



DCOD STATUS

NARVAL 1.14 est mort, vive NARVAL 2.0 ;)

OUTLINE

- DCOD grammar and goals
- AGATA Status
- New DCOD tools
 - DCOD Monitor
 - Narval standalone



DCOD GRAMMARY AND GOALS

SIMPLIFICATION IS THE IDEA

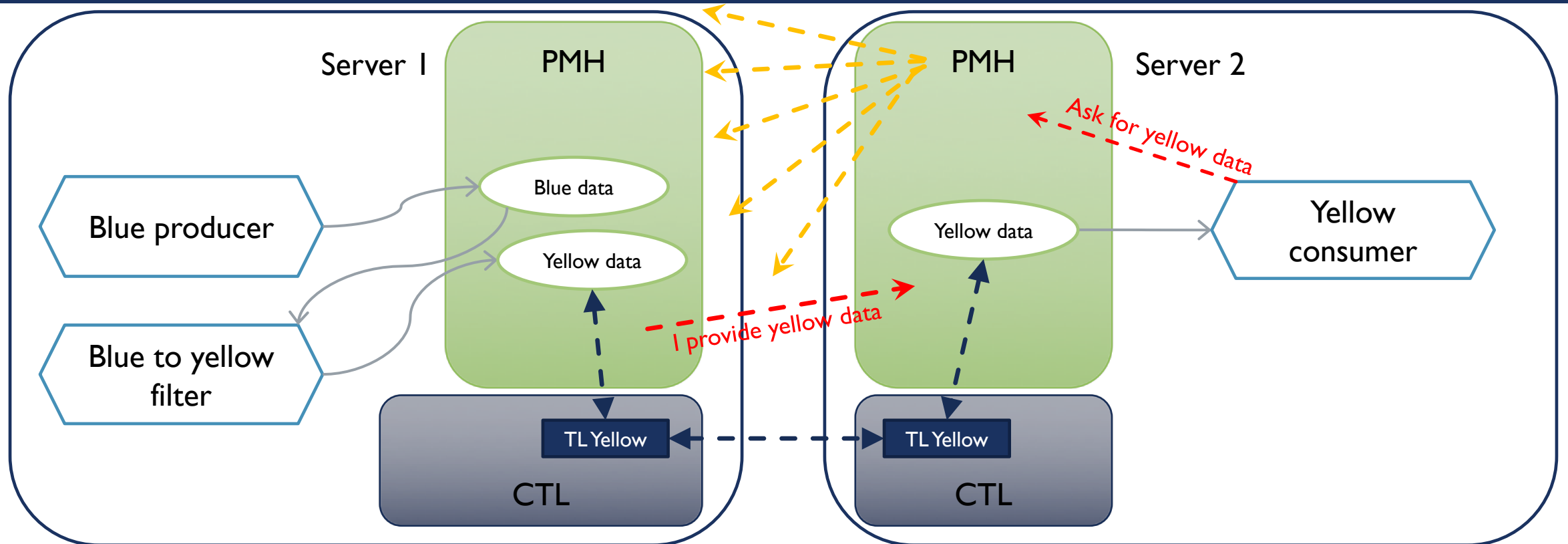
LEXIC

- DCOD is compound of 4 kind of objects
 - PMH – Posix Memory Handler
 - CTL – Common Transport Layer
 - Narval – Means Narval
 - ENX - Means something, but keep it secret 😊
- Dcod launcher : a process to control them all

NARVAL VIEW

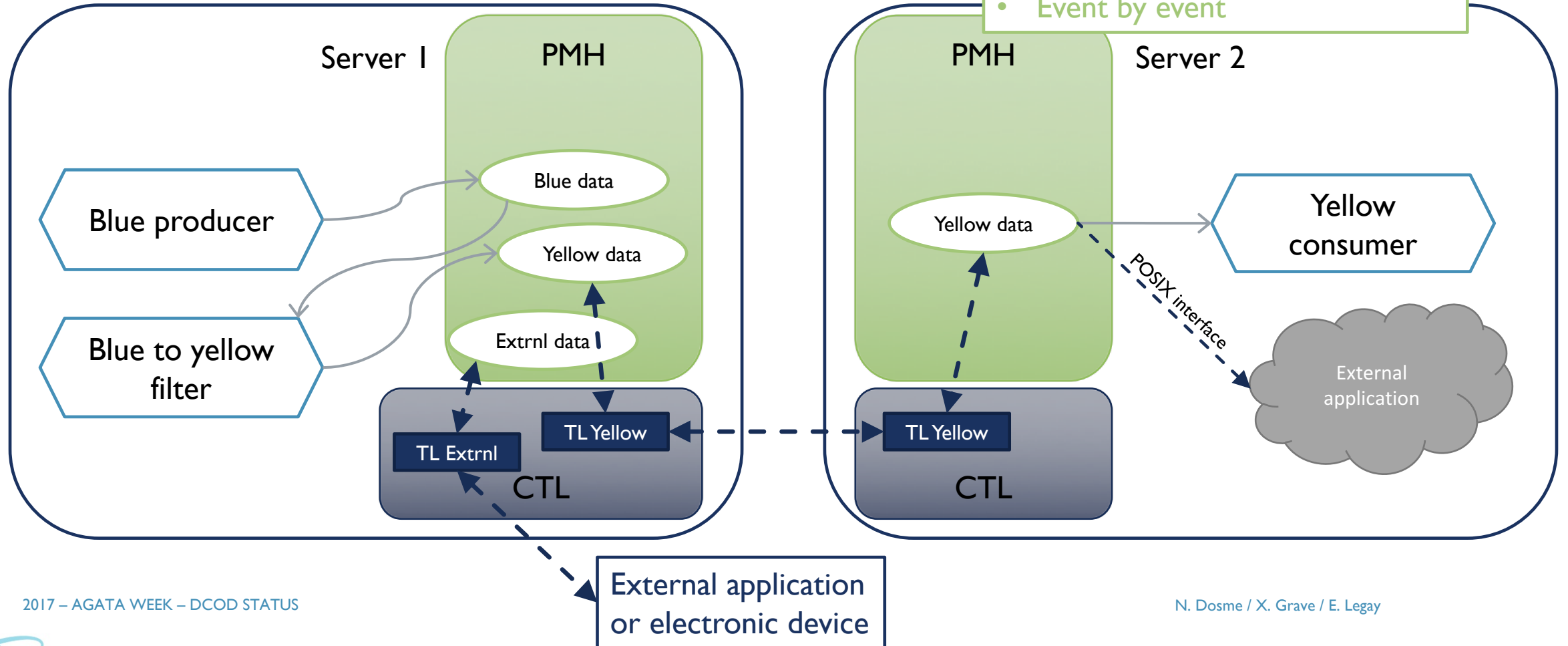


EVOLUTION TO DCOD – POSIX MEMORY HANDLER



DCOD INTEREST

Access to data through PMH:
• Buffer by buffer (as Narval)
• Event by event





AGATA STATUS

STATUS 27/01/2017 FOR AGATA

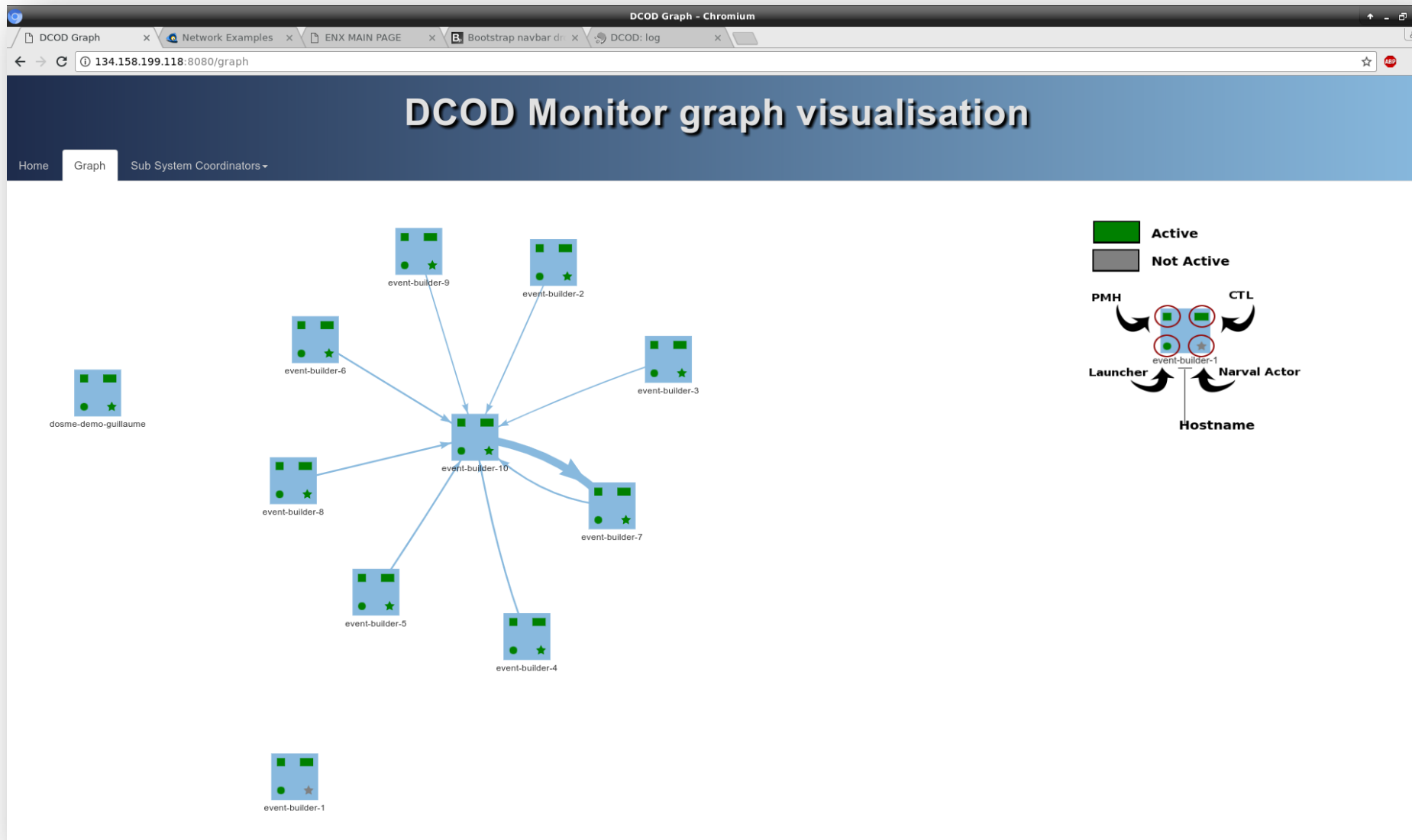
- DCOD status – Near OK 😊
 - Database load < 20 seconds
 - Standalone AGATA Acquisition OK
 - VAMOS actors : Translation done but not testes
 - TM adaptation for DCOD OK
 - RCC adaptation to control DCOD to be done



NEW DCOD TOOL : DCOD MONITOR

DCOD MONITOR GOALS

- DCOD is a distributed framework : how to monitor it ?
- Automatic nodes detection
- Automatic DCOD object detection
- Used bandwidth visualisation
 - From system point of view
 - From Narval point of view



DCOD Actors

Home Hosts graph Sub System Coordinators

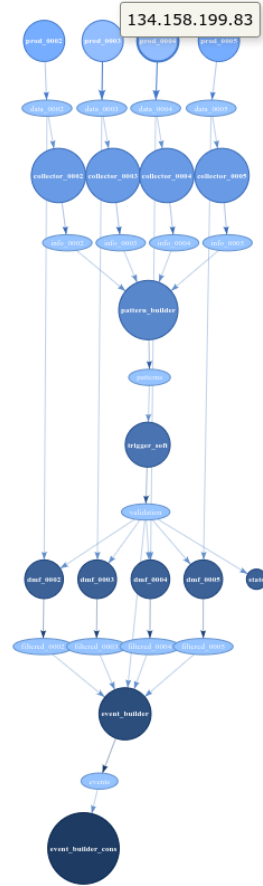
SUB SYSTEM COORDINATOR

test_trigger_soft

Actors list

- prod_0002
- prod_0003
- prod_0004
- prod_0005
- stats
- event_builder_cons
- collector_0002
- collector_0003
- collector_0004
- trigger_soft
- collector_0005
- dmf_0002
- dmf_0003
- dmf_0004
- dmf_0005
- pattern_builder
- event_builder

Address :	134.158.199.85
Host Name :	event-builder-2
Actor name :	prod_0002
Port :	57774
Rank :	0
Registered :	true
Statement :	RUNNING



Name	Mode	Type	Value
bytes_in	Read_Only	Unsigned_64_Type	0
bytes_out	Read_Only	Unsigned_64_Type	0
port	Read_Only	Integer_Type	38268
kind	Read_Only	String_Type	UNDEFINED
actif	Read_Write	Boolean_Type	TRUE
log_level	Read_Write	Log_Level_Type	INFO
host_name	Read_Only	String_Type	event-builder-4
rank	Read_Only	Natural_Type	0



DCOD MONITOR STATUS

- Developed by apprentice (S. Gallois)
- Tested but still have to be used by external people
- Incoming features
 - Control of DCOD objects ?



NEW DCOD TOOL : NARVAL STANDALONE

USING NARVAL EASILY ...

- Using a standalone executable instead of the usual distributed process
 - Running easily on personal computer
 - Useful for small experiment
 - Useful to test / validate actors
- Each actors run in a separate "thread"
- Using the same topology file
 - Doesn't care about host information
 - Use local PMH
 - Same object actors, so same library than for usual actors
- Hosted on Virtual Machine
 - Connection through web page
 - No installation needed
 - No administration needed

NARVAL STANDALONE

Name	Topology	Status	Options
test	narval_config/stand_alone_test.graphml	INITIAL	 

New Instance

Topology Editor

CONTROLLER - test

Home Actor Parameters Log Level ▾ Delete

Overview

Controls

Log

Load

Start

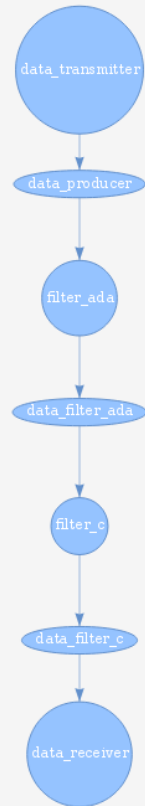
Stop

Clean

Overview

Controls

Log



Load

Start

Stop

Clean

```
165 INFO [new_containers(2).handler_00007F5C44006C70] Narval STDL test - key : value - value
165 INFO [new_containers(2).handler_00007F5C44006C70] Narval STDL test - try to load library
165 INFO [new_containers(2).handler_00007F5C44006C70] Narval STDL test - configure done for
165 INFO [A1057b(4)_0000000001B5A0F0] Narval STDL test - actor name : filter_c
165 INFO [new_containers(3).handler_00007F5C4400A2A0] Narval STDL test - key : name - value
165 INFO [new_containers(3).handler_00007F5C4400A2A0] Narval STDL test - key : value - value
165 INFO [new_containers(3).handler_00007F5C4400A2A0] Narval STDL test - key : type - value
165 INFO [new_containers(3).handler_00007F5C4400A2A0] Narval STDL test - try to load library
165 INFO [new_containers(3).handler_00007F5C4400A2A0] Narval STDL test - start library analy
165 WARN [new_containers(3).handler_00007F5C4400A2A0] Narval STDL test - algo_path not set
165 INFO [new_containers(3).handler_00007F5C4400A2A0] Narval STDL test - configure done for
165 INFO [A1057b(4)_0000000001B5A0F0] Narval STDL test - actor name : data_receiver
165 INFO [new_containers(4).handler_00007F5C4400D8D0] Narval STDL test - key : name - value
165 INFO [new_containers(4).handler_00007F5C4400D8D0] Narval STDL test - key : value - value
165 INFO [new_containers(4).handler_00007F5C4400D8D0] Narval STDL test - key : type - value
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165 INFO [new_containers(4).handler_00007F5C4400D8D0] Narval STDL test - configure done fo
165 INFO [A1057b(4)_0000000001B5A0F0] Narval STDL test - *** output *** data_producer ***
165 INFO [A1057b(4)_0000000001B5A0F0] Narval STDL test - *** input *** data_producer ***
167 INFO [A1057b(4)_0000000001B5A0F0] Narval STDL test - *** output *** data_filter_ada ***
167 INFO [A1057b(4)_0000000001B5A0F0] Narval STDL test - *** output *** data_filter_c ***
167 INFO [A1057b(4)_0000000001B5A0F0] Narval STDL test - *** input *** data_filter_ada ***
169 INFO [A1057b(4)_0000000001B5A0F0] Narval STDL test - *** input *** data_filter_c ***
171 INFO [A1057b(4)_0000000001B5A0F0] Narval STDL test - new_containers(2).handler_00007F
171 INFO [A1057b(4)_0000000001B5A0F0] Narval STDL test - new_containers(2).handler_00007F
171 INFO [A1057b(4)_0000000001B5A0F0] Narval STDL test - new_containers(1).handler_00007F
171 INFO [A1057b(4)_0000000001B5A0F0] Narval STDL test - new_containers(1).handler_00007F
171 INFO [A1057b(4)_0000000001B5A0F0] Narval STDL test - new_containers(1).handler_00007F
171 INFO [A1057b(4)_0000000001B5A0F0] Narval STDL test - new_containers(3).handler_00007F
171 INFO [A1057b(4)_0000000001B5A0F0] Narval STDL test - new_containers(3).handler_00007F
171 INFO [A1057b(4)_0000000001B5A0F0] Narval STDL test - new_containers(4).handler_00007F
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171 INFO [A1057b(4)_0000000001B5A0F0] Narval STDL test - new_containers(2).handler_00007F
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171 INFO [A1057b(4)_0000000001B5A0F0] Narval STDL test - new_containers(3).handler_00007F
171 INFO [A1057b(4)_0000000001B5A0F0] Narval STDL test - new_containers(1).handler_00007F
171 INFO [A1057b(4)_0000000001B5A0F0] Narval STDL test - new_containers(1).handler_00007F
171 INFO [A1057b(4)_0000000001B5A0F0] Narval STDL test - new_containers(1).handler_00007F
171 INFO [A1057b(4)_0000000001B5A0F0] Narval STDL test - new_containers(4).handler_00007F
171 INFO [A1057b(4)_0000000001B5A0F0] Narval STDL test - new_containers(4).handler_00007F
171 INFO [A1057b(1)_0000000001B4F4E0] Narval STDL test - Waiting for Start
```

Overview



Actor Parameters

data_transmitter filter_ada filter_c data_receiver

filter_ada

Type	Name	Value
BOOLEAN_TYPE	test_parameter	<input type="text" value="TRUE"/>
UNSIGNED_32_ARRAY	array_parameter	<input type="text" value="0!0!0!0!0!0!0!42!0!0!0!0!0!0"/>

Submit Cancel

Log

```

6 INFO [new_containers(1).handler_00007FAA940034B0] Narval STDL test - actor name : data_transmitter
6 INFO [new_containers(1).handler_00007FAA940034B0] Narval STDL test - key : name - value : f
6 INFO [new_containers(1).handler_00007FAA940034B0] Narval STDL test - key : value - value : s
6 INFO [new_containers(1).handler_00007FAA940034B0] Narval STDL test - key : type - value : st
6 INFO [new_containers(1).handler_00007FAA940034B0] Narval STDL test - try to load library src
6 INFO [new_containers(1).handler_00007FAA940034B0] Narval STDL test - start library analyze
6 WARN [new_containers(1).handler_00007FAA940034B0] Narval STDL test - algo_path not set
6 INFO [new_containers(1).handler_00007FAA940034B0] Narval STDL test - configure done for d
6 INFO [A1057b(3)_000000000170DAF0] Narval STDL test - actor name : filter_ada
6 INFO [new_containers(2).handler_00007FAA94006AE0] Narval STDL test - key : name - value : f
6 INFO [new_containers(2).handler_00007FAA94006AE0] Narval STDL test - key : value - value : e
6 INFO [new_containers(2).handler_00007FAA94006AE0] Narval STDL test - key : type - value : st
6 INFO [new_containers(2).handler_00007FAA94006AE0] Narval STDL test - try to load library ex
6 INFO [new_containers(2).handler_00007FAA94006AE0] Narval STDL test - configure done for fil
6 INFO [A1057b(3)_000000000170DAF0] Narval STDL test - actor name : filter_c
6 INFO [new_containers(3).handler_00007FAA9400A110] Narval STDL test - key : name - value : f
6 INFO [new_containers(3).handler_00007FAA9400A110] Narval STDL test - key : value - value : s
6 INFO [new_containers(3).handler_00007FAA9400A110] Narval STDL test - key : type - value : st
6 INFO [new_containers(3).handler_00007FAA9400A110] Narval STDL test - try to load library src
6 INFO [new_containers(3).handler_00007FAA9400A110] Narval STDL test - start library analyze
6 WARN [new_containers(3).handler_00007FAA9400A110] Narval STDL test - algo_path not set
6 INFO [new_containers(3).handler_00007FAA9400A110] Narval STDL test - configure done for fil
6 INFO [A1057b(3)_000000000170DAF0] Narval STDL test - actor name : data_receiver
6 INFO [new_containers(4).handler_00007FAA9400D740] Narval STDL test - key : name - value : s
6 INFO [new_containers(4).handler_00007FAA9400D740] Narval STDL test - key : value - value : s
6 INFO [new_containers(4).handler_00007FAA9400D740] Narval STDL test - key : type - value : st
6 INFO [new_containers(4).handler_00007FAA9400D740] Narval STDL test - try to load library src
6 INFO [new_containers(4).handler_00007FAA9400D740] Narval STDL test - start library analyze
6 WARN [new_containers(4).handler_00007FAA9400D740] Narval STDL test - algo_path not set
6 INFO [new_containers(4).handler_00007FAA9400D740] Narval STDL test - configure done for d
6 INFO [A1057b(3)_000000000170DAF0] Narval STDL test - *** output *** data_producer ***
6 INFO [A1057b(3)_000000000170DAF0] Narval STDL test - *** input *** data_producer ***
9 INFO [A1057b(3)_000000000170DAF0] Narval STDL test - *** output *** data_filter_ada ***
9 INFO [A1057b(3)_000000000170DAF0] Narval STDL test - *** output *** data_filter_c ***
9 INFO [A1057b(3)_000000000170DAF0] Narval STDL test - *** input *** data_filter_ada ***
9 INFO [A1057b(3)_000000000170DAF0] Narval STDL test - *** input *** data_filter_c ***
11 INFO [A1057b(3)_000000000170DAF0] Narval STDL test - *** input *** data_filter_c ***
13 INFO [A1057b(3)_000000000170DAF0] Narval STDL test - new_containers(3).handler_00007FA
13 INFO [A1057b(3)_000000000170DAF0] Narval STDL test - new_containers(1).handler_00007FA
13 INFO [A1057b(3)_000000000170DAF0] Narval STDL test - new_containers(1).handler_00007FA
13 INFO [A1057b(3)_000000000170DAF0] Narval STDL test - new_containers(1).handler_00007FA
13 INFO [A1057b(3)_000000000170DAF0] Narval STDL test - new_containers(1).handler_00007FA
13 INFO [A1057b(3)_000000000170DAF0] Narval STDL test - new_containers(2).handler_00007FA
13 INFO [A1057b(3)_000000000170DAF0] Narval STDL test - new_containers(2).handler_00007FA
13 INFO [A1057b(3)_000000000170DAF0] Narval STDL test - new_containers(4).handler_00007FA
13 INFO [A1057b(3)_000000000170DAF0] Narval STDL test - new_containers(4).handler_00007FA
13 INFO [A1057b(4)_00000000017110F0] Narval STDL test - Waiting for Start
  
```

Stop

Clean



STANDALONE NARVAL STATUS

- Under development
 - 6 month student working only on this (G.Astorgis)
 - Screenshot done after 2 months of work
- Developed in collaboration with IPNO
 - Will be tested by physicist to run repetitive tasks
- Have to be easy to use, else documentation
 - API of narval actors have to be well documented
 - Need testers
- Incoming features
 - Add topology generator
 - Possibility to launch narval instance on new cloud server