

Project of Strategic Interest NEXTDATA WP2.7

Report on

D2.7B – Public deployment of NextData General Portal and extended brokering Middleware

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Introduction

The NextData deliverable D2.7B is a Prototype deliverable consisting in the public deployment of the first release of the NextData general portal and extended brokering middleware (previously described in deliverable D2.7A).

This document is intended to report the accomplishment of the D2.7B release.

Report on the deployment of NextData General Portal and extended brokering Middleware

In December 2017 both the deployment of the NextData portal and the brokering middleware on the CINECA computing infrastructure has been completed and the system has been publicly made available.

As a result of this activity NextData user can access the portal at the URL <u>http://nextdataproject.hpc.cineca.it/</u> to fully exercise the functionalities of the NextData System of Systems Infrastructure (ND-SoS-Ina). The NextData portal is the entry point for the NextData System of Systems Infrastructure (ND-Sos-Ina) as shown in Figure 2.



Figure 1 The NextData Portal and connected data sources

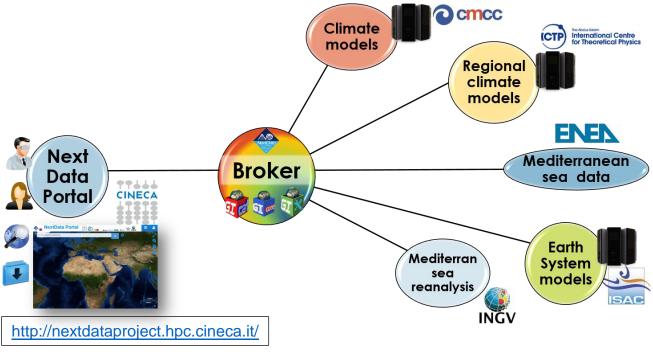


Figure 2 The NextData portal as the entry point of the ND-Sos-Ina.

NextData users can access it to discovery and access NextData resources from data providers. The portal translates user interactions to programmatic requests delegating them to the broker. The broker represents a ND-Sos-Ina key component: its role is to execute discovery and access requests received from the portal against the distributed and heterogeneous NextData sources hosted by different organizations (i.e. CMCC, ICTP, ENEA, ISAC, INGV), as shown in Figure 2. Results are harmonized before providing them back to the portal to ease their presentation by the portal.

Figure 3 shows the current deployment of the NextData System of Systems Infrastructure.

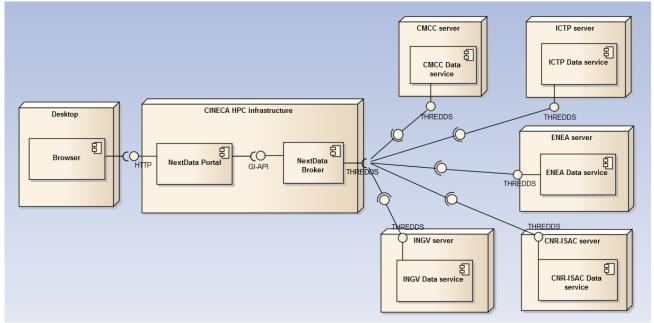


Figure 3 ND-Sos-Ina infrastructure deployment diagram depicting the main nodes and components, along with the interfaces published and required by each of them.