

Control system based on a
Highly
Abstracted and
Open
Structure

!CHΛOS



WP2

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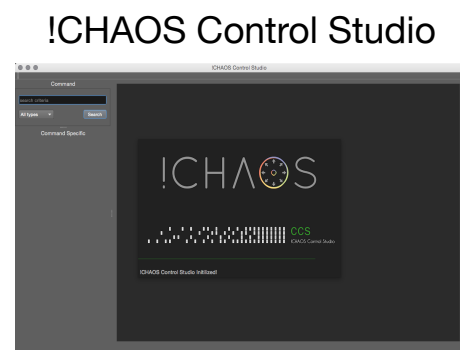
WP2 Task

WP2 development state

The new metadata service has **born**, remain to port the
DeviceMessageChannel to new api(2d of work)

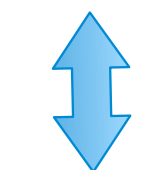
WP2 Task

New Metadata Service and Lib



monitoring event & Job		HLAPI Proxy	
monitoring		Api Proxy Manager	
Common Layer			
RPC	Event	DirectIO	

High Level API			
Common Layer			Low Level API Abstraction
RPC	Event	DirectIO	MongoDB Low Level API Impl



MongoDB Cluster

WP2 Task

New Metadata Service

- Server layer:
 - high level api set based on low level set(<https://opensource-confluence.infn.it/confluence/display/chd/High+Level+API>)
 - low level api abstraction (C++ abstract class)
 - many different implementation with different backend
 - MongoDB implementation

WP2 Task

New Metadata Service

- Client layer, is composed by a library that permits to:
 - call high level server api through a Proxy Class, the proxy return a “future-result” that can be inspected by user or deleted.
 - Monitoring api and event for the health of nodes(CU, DS....)

WP2 Task

towards a new topology (1)

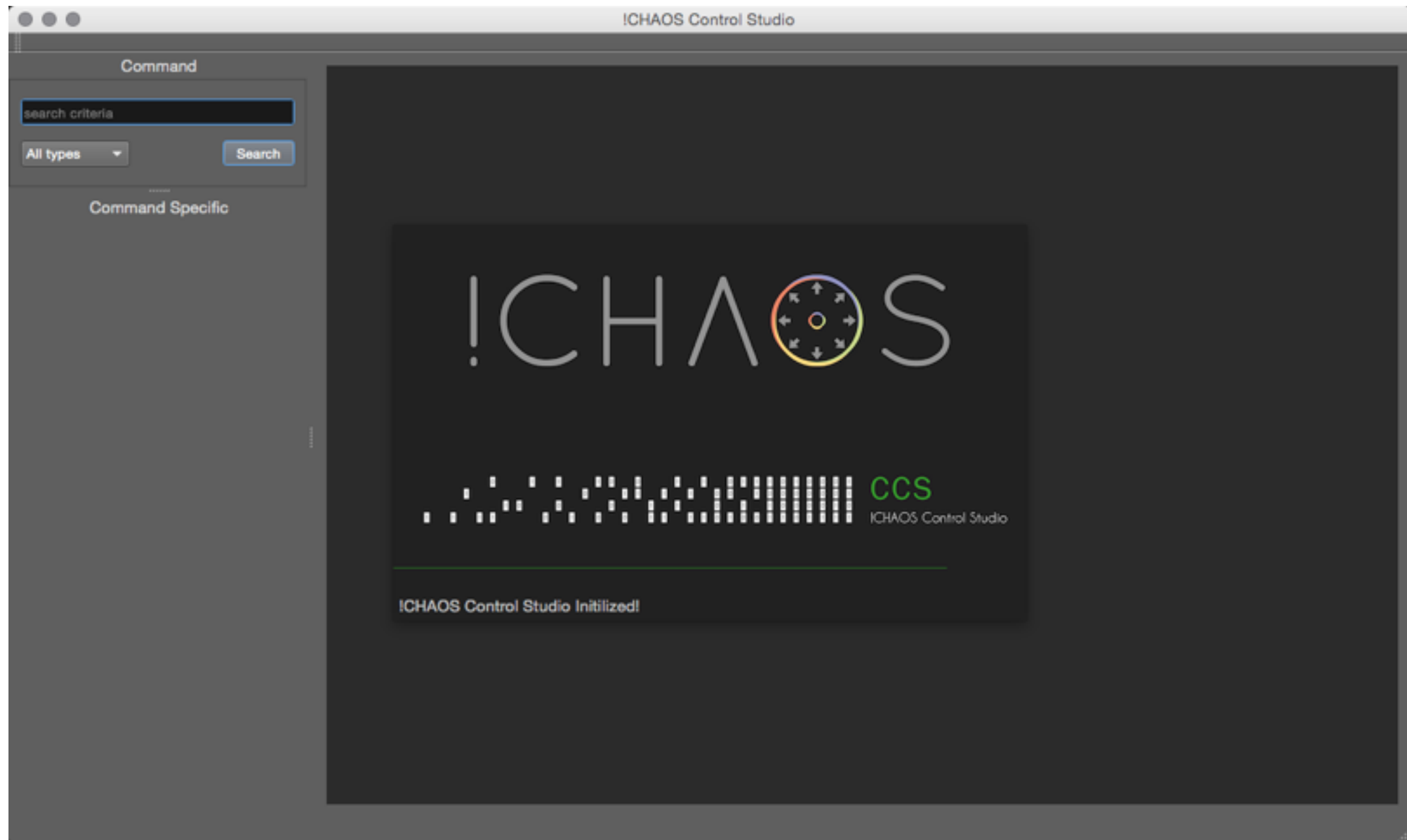
- Control Unit, control hardware or other control unit, push data to DS
- Metadata Server Layer,
 - **contains**; node information, dataset history changes, commands sequence, grouping of command and node, etc...
 - **do**; send command to control unit, by automatic job(health system) or HL Api execution(a client ha request something), etc...

WP2 Task

towards a new topology (2)

- !Chaos Control Studio(through MDSLlib), permit to configure, check , and control all chaos node and every property...(in the future)
- UIToolkit read data from the DS to check cu status and dataset, some limitate action throw Metadata Service.

WP2 Task



WP2 Task

Qt

Search Nodes

Search criteria:

Search

Search type:

All types

	Node Unique ID	Node type
1	rt-claudio-1	nt_control_unit
2	rt-claudio-2	nt_control_unit
3	sc-claud-1	nt_control_unit
4	sc-claud-2	nt_control_unit
5	test_1	nt_data_service
6	test_2	nt_data_service
7	test_claudio-1	nt_unit_server

<<

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open editor

WP2 Task

Qt

test_claudio-1

Unit server unique id: test_claudio-1

Address: 193.206.86.44:8888

Last reg ts Wed Apr 29 20:05:30 2015

Control unit type

RTWorkerCU
SCWorkerCU

Control unit instances

	UID	RPC Domain	State	State SM	5	6
1	sc-claud-1	SCWorkerCU	--nr--	--nr--	---	---
2	sc-claud-2	SCWorkerCU	193.206.86....	7ebe8858	---	---
3	rt-claudio-2	RTWorkerCU	193.206.86....	29d70705	---	---
4	rt-claudio-1	RTWorkerCU	193.206.86....	bcde37ea	---	---

update

<<

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remove

edit

add

Update All

WP2 Task

Qt Form

Data Services

	Unique Identifier	Endpoint	
1	test_2	localhost:1672:30175	0
2	test_1	localhost:1672:30175	0

update remove edit add

Control unit associate to: selected data service

Unique Identifier	RPC Domain	State	State SM
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update remove add

WP2 Task

Qt Control unit instance editing — □ ×

Unit server host: **test_claudio-1**

Control unit type: **RTWorkerCU** Choose Type

Unit server unique id: **rt-claudio-2** check unique

configuration **dataset attributes default values**

☒ autoload

Load paramter: **lod param for claudio 1**

Driver specifications

	Name	Version	Init parameter
1	name	version	init

remove Edit add

save

WP2 Task

Qt Control unit instance editing — □ ×

Unit server host: **test_claudio-1**

Control unit type: **RTWorkerCU** Choose Type

Unit server unique id: **rt-claudio-2** check unique

configuration dataset attributes default values

	Name	Default Value	Max Value	Min Value
1	name	value		

remove edit add

save

!CHΛS

thanks you

