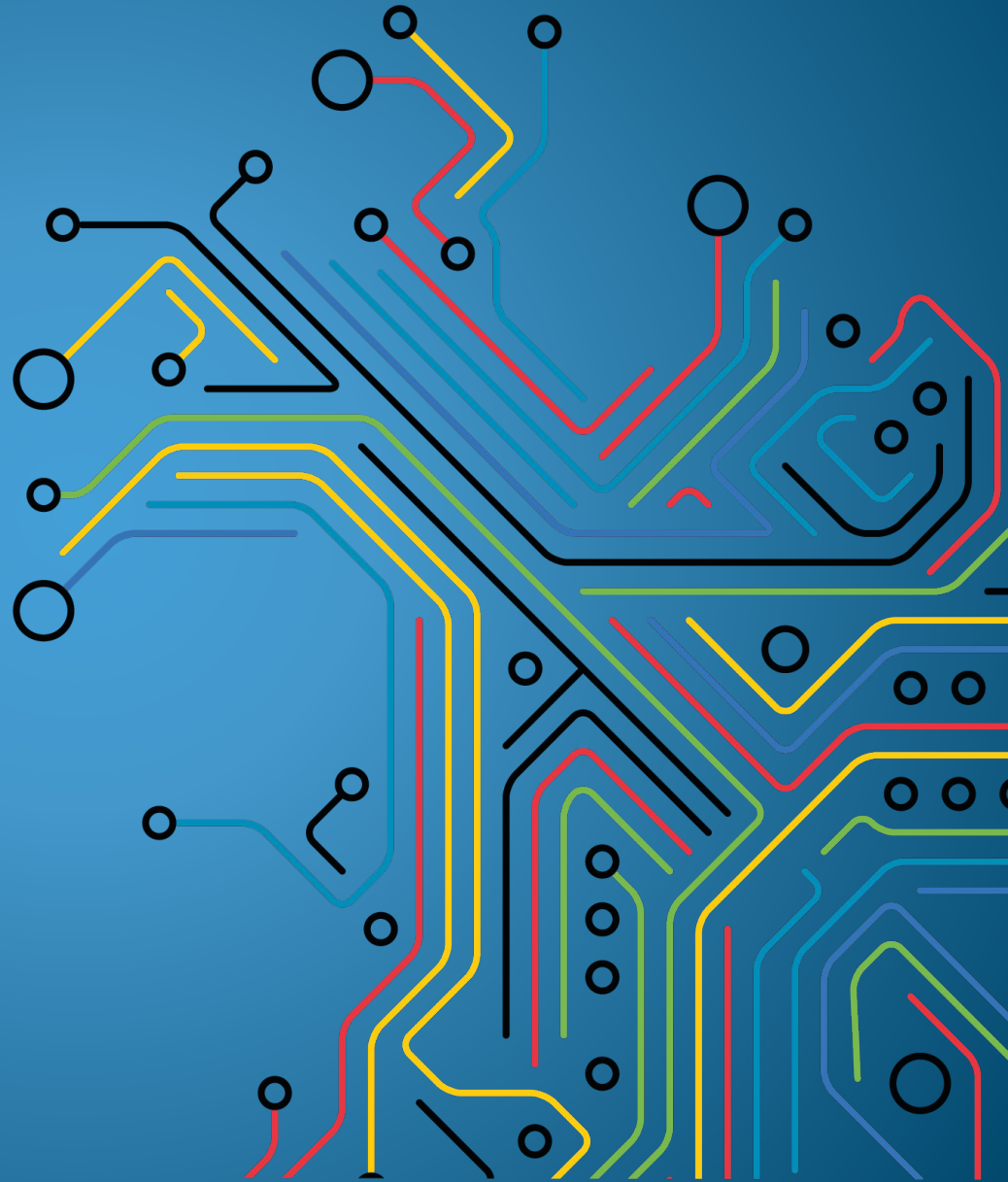


Interface Gráfica PSMORA

Por: Laércio Pioli Junior



Soluções Arquitetônicas para a Interface do PSMORA

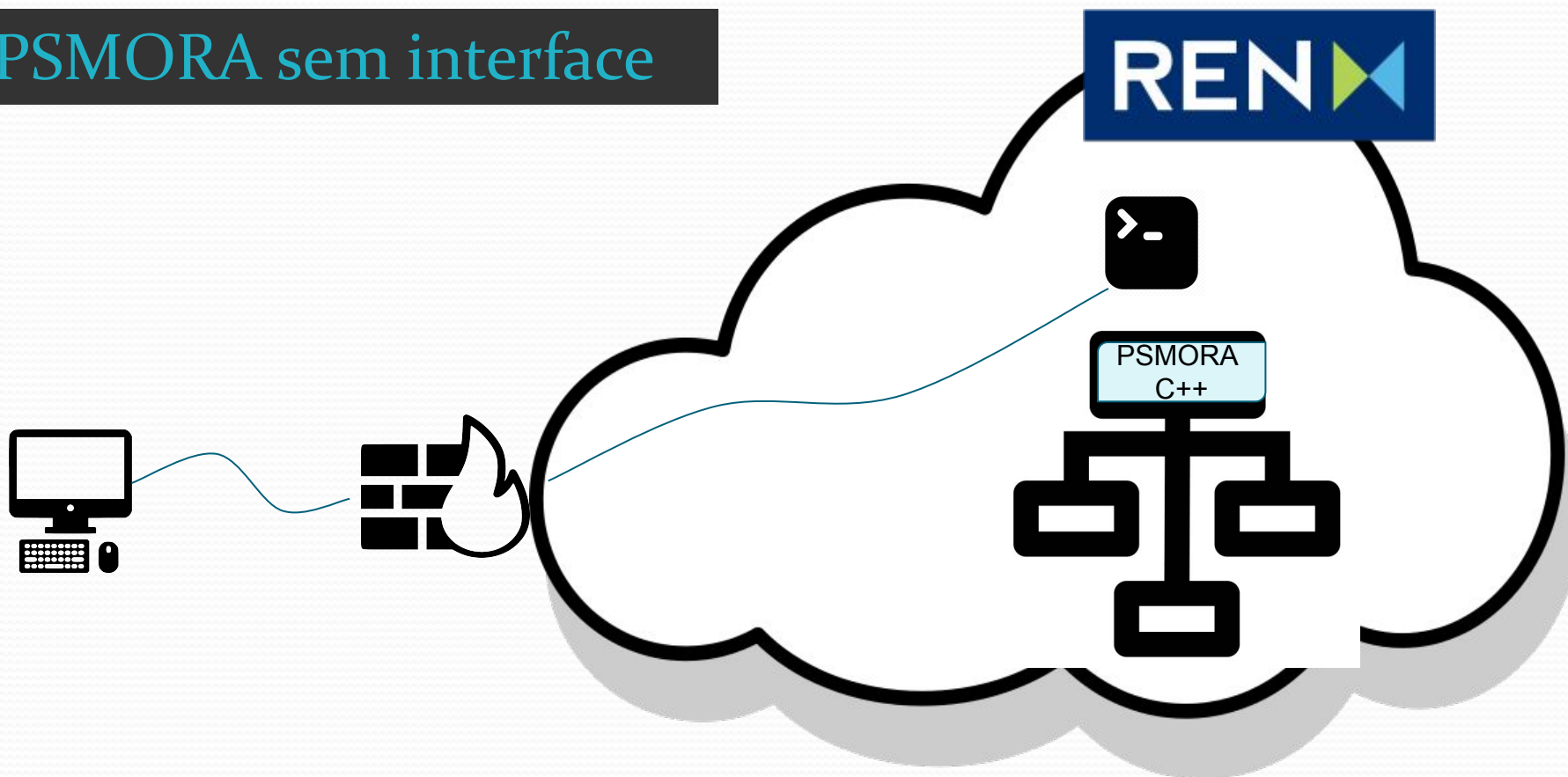
1 PSMORA sem interface

2 PSMORA WebApp

3 PSMORA C# interface

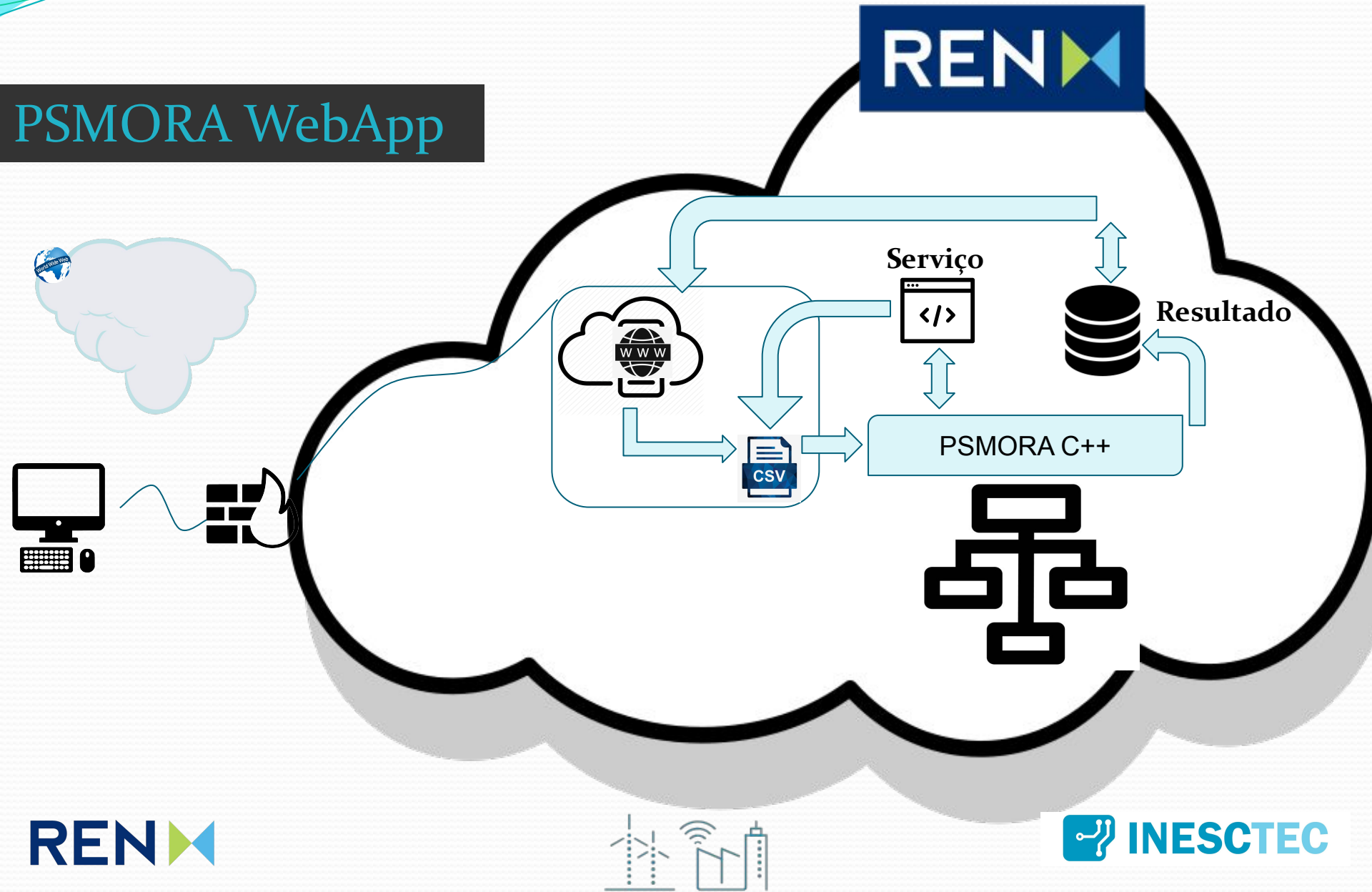
Arquitetura

PSMORA sem interface



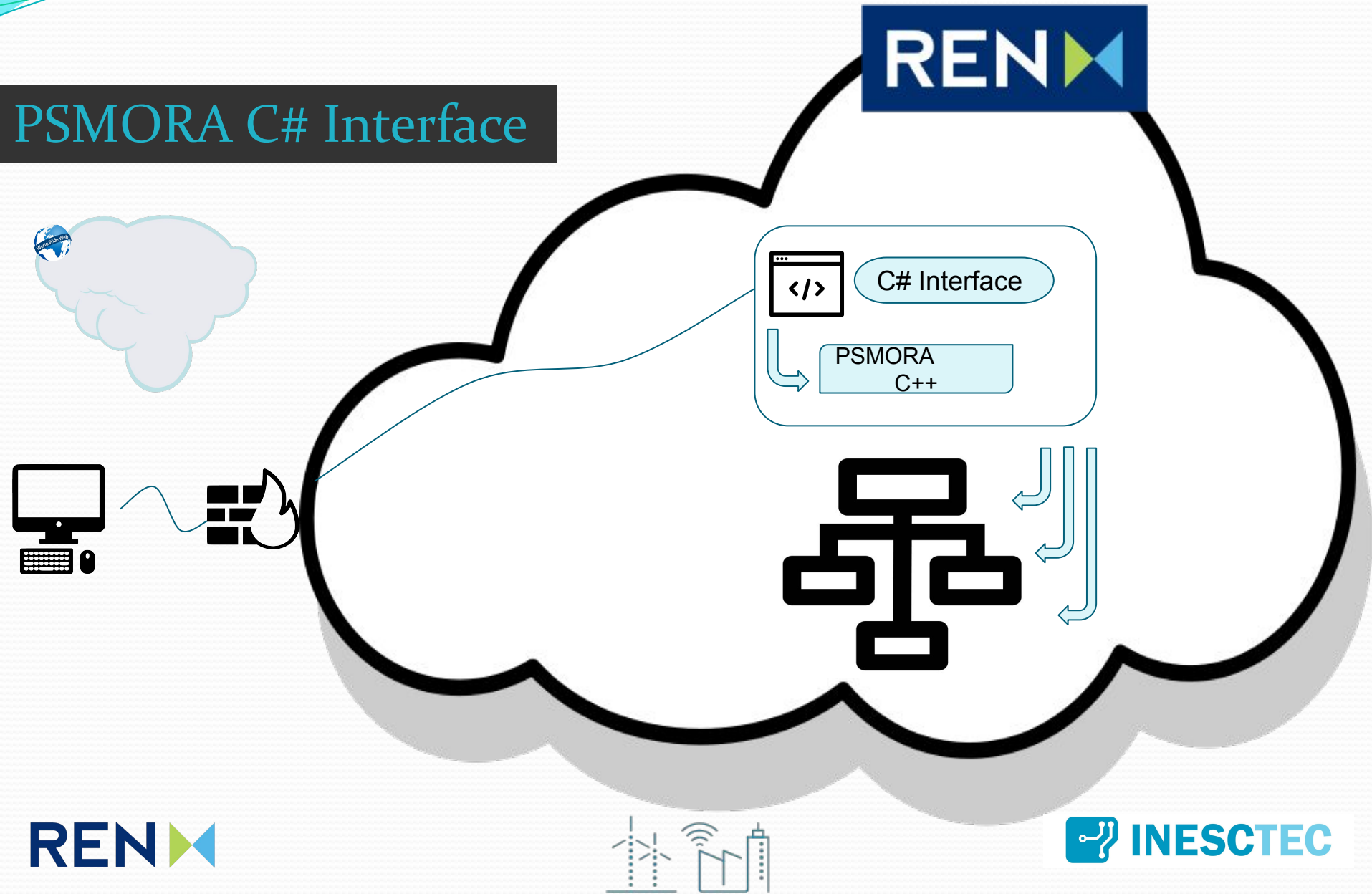
Arquitetura

PSMORA WebApp



Arquitetura

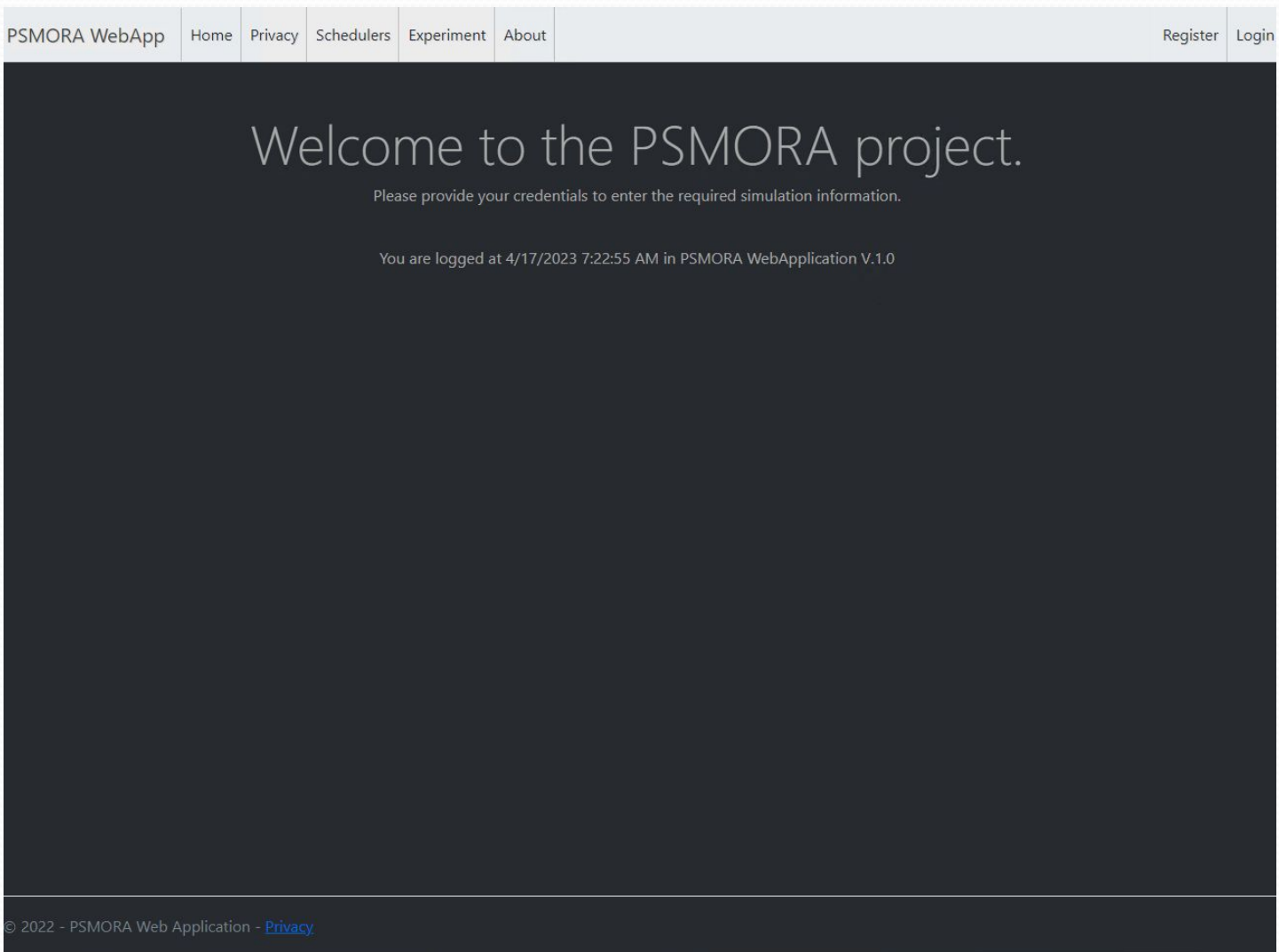
PSMORA C# Interface



Vantagens / Desvantagens

	PSMORA sem interface	PSMORA WebApp	PSMORA C# interface
Histórico dos Experimentos	●	●	●
Permite Agendamento	●	●	●
Histórico de Resultados	●	●	●
Analytics	●	●	●
Dependência de Software	●	●	●
Dependência de Conhecimento Técnico	●	●	●
Interfere na Aplicação C++	●	●	●

Tela Inicial



Registro de Usuário

localhost:44389/Identity/Account/Register

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Register

Create a new account.

Last Name

Email

Password

Confirm password

Register

Use another service to register.

There are no external authentication services configured. See [this article](#) for details on setting up this ASP.NET application to support logging in via external services.

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Login de Usuário

PSMORA WebApp

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Schedulers

Experiment

About

Register

Login

Log in

Use a local account to log in.

Use another service to log in.

Email

psmora3@psmora3

Password

.....

☐ Remember me?

Log in

[Forgot your password?](#)

[Register as a new user](#)

[Resend email confirmation](#)

There are no external authentication services configured. See [this article](#) for details on setting up this ASP.NET application to support logging in via external services.

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Funcionalidades de Gerenciamento de Usuário

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Manage your account

Change your account settings

Profile

Email

Password

Two-factor authentication

Personal data

Profile

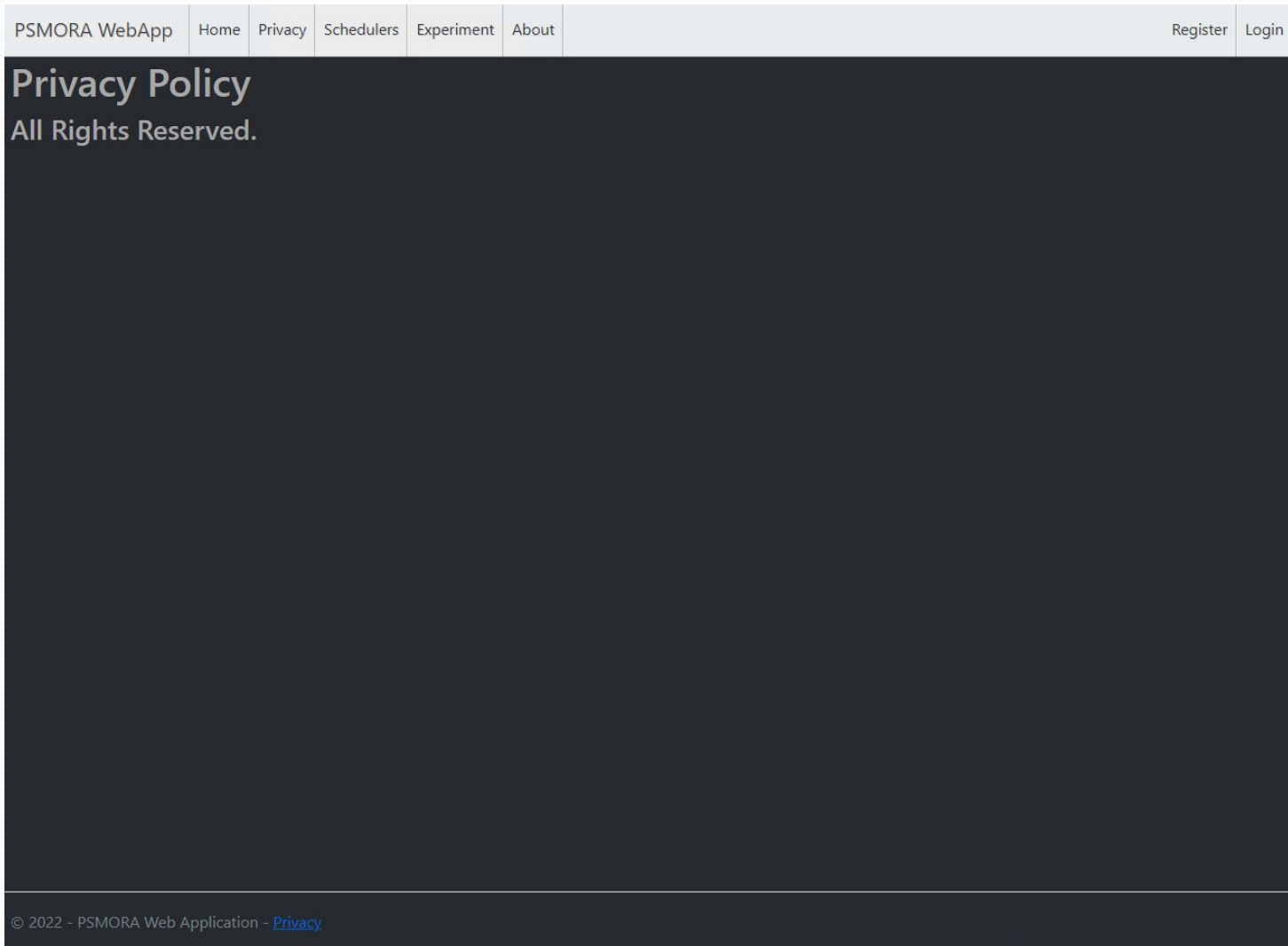
Username

Phone number

Save

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Privacy Policy



Agendamento

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Scheduler

Please, schedule your experiment before running it.

[Create New](#)

User	Schedule Date	Experiment Date	Experiment Description
psmora3@psmora3	2023:04:17 06:41	2023:04:27 11:41	Expected time to execute Details Delete

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Experimentos - Painel

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Create New

User: psmora3@psmora3

Experiment ID: 29

Description: IEEE teste2

Template

Details

Edit

Delete

RUN

Results

User: psmora3@psmora3

Experiment ID: 31

Description: testws

Template

Details

Edit

Delete

RUN

Results

User: psmora3@psmora3

Experiment ID: 33

Description: Testing Twice IEEE79

Template

Details

Edit

Delete

RUN

Results

User:

Experiment ID: 35

Description: testafdosreis

Template

Details

Edit

Delete

RUN

Results

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Experimentos - Detalhes

User:

Experiment ID: 35

Description: testafdosreis

Template	Details	Edit
Delete	RUN	Results

Experimentos - Criação

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Create Experiment

System configuration

- Main system single node*
- Main with transmission network
- Multi-systems single node
- Multi-systems with interconnections
- Multi-systems with transmission network

Configuration MPI String

- Single Node*
- Multiple Node

Select The Desired Case

[PORTUGAL_Caso_262]_COMPOSTO_(14-11-2022) ▼

Basic Paramenters

Numbers of Samples (Years)

1000

Numbers of min Years

10

Simulation Tracking (Years)

1

Meaningful of load (MW)

0.001

Coefficient variation (%)

5

Parallel send Years

2

Results Options (Print)

☐ Print Uncertainties probability distribution

☐ Print Reliability probability distribution

☐ Print Other Variables probability distribution

Confidence (%)

0.95

Wellbeing criterion

☐ Largest Unit*

☐ Reverse Requirement

Study Type

☐ Static reserve*

☐ Operating reserve

☐ Operating reserve flexibility

Number for bins for histograms

☒ Automatic

☐ User Defined

10

Experimentos - Resultados

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Result						
Confidence Left	95.00					
Confidence Right	95.00					
LOLP (prob.)	0.00					
LOLP (prob. %)	6.17					
LOLP (prob. Lim. Inf.)	0.00					
LOLP (prob. Lim. Sup.)	0.00					
LOLE (prob.)	8.07					
LOLE (prob. %)	6.17					
LOLE (prob. Lim. Inf.)	0.00					
LOLE (prob. Lim. Sup.)	0.00					
EPNS (prob.)	0.11					
EPNS (prob. %)	8.75					
EPNS (prob. Lim. Inf.)	0.09					
EPNS (prob. Lim. Sup.)	0.13					
EENS (prob.)	947.27					
EENS (prob. %)	8.75					
EENS (prob. Lim. Inf.)	784.80					
EENS (prob. Lim. Sup.)	1109.73					
LOLF (prob.)	2.66					
LOLF (prob. %)	4.58					
LOLF (prob. Lim. Inf.)	2.42					
LOLF (prob. Lim. Sup.)	2.90					
LOLD (prob.)	3.03					
LOLC (prob.)	0.00					
Experiment	3					
Back to List						

Experimentos - Analytics

Allocated hydro - annual average	Allocated hydro - hourly average	Allocated hydro - monthly average	Allocated hydro - weekly average
Available Power - annual average	Available Power - hourly average	Available Power - monthly average	Available Power - weekly average
Available Power factor - annual average	Available Power factor - hourly average	Available Power factor - monthly average	Available Power factor - weekly average
Available Reserve - annual average	Available Reserve - hourly average	Available Reserve - monthly average	Available Reserve - weekly average
Benefit of turbine power plant - annual average	Benefit of turbine power plant - hourly average	Benefit of turbine power plant - monthly average	Benefit of turbine power plant - weekly average
Day-ahead Marginal Cost - annual average	Day-ahead Marginal Cost - hourly average	Day-ahead Marginal Cost - monthly average	Day-ahead Marginal Cost - weekly average
ENS - annual average	ENS - hourly average	ENS - monthly average	ENS - weekly average
Final Reliability Indices	Fuel Charges - annual average	Fuel Charges - hourly average	Fuel Charges - monthly average
Fuel Charges - weekly average	Generation - annual average	Generation - hourly average	Generation - monthly average
Generation - weekly average	Generation Distribution - annual average	Generation Distribution - hourly average	Generation Distribution - monthly average
Generation Distribution - weekly average	Hydro model variables - hourly average	Marginal Cost - annual average	Marginal Cost - hourly average
Marginal Cost - monthly average	Marginal Cost - weekly average	Ordered Values	Production Marginal Value - annual average
Production Marginal Value - hourly average	Production Marginal Value - monthly average	Production Marginal Value - weekly average	Production Value - annual average
Production Value - hourly average	Production Value - monthly average	Production Value - weekly average	Pumping - Arbitrage - annual average
Pumping - Arbitrage - hourly average	Pumping - Arbitrage - monthly average	Pumping - Arbitrage - weekly average	Pumping - Remedial action - annual average
Pumping - Remedial action - hourly average	Pumping - Remedial action - monthly average	Pumping - Remedial action - weekly average	Pumping - Seasonal - annual average
Pumping - Seasonal - hourly average	Pumping - Seasonal - monthly average	Pumping - Seasonal - weekly average	Pumping costs - annual average
Pumping costs - hourly average	Pumping costs - monthly average	Pumping costs - weekly average	Simulation Config
System coverage index - annual average	System coverage index - hourly average	System coverage index - monthly average	System coverage index - weekly average
System coverage index with interconnection b...	System coverage index with interconnection b...	System coverage index with interconnection b...	System coverage index with interconnection b...
System load - annual average	System load - hourly average	System load - monthly average	System load - weekly average
System load EV - hourly average	Transmission - annual average	Transmission - hourly average	Transmission - monthly average
Transmission - weekly average	Transmission capacity - annual average	Transmission capacity - hourly average	Transmission capacity - monthly average
Transmission capacity - weekly average	Transmission capacity factor - annual average	Transmission capacity factor - hourly average	Transmission capacity factor - monthly average
Transmission capacity factor - weekly average	Transmission utilization factor - annual average	Transmission utilization factor - hourly average	Transmission utilization factor - monthly average
Transmission utilization factor - weekly average	Utilization factor - annual average	Utilization factor - hourly average	Utilization factor - monthly average
Utilization factor - weekly average			

About

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About

PSMORA Web Application V.1

Welcome to the PSMORA web interface.

It calls the c++ module through a local service script execution. Therefore, it is mandatory to run the script before running the interface. Make sure it is running on the server!

All the generated experiments are saved on a local relational database for further verification and archive.

To use this page, please login into the system and configure the desired parameters.

4/17/2023 7:48:17 AM

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<https://youtu.be/5VLRhy1GEY4>



Fim