Proposed Applications for the Gateway and Data Node in the IPSL Prodiguer Portal Project.

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The Pierre Simon Laplace Institut (IPSL), like many other modeling groups, is involved in the development of a comprehensive Earth System Model (ESM) to study the interactions between physical, chemical and biological processes. This work entails the coupling of the different components (land, ocean, atmosphere, chemistry etc.) that demands an execution environment and platform that can tackle the entire range of interdependent model configurations. Furthermore, the ever-increasing number of simulations, executed against model configurations within scientific computing centres, is generating a huge volume of data and meta-data that must be made available to researchers, scientists, modelers, students and general users. To achieve these objectives, we have decided to integrate the efforts made by International and European projects like Earth System Grid, METAFOR and IS-ENES within our execution environment.

Prodiguer Project is an initiative of IPSL, France for the availability of climate models simulations data and metadata generated at the scientific computing centres to the French and International community.
The presentation will focus on the applications (web based and desktop application) to be developed for the gateway and data node at IPSL which includes:

1. Simulation Monitor (Gateway Web Application)

2. Data Node Metadata Query API (Data Node Application)

NOTE: A collaboration scenario is likely to emerge among IPSL-Paris, BADC-UK and DKRZ-Hamburg regarding development and/or testing of the API.

3. Administrative Control Panel for the ESG Data Node and Metadata Database (Data Node Application)