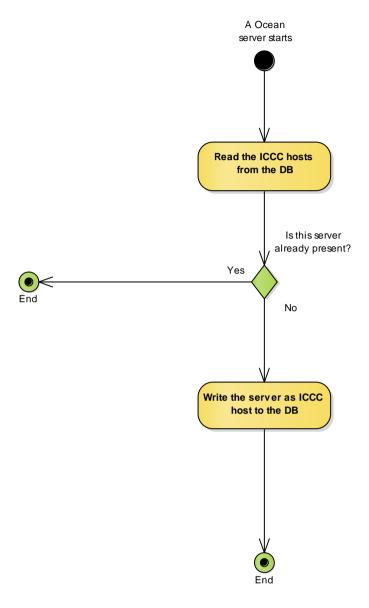
Ocean's ICCC Terminologies

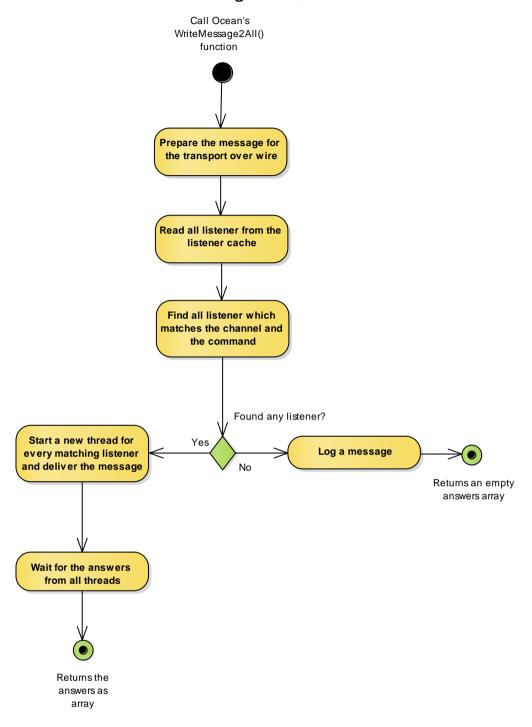
Listener := An ICCC command at a given channel which is located on any or all of the servers Host := An ICCC host is a server which provides at least one ICCC command. Thus, any host provides at least one listener.

Ocean's ICCC start-up

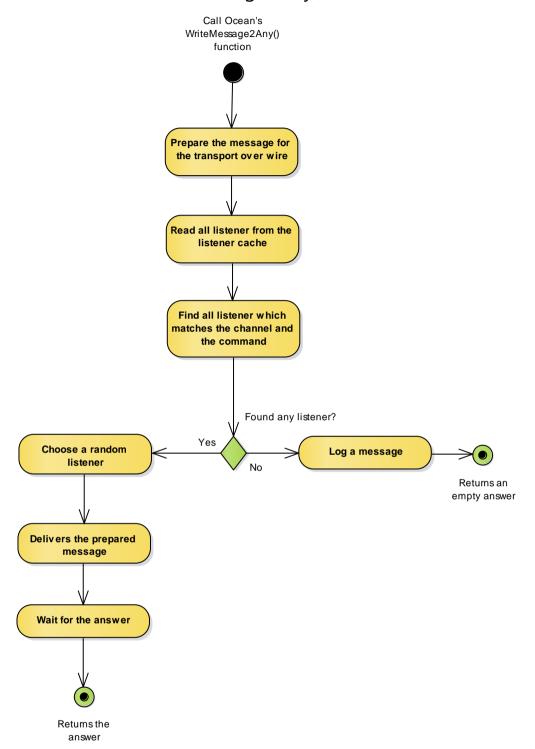


This diagram shows only the ICCC parts of Ocean's start-up process! Further, this diagram is only for Ocean true -- other external ICCC components e.g. with C#/.NET, Python, etc. are setting up differently.

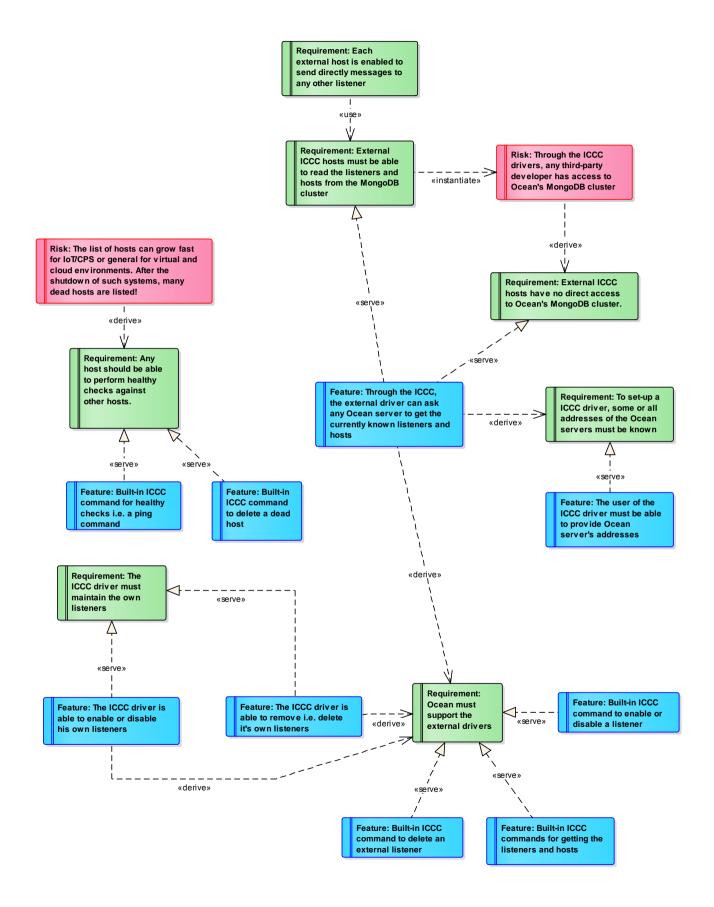
Ocean's WriteMessage2All() function



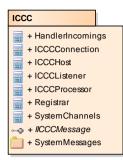
Ocean's WriteMessage2Any() function

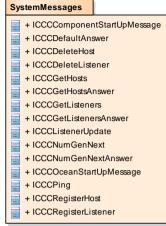


Requirements for ICCC drivers



Class diagram for an Ocean ICCC driver





(from ICCC)

- icccHostsCache: IEnumerable<ICCCHost>
- icccListenerCache: IEnumerable<ICCCListener>
- + INSTANCE: ICCCConnection {readOnly}
- + send2AII(IICCCMessage): IEnumerable<IICCCMessage>

ICCC::ICCCConnection

- + send2Any(IICCCMessage): IICCCMessage
- sendMessage(NameValueCollection): void
- «constructor»
- ICCCConnection()

ICCC::HandlerIncomings

- + ProcessRequest(WebRequest, WebResponse): void
- «constructor»
- + HandlerIncomings()

ICCC::SystemChannels

- + ICCC: string = "System::ICCC" {readOnly}
- + 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}
- convertData2Message(NameValueCollection): IICCCMessage
- ~ convertMessage2Data(IICCCMessage): NameValueCollection
- signMessage(NameValueCollection): NameValueCollection «constructor»
- ICCCProcessor()

ICCC::Registrar

- + INSTANCE: Registrar {readOnly}
- localListeners: Dictionary<string, MethodCallback>
- + addLocalListener(string, string, MethodCallback): void
- getLocalListeners(string, string): IEnumerable<MethodCallback
- «constructor»
- Registrar()

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

ICCC::ICCCHost

- hostname: string
- · ipAddressPort: string

«property»

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

«constructor»

- + ICCCHost()
- + ICCCHost(string, string)

ICCC::ICCCListener

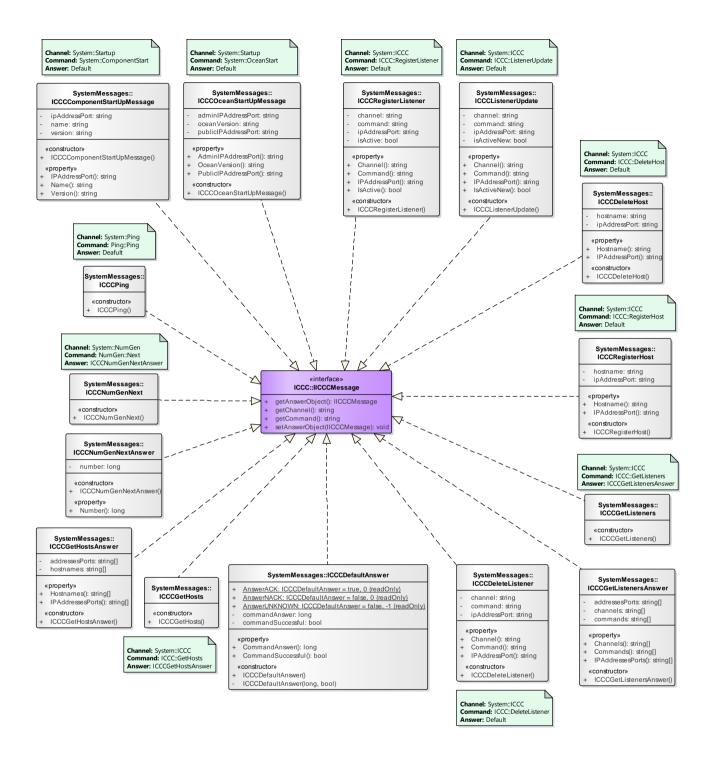
- channel: string
- command: string
- ipAddressPort: string
- isActive: bool

«property»

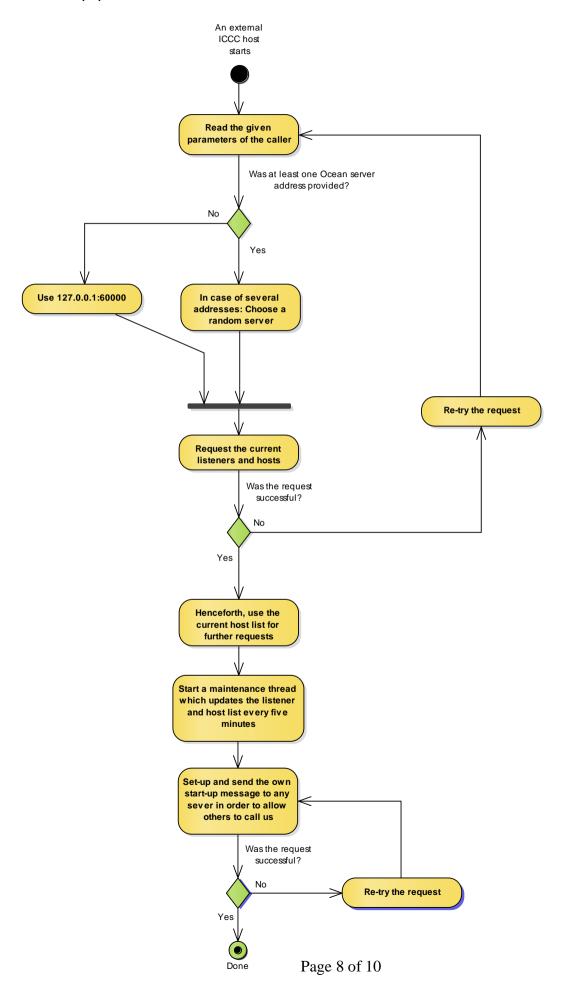
- + Channel(): string
- + Command(): string
- + IPAddressPort(): string
- + IsActive(): bool

«constructor»

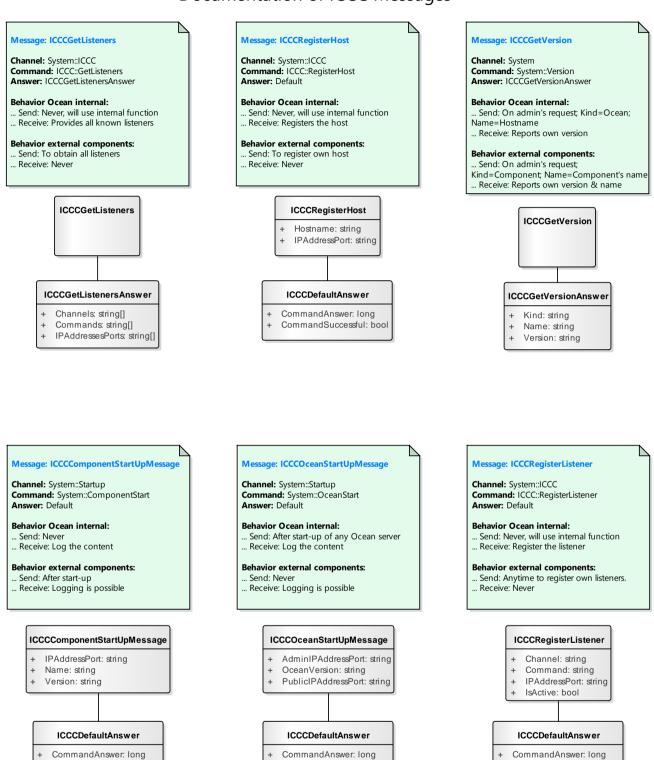
+ ICCCListener()
+ ICCCListener(string, string, string, bool)



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 CommandAnswer: long

Message: ICCCGetHosts

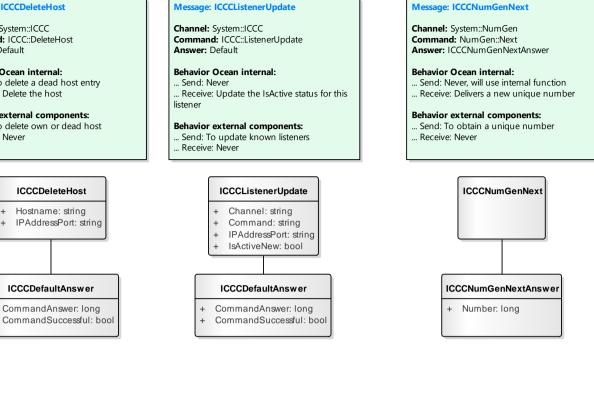
Channel: System::ICCC

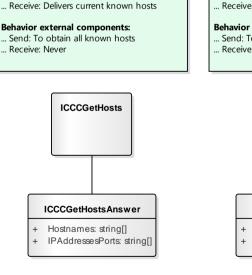
Command: ICCC::GetHosts

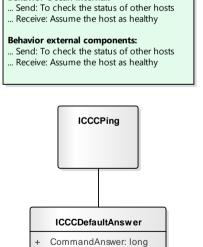
Behavior Ocean internal:

Answer: ICCCGetHostsAnswer

... Send: Never, will use internal function







CommandSuccessful: bool

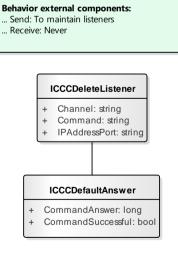
Message: ICCCPing

Channel: System::Ping

Command: Ping::Ping

Behavior Ocean internal:

Answer: Deafult



Message: ICCCDeleteListener

Command: ICCC::DeleteListener

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

Channel: System::ICCC

Behavior Ocean internal:

Answer: Default