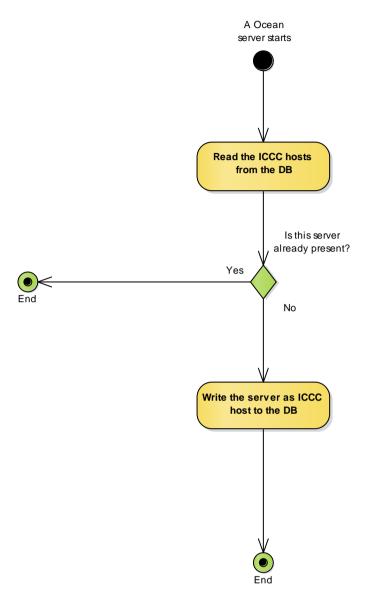
# Ocean's ICCC Terminologies

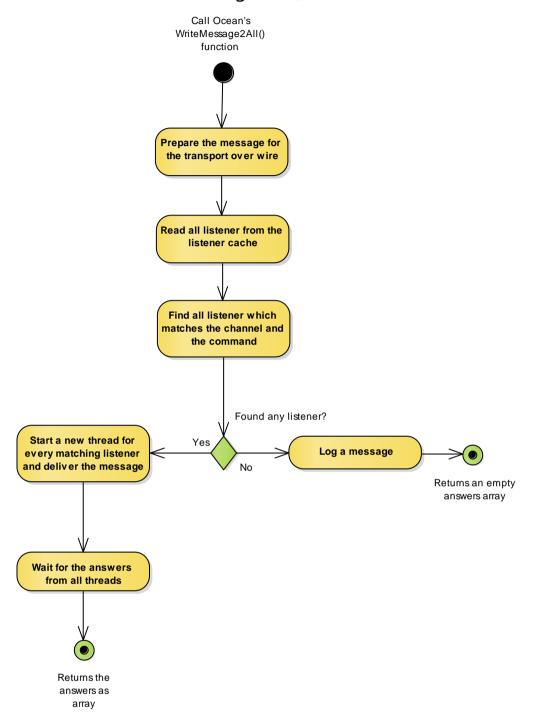
Listener := An ICCC command at a given channel which is located on any or all of the servers Host := An ICCC host is a server which provides at least one ICCC command. Thus, any host provides at least one listener.

### Ocean's ICCC start-up

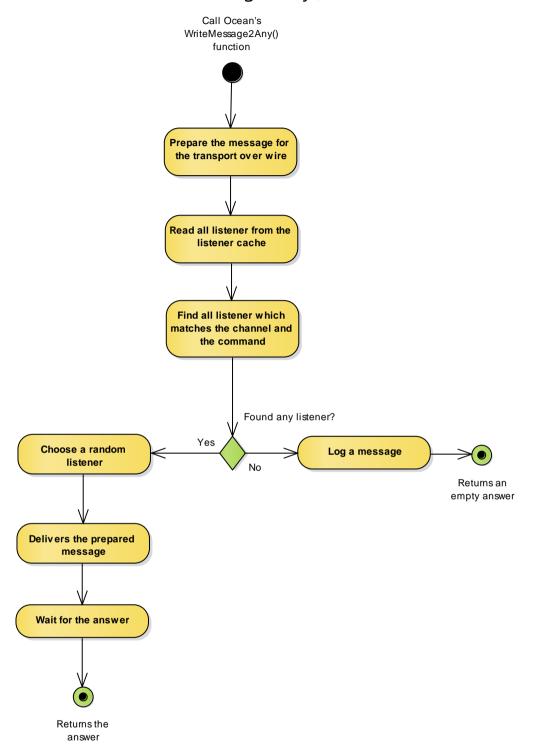


This diagram shows only the ICCC parts of Ocean's start-up process! Further, this diagram is only for Ocean true -- other external ICCC components e.g. with C#/.NET, Python, etc. are setting up differently.

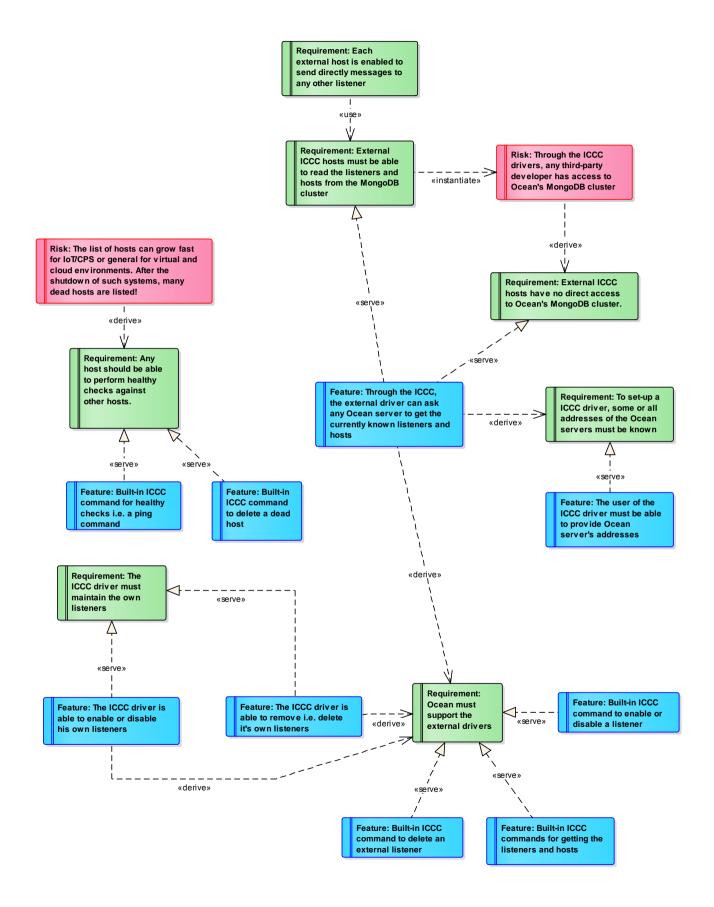
## Ocean's WriteMessage2All() function



## Ocean's WriteMessage2Any() function

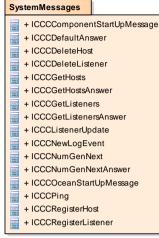


### Requirements for ICCC drivers



### Class diagram for an Ocean ICCC driver





(from ICCC)

ICCCHost and ICCCListener are classes to maintain lists with the current available

#### ICCC::ICCCHost

- hostname: string
- ipAddressPort: string

#### «property»

entries.

- Hostname(): string
- + IPAddressPort(): string

#### «constructor»

- ICCCHost()
- ICCCHost(string, string)

#### ICCC::ICCCListener

- channel: string
- command: string
- ipAddressPort: string
- isActive: bool

#### «property»

- Channel(): string
- Command(): string
- IPAddressPort(): string IsActive(): bool

#### «constructor»

- ICCCListener()
- ICCCListener(string, string, string, bool)

#### ICCC::HandlerIncomings

- ProcessRequest(WebRequest, WebResponse): void
- HandlerIncomings()

#### ICCC::SystemChannels

- ICCC: string = "System::ICCC" {readOnly}
- LOGGING: string = "System::Logging"
- NUMGEN: string = "System::NumGen" {readOnly}
- PING: string = "System::Ping" {readOnly}
- SHUTDOWN: string = "System::Shutdown" {readOnly}
  STARTUP: string = "System::Startup" {readOnly}
  SYSTEM: string = "System" {readOnly}

#### ICCC::ICCCProcessor

- INSTANCE: ICCCProcessor {readOnly}
- maintainerThread: Thread
- convertData2Message(NameValueCollection, IICCCMessage): IICCCMessage
- convertMessage2Data(IICCCMessage): NameValueCollection
- maintainer(): void
- setConfiguration(string); void
- signMessage(NameValueCollection): NameValueCollection

#### «constructor»

ICCCProcessor()

#### ICCC::Registrar

- INSTANCE: Registrar (readOnly)
- addLocalListener(string, string, MethodCallback): void
- getLocalListeners(string, string): IEnumerable<MethodCallback>

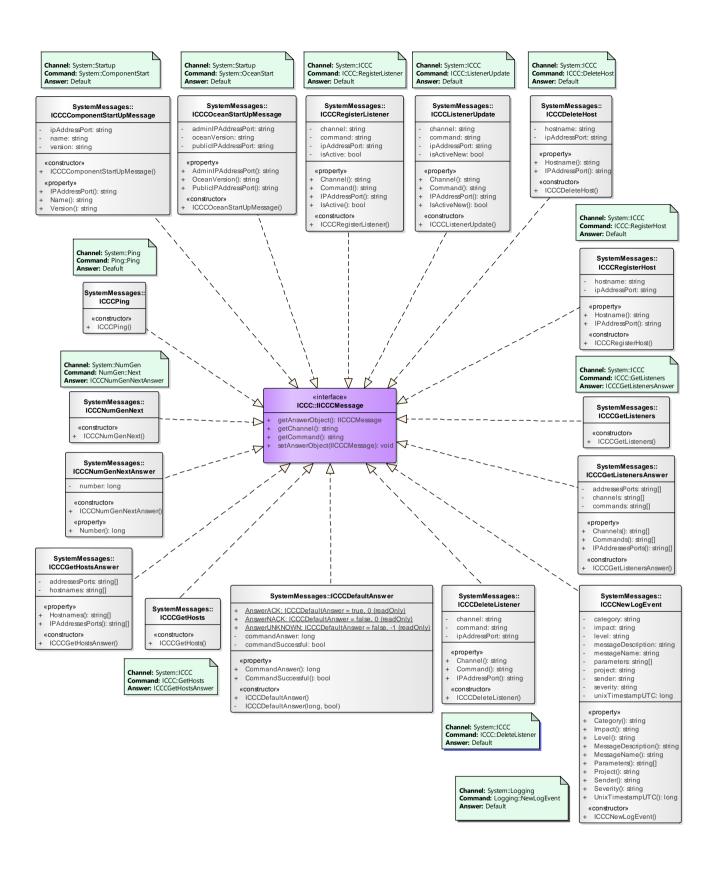
#### «constructor»

Registrar()

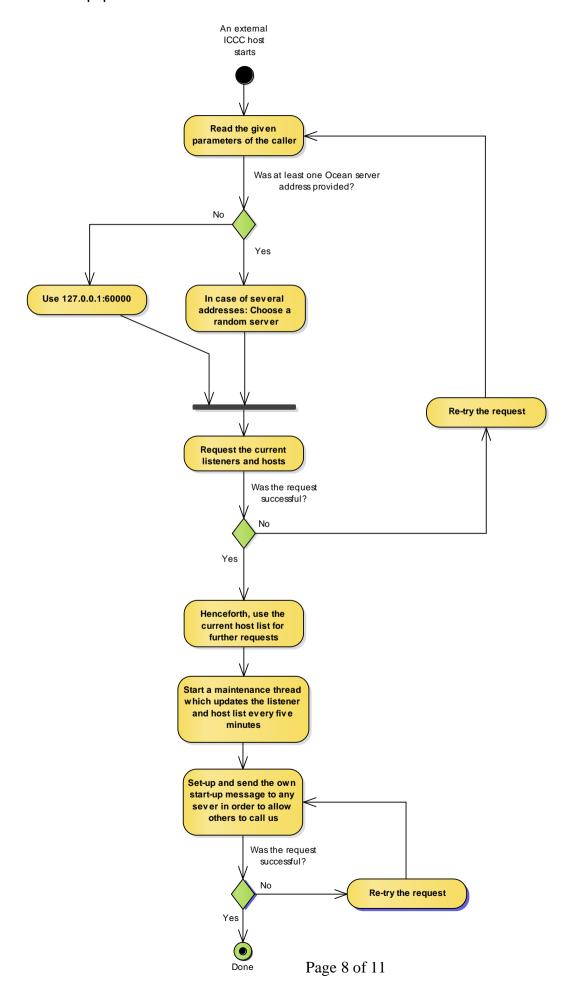
#### ICCC::ICCCConnection

- icccHostsCache: IEnumerable<ICCCHost>
- icccListenerCache: IEnumerable<ICCCListener>
- INSTANCE: ICCCConnection {readOnly}
- send2AII(IICCCMessage): IEnumerable<IICCCMessage>
- send2Any(IICCCMessage): IICCCMessage
- sendMessage(NameValueCollection): void
- + setConfiguration(IEnumerable<string>): void

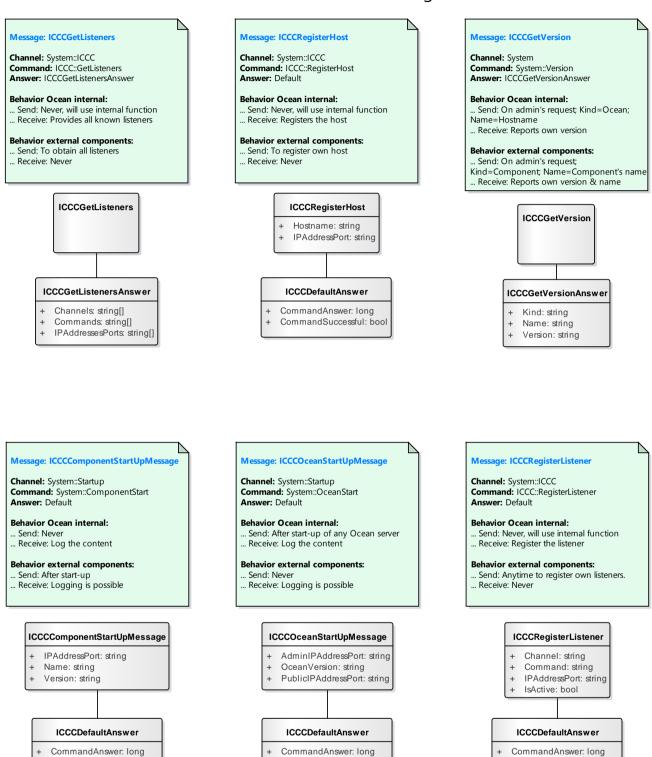
#### «constructor»



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



### Documentation of ICCC Messages



CommandSuccessful: bool

CommandSuccessful: bool

CommandSuccessful: bool

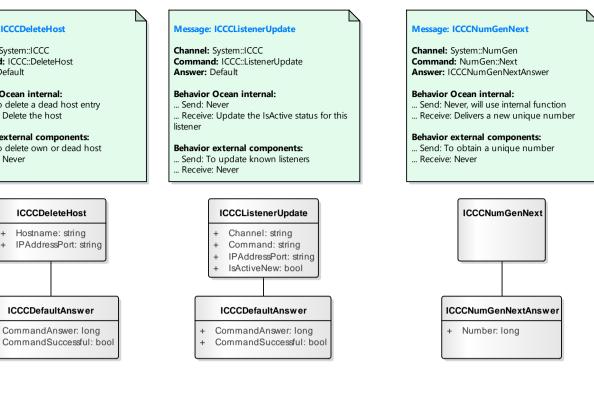
### Message: ICCCDeleteHost Channel: System::ICCC Command: ICCC::DeleteHost Answer: Default Behavior Ocean internal: Send: To delete a dead host entry ... Receive: Delete the host Behavior external components: ... Send: To delete own or dead host Receive: Never **ICCCDeleteHost** Hostname: string IPAddressPort: string ICCCDefaultAnswer

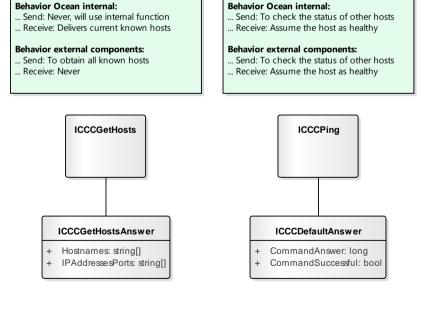
Message: ICCCGetHosts

Channel: System::ICCC

Command: ICCC::GetHosts

Answer: ICCCGetHostsAnswer



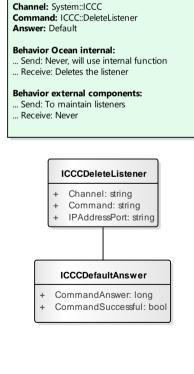


Message: ICCCPing

Channel: System::Ping

Command: Ping::Ping

Answer: Deafult



Message: ICCCDeleteListener

#### Message: ICCCNewLogEvent

**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

#### 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