



SeaDataCloud



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Task WP 9.7 :
Status of development and testing of
Virtual Appliance for connecting data
centres to CDI service

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Task WP9.7: Develop a preconfigured and pre-built virtual appliance system as a complete solution to new data centres to connect to the CDI service

Preparation of a virtual machine with the Download Manager component (DM) pre-installed (ENEA)

Completed

(We are ahead with the initial plan M24 😊)

- The appliance (Virtual Machine), in both VMWARE and Virtualbox formats, is available
- It has been tested successfully by Maris, ENEA and the following partners: DMU (NERI), HCMR, OGS and ORION
- MARIS (Flavian Gheorghe) supports the partners for tests and maintains an “User manual”



Some Details:

VM chosen: a pre-built TURNKEY system (<https://www.turnkeylinux.org/>), a Linux Debian based system, distributed by turnkey inc.

Advantages:

- It has only the necessary software tools to run the DM
- free (all open source software)
- easy management and deployment
- easy integration in the future cloud infrastructure
- different format (kvm, vmware, Xen ...)
- supported by a community
- automatic security updates
- extensible
- manageable (size < 4GB)



Some Details:

Re-using:

A bash procedure has been released to simplify the configuration of the VM that can be easily replicated on a different linux system. Even if you don't use the VM you can use the program for another linux system.

Testing:

some basic testing have been defined and can be performed in a semi-automatic way on any new installation

Availability:

The VM is temporarily available at:

<http://192.107.61.203/seadatacloud/>

It should be distributed by IFREMER through an official channel as the Download Manager

An user manual is available (to be completed for the transition from test to production) at the same web address



Tools to manage the appliance:

SSH and SFTP

Shellinabox application allows secure shell using HTTPS protocol

Webmin application allows graphical management



Next actions:

We are waiting for the new version of the Download Manager to prepare and test a new version of the VM

A VM could also be prepared to host the replicator. We are waiting for the replicator.

We are preparing a semi-automated procedure for a transition from the testing to the production operating mode

The ENEA marine research center is available to move its production environment to the SDN-VA as soon as the replicator will be released and tested;

We also will be “users” of our Virtual appliance



What we learned:

The VM is really useful:

some data center are not yet accustomed with setup and management of Unix/Linux systems and complex Java applications (as the DM), but they can easily set-up a simple virtualization environment, as virtualbox.

A pre-configured virtual appliance is what they need.



The support offered by Maris is essential.

Partners can still face some problems in running the appliance and inserting data into the system, they need advice from experienced technicians.