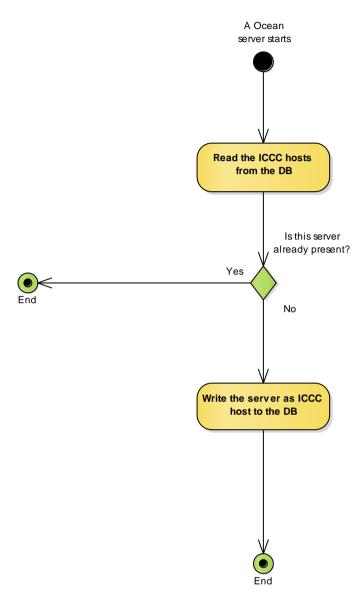
Ocean's ICCC Terminologies

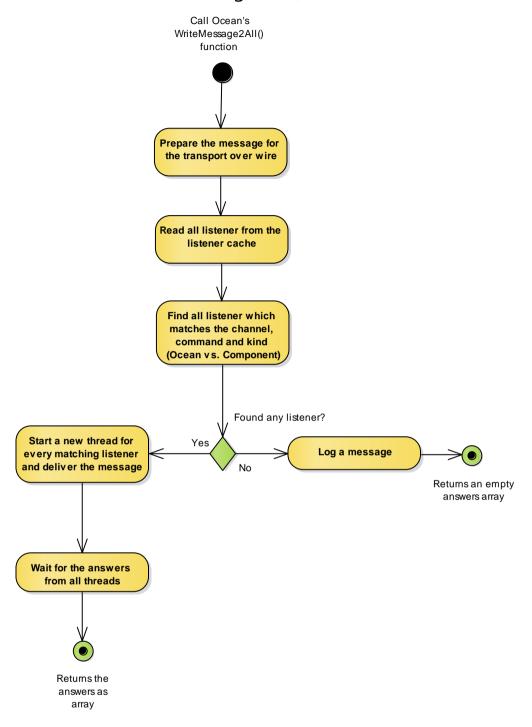
Listener := An ICCC command at a given channel which is located on any or all of the servers Host := An ICCC host is a server which provides at least one ICCC command. Thus, any host provides at least one listener.

Ocean's ICCC start-up

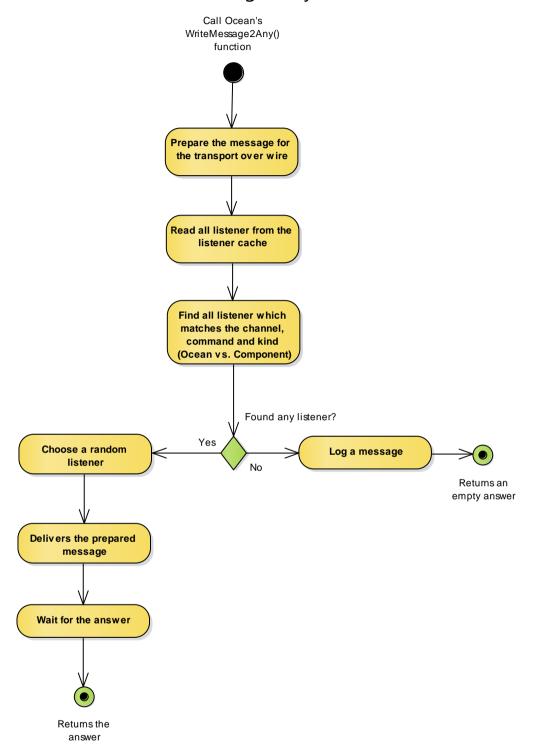


This diagram shows only the ICCC parts of Ocean's start-up process! Further, this diagram is only for Ocean true -- other external ICCC components e.g. with C#/.NET, Python, etc. are setting up differently.

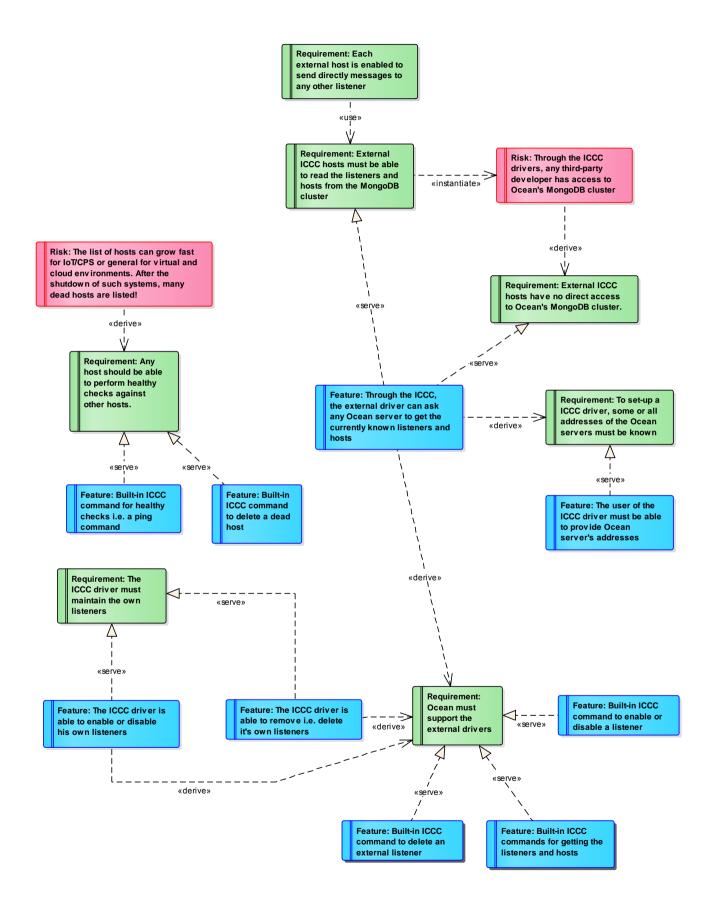
Ocean's WriteMessage2All() function



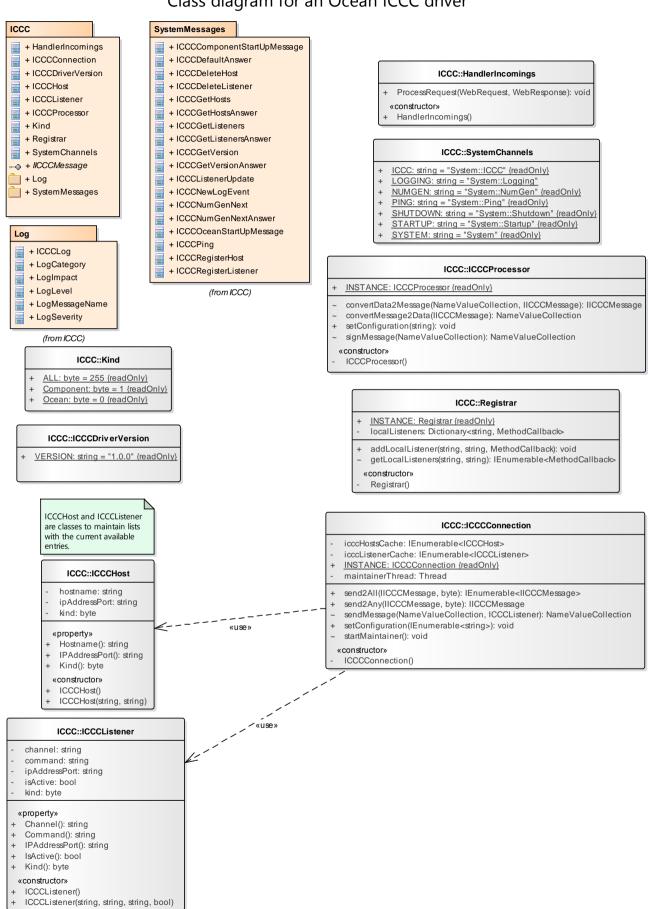
Ocean's WriteMessage2Any() function

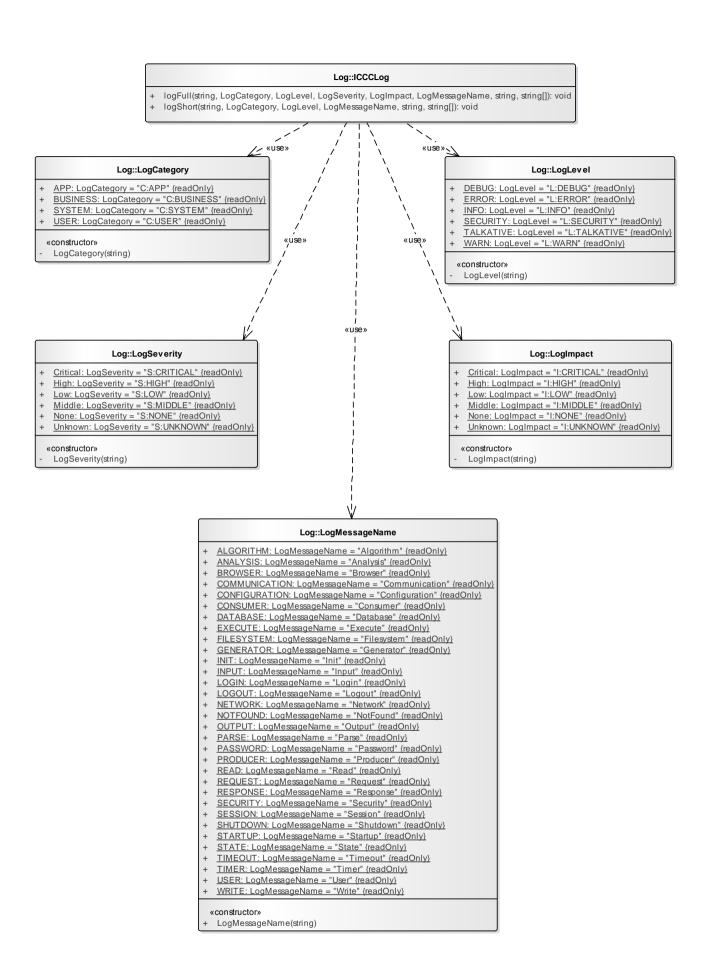


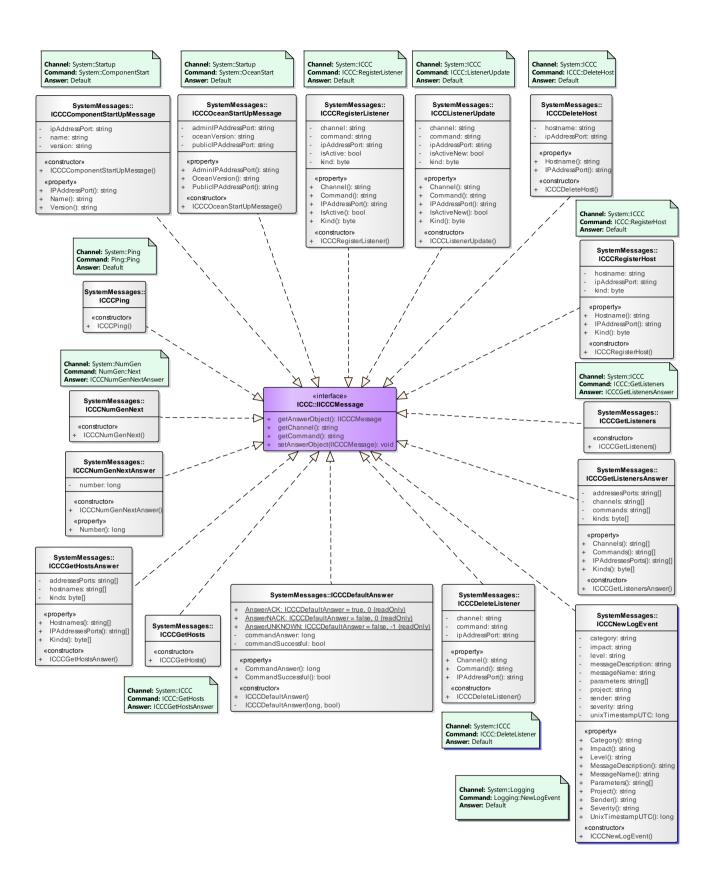
Requirements for ICCC drivers

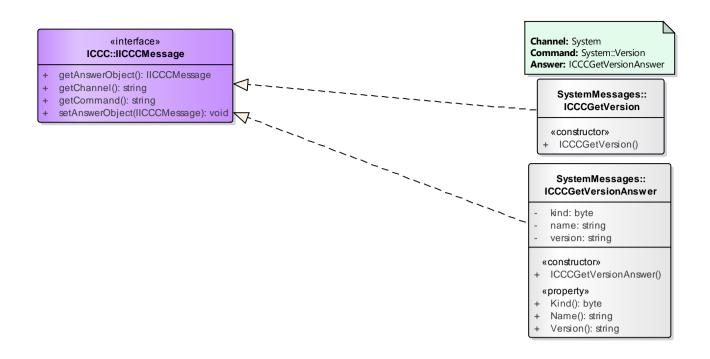


Class diagram for an Ocean ICCC driver

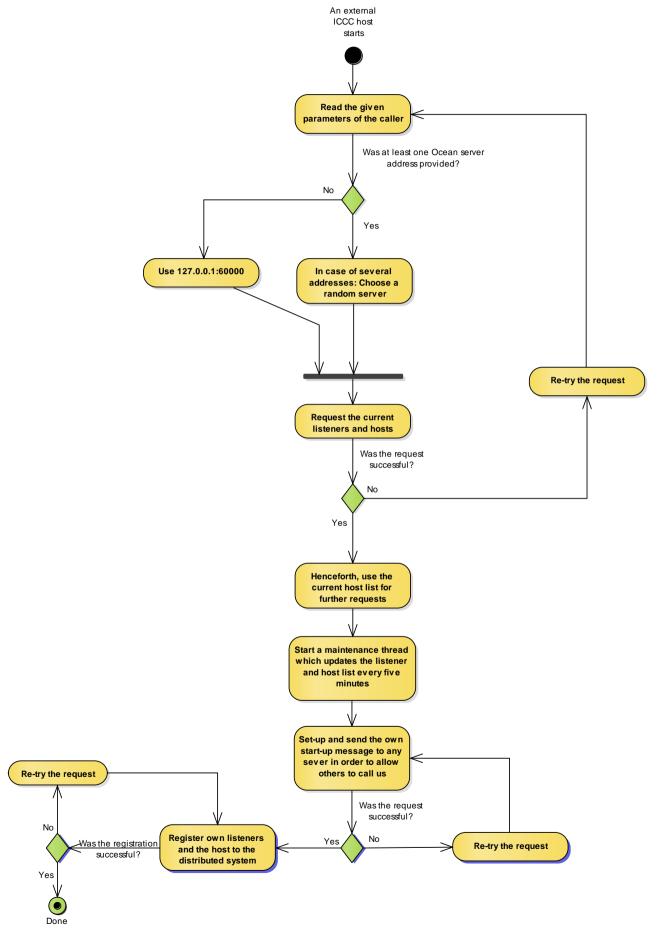






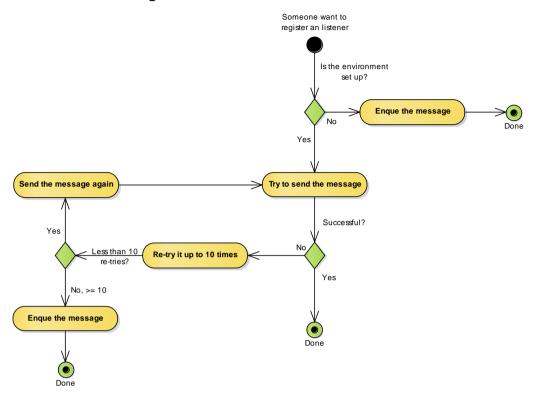


Start-up process for a external ICCC driver / host

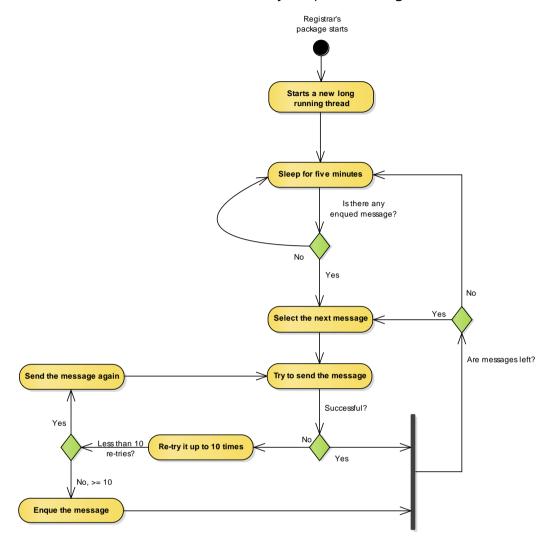


Page 10 of 15

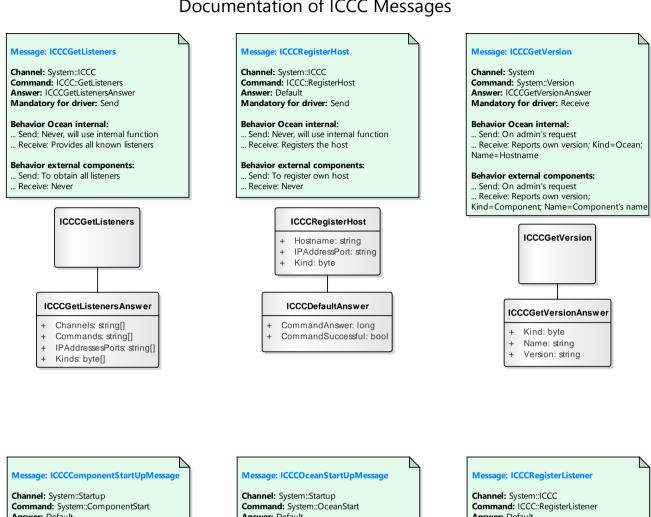
Register an internal ICCC listener on the driver's side



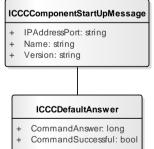
Re-try enqued messages



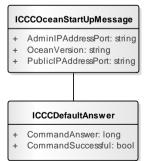
Documentation of ICCC Messages

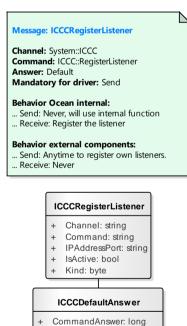






Answer: Default Mandatory for driver: No Behavior Ocean internal: Send: After start-up of any Ocean server Receive: Log the content Behavior external components: Send: Never Receive: Logging is possible **ICCCOceanStartUpMessage**





CommandSuccessful: bool

Message: ICCCDeleteHost

Channel: System::ICCC Command: ICCC::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

ICCCDeleteHost

- Hostname: string
- IPAddressPort: string

ICCCDefaultAnswer

CommandAnswer: long CommandSuccessful: bool

Message: ICCCListenerUpdate

Channel: System::ICCC

Command: ICCC::ListenerUpdate

Answer: Default

Mandatory for driver: No

Behavior Ocean internal:

- Send: Never
- Receive: Update the IsActive status for this

Behavior external components:

- Send: To update known listeners

ICCCListenerUpdate

- Channel: string
- Command: string
- IPAddressPort: string
- IsActiveNew: bool
- Kind: byte

ICCCDefaultAnswer

- CommandAnswer: long
- CommandSuccessful: bool

Message: ICCCNumGenNext

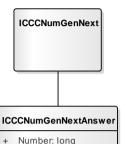
Channel: System::NumGen Command: NumGen::Next Answer: ICCCNumGenNextAnswer Mandatory for driver: No

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: ICCCGetHosts

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

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

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: ICCCDeleteListener

Channel: System::ICCC Command: ICCC::DeleteListener

Answer: Default Mandatory for driver: No

Behavior Ocean internal:

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

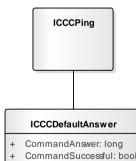
Behavior external components:

- . Send: To maintain listeners
- Receive: Never

ICCCGetHosts

ICCCGetHostsAnswer

- Hostnames: string[]
- IPAddressesPorts: string[]
- Kinds: byte[]



ICCCDeleteListener Channel: string

Command: string IPAddressPort: string

ICCCDefaultAnswer

- CommandAnswer: long
- CommandSuccessful: bool

Message: ICCCNewLogEvent

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

ICCCNew LogEvent

- Category: string
- + Impact: string
- Level: string
- MessageDescription: string
- MessageName: string
- Parameters: string[]
- Project: string
- Sender: string
- Severity: string
- UnixTimestampUTC: long

ICCCDefaultAnswer

- CommandAnswer: long
- CommandSuccessful: bool