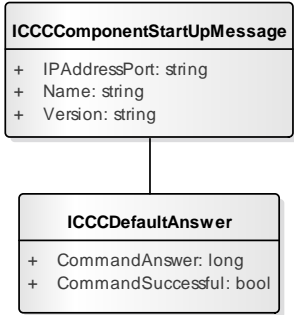


**Message: ICCComponentStartUpMessage**

**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

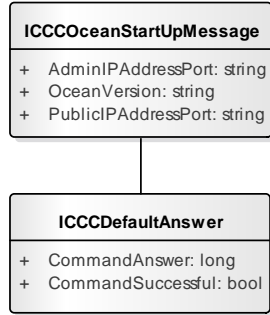


**Message: ICCCOceanStartUpMessage**

**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

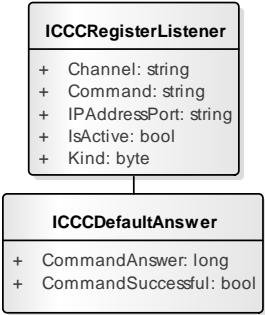


**Message: ICCCRestListener**

**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

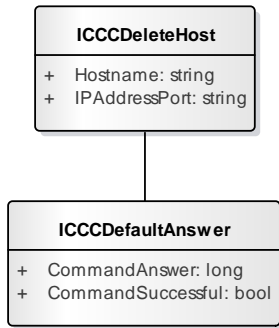


**Message: ICCDeleteHost**

**Channel:** System::ICCC  
**Command:** ICC::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

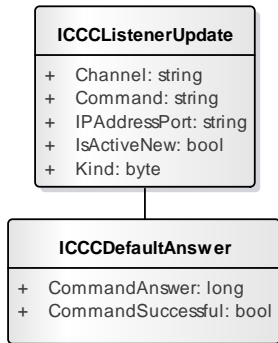


**Message: ICCListenerUpdate**

**Channel:** System::ICCC  
**Command:** ICC::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

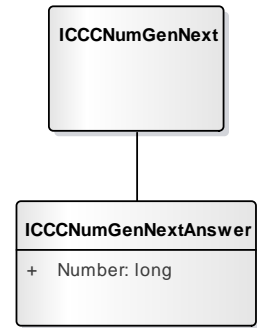


**Message: ICCNumGenNext**

**Channel:** System::NumGen  
**Command:** NumGen::Next  
**Answer:** ICCNumGenNextAnswer

**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

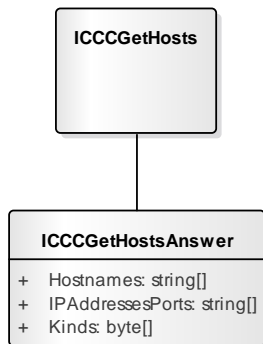


**Message: ICCGetHosts**

**Channel:** System::ICCC  
**Command:** ICC::GetHosts  
**Answer:** ICCGetHostsAnswer

**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

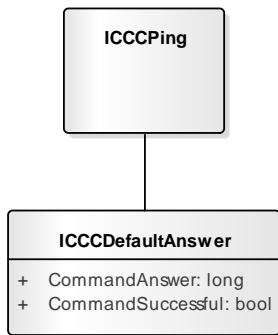


**Message: ICCPing**

**Channel:** System::Ping  
**Command:** Ping::Ping  
**Answer:** Default

**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

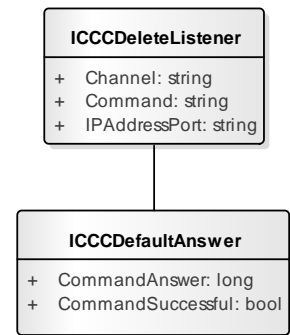


**Message: ICCDeleteListener**

**Channel:** System::ICCC  
**Command:** ICC::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: ICCCNLogEvent**

**Channel:** System::Logging

**Command:** Logging::NewLogEvent

**Answer:** Default

**Behavior Ocean internal:**

... Send: Never

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

**Behavior external components:**

... Send: Anytime an interesting event occurs

... Receive: Never

