



# ONERA

THE FRENCH AEROSPACE LAB

[www.onera.fr](http://www.onera.fr)

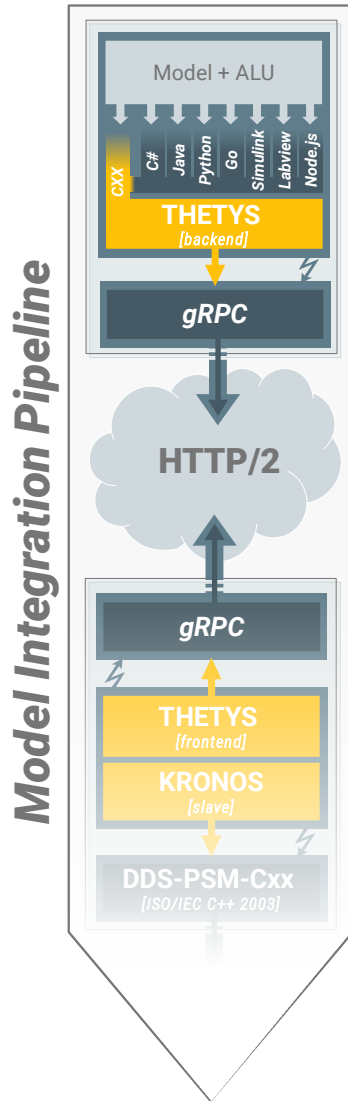




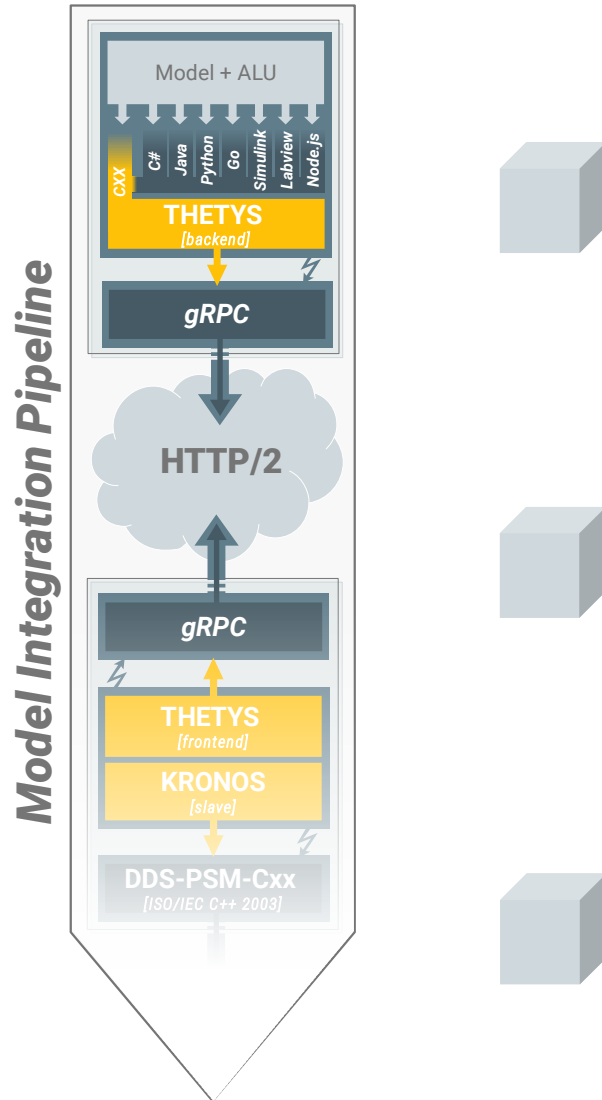
# Simulation Software Ecosystem Model Integration Pipeline

# simulation\_software\_ecosystem-> Model integration pipeline

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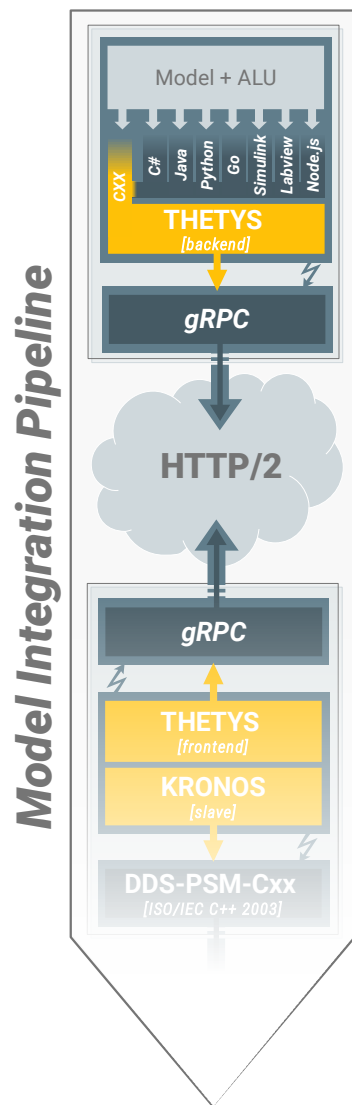


# simulation\_software\_ecosystem-> Model integration pipeline





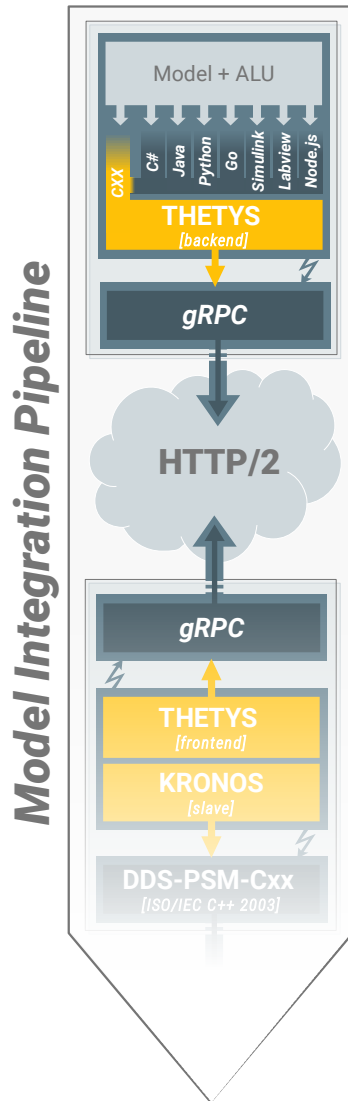
# simulation\_software\_ecosystem-> Model integration pipeline



## Characteristics

- Model-based integration : heterogeneous scientific domain, multiple langage connectors
- Process-based encapsulation
- Data-centric architecture

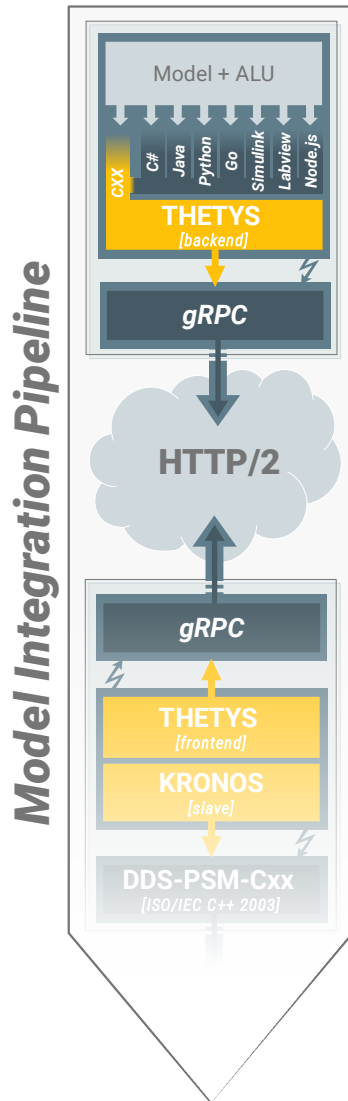
# simulation\_software\_ecosystem-> Model integration pipeline



## Components

- **THETYS** : a real-time data-centric simulation process integration layer
- **OCEAN** : the THETYS process's configuration file generator

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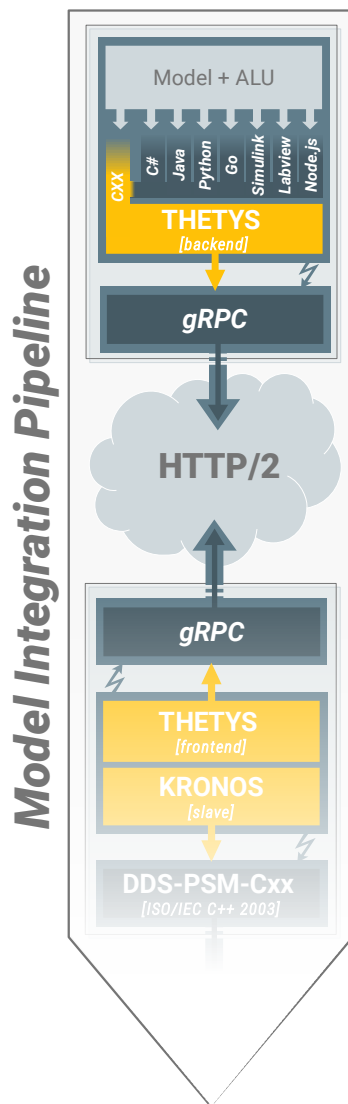


## Properties

- Supported OS : Linux & Windows
- HTTP/2 transport layer via gRPC & Protobuf
- Fully configured through XML



# simulation\_software\_ecosystem-> Model integration pipeline



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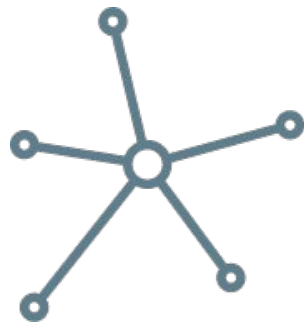
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# LABSIM

<http://www.labsim.github.io>