

Frequently Asked Questions

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General

1. What is ONDA?

ONDA is a platform enabling users to access and host geospatial data and to build their applications in the Cloud.

2. What can I do with ONDA?

- You can get free access to geospatial data and information from different sources (Earth Observation satellites or Copernicus Services Projects) through our Data Access Services:
 - Browse data on our <u>Discovery</u> catalogue
 - o <u>View</u> data in the form of a digital image file
 - Download data in the native format this service is available to registered users
- You can apply for our fee-based Cloud Resources <u>Services</u>:
 - o <u>Virtual Servers</u>: access and manage a Cloud platform
 - Add to your Virtual Server free <u>Custom Environments</u> that include dedicated Software tools
- You can benefit from a variety of <u>Managed Services</u> to use the ONDA platform for your own hosted processing and applications development

3. What is new about ONDA?

- ONDA offers full availability of all Copernicus data
- ONDA provides customisable solutions, together with an innovative data access technology (Advanced API) allowing users to easily extract only the needed product information
- In addition, ONDA provides IT resources and infrastructures to third parties, allowing users to build their own office and at the same time integrate data and information from other environments in the service provision.
 - Third party developers can configure their own environment with the possibility to freely integrate data in the services and the possibility to reuse any available open-source tool and operate and manage the services autonomously, including the management of access to services results.

4. How can I get started with ONDA?

While access to the Discovery catalogue browsing and viewing (Discovery and View services) is immediately available to anyone with a click, for all the other Services registration to the ONDA User Portal is required.

To register, click the "Login/Register" button on the ONDA Web Page, enter your first name, last name, a valid email address, choose a temporary password, agree to the ONDA Terms & Conditions and Privacy Policy, then click on the Register button.

You will receive a confirmation email containing a link to Login and change the temporary password as a first step.



If you need help you can either <u>Contact Us</u> via a web form or submit a support ticket from your Personal Area of the ONDA User Portal further to registration.

5. How can I find all the available data?

Access the ONDA <u>Discovery</u> service to explore all available data and information. You can browse the catalogue through a simple web interface that allows searching the data using simple criteria such as data type, area of interest and time or through an API via OData Protocol. You are also able to visualise metadata and quick-looks of selected data.

6. What is the temporality of the data ingestion / data distribution of the ONDA platform?

Data are made available by the different Copernicus core Ground Segment and Services (e.g. ESA, EUMETSAT, Services). Once published, we are committed to retrieve these data without other delays than transfer time.

The Copernicus Services information will be made increasingly available to users gradually over the Service lifecycle. At the beginning of operations we provide access to Copernicus Marine Environment and Land services information. Copernicus Atmosphere and Emergency Management information will be available during the course of the project.

The Copernicus services information will be accessible through the ONDA services (in the same way as Sentinel products).

More details on the available data are published in the <u>Data</u> section of the ONDA Web Portal.

7. Which in-situ products or other satellite data can be accessed via ONDA?

Our Data Offer includes some candidate in-situ datasets. According to the user demand / customer needs we can consider to include other in situ data. The complete list of in-situ candidate datasets will be made available in the ONDA Web portal.

8. What is the best advantage of using ONDA as a Third Party User?

Public authorities, commercial entities or other organisations can use the ONDA platform to offer their own data and information and/or develop and deploy applications as a front office services. A third party user can:

- obtain a personal working environment on the Cloud
- acquire storage and processing power
- · use the back-office data and tools
- add their own data and information
- develop and deploy tools and application
- provide applications
- build user communities
- use advanced programming environments

Third Party Users will have the possibility to upload their own web content in the form of logos, text, pictures and web links on the Marketplace section to advertise their own services developed on the ONDA platform.



9. How do I close my ONDA account?

If you want to close your account please open a Support Ticket from your Personal Area of the ONDA User Portal and ask for the deletion of your personal account.

Our Helpdesk will send you a confirmation email when the account deletion is completed.

Data Access Services

10. What is Discovery?

Discovery is the ONDA service that allows users to search, view and explore all available data and information without the need to Register.

Access Discovery from the **Services** section of the ONDA Web Portal.

11. How can I browse the Catalogue?

Click <u>Discovery</u> from the <u>Services</u> section to enter the products Catalogue.

You can easily select a list of the products of your interest with the support the geographic query tool directly on the world map.

You can also use the Advanced search directly from the home page of the Catalogue and use the available filters to perform your search.

12. How can I find Copernicus services in the Catalogue?

The text query to be typed in the full-text search of the <u>Catalogue</u> is:

Copernicus

13. How can I find Copernicus Land products in the Catalogue?

Search queries on the <u>Catalogue</u> can be performed by entering a text query in the full-text search bar or via the OData API.

The text query to be typed in the full-text search is:

land AND NOT S3*

In this way, all and only the Copernicus Land products will be returned.

Please note that, by default, the value inserted in the search bar is looked for in all the product fields. So, for example, land* returns all the find Copernicus Land products and also all the products with the "land" metadata value (i.e. some Sentinel-3 products).

Via OData API, the query syntax is:

https://catalogue.onda-dias.eu/dias-catalogue/Products?\$search="copernicus-land"



14. How can I find Copernicus Marine products in the Catalogue?

Search queries on the <u>Catalogue</u> can be performed by entering a text query in the full-text search bar or via the OData API.

The text query to be typed in the full-text search is:

marine AND NOT S3*

Via OData API, the query syntax is:

https://catalogue.onda-dias.eu/diascatalogue/Products?\$search="copernicus-marine"

15. How can I find Landsat-8 products in the Catalogue?

Search queries on the <u>Catalogue</u> can be performed by entering a text query in the full-text search bar or via the OData API.

The text query to be typed in the full-text search is:

LC08*

Via OData API, the query syntax is:

https://catalogue.onda-dias.eu/dias-catalogue/Products?\$search="LC08*"

16. How can I find Envisat products in the Catalogue?

Search queries on the <u>Catalogue</u> can be performed by entering a text query in the full-text search bar or via the OData API.

The text query to be typed in the full-text search is:

EN1*

Another search query, based on the index "platformName", is:

platformName: Envisat

Via OData API, the queries are:

https://catalogue.onda-dias.eu/dias-catalogue/Products?\$search="EN1*"

https://catalogue.onda-dias.eu/diascatalogue/Products?\$search="platformName:Envisat"



17. What is the View and how can I use it?

The <u>View</u> service allows users to visualise the selected data directly on the world map through a standard Web Map Service (WMS) providing the representation of data in the form of a digital image file.

From the Catalogue you can simply select a layer of a single product and, if supported, visualise the image in the geographical context. Dedicated collections (e.g. Sentinel-1 GRDH) are exposed as a single layer for a predefined time period. The list of available layers can be retrieved using the standard GetCapabilities method of the WMS server.

18. What are the ONDA WMS layers and how can I access them?

1. The access to the Web Map Service (WMS) layers is through standard OGC API GetCapabilities:

https://view.onda-dias.eu/instance00/ows?service=wms&request=getcapabilities

The following layers are available:

- S1_IW_GRDH_FullResolution Sentinel-1 Polarisation IW GRDH with full resolution: 40m
- S2L2A_TRUE_COLOR Sentinel-2 L2A True color image with full resolution: 10m
- S2_MSIL1C_TRUE_COLOR Sentinel-2 L1C True color image with full resolution: 10m
- 2. Users can access the specific map through standard **OGC API GetMap**: Example of request with:
 - Layer S1 IW GRDH Full Resolution
 - Image width: 2048
 - Image height: 2048
- 3. Product based WMS are accessible through the <u>Catalogue</u> for the products for which the layer has been generated (Product WMS image layer displayed on the map).

19. What is the Advanced API?

The ONDA Advanced API service allows users to easily access any low level component of the product through ENS (Elastic Node Service) without the need for a full download.

This service is available to users who order a Virtual Server.

Advanced API provides the following features:

- product listing
- search using time filters
- ordering
- geographical search
- search using string manipulation

The usage of the ENS API is free of charge. Find more details on the <u>Advanced API</u> web page and on the ENS User Guide available from the Help section.



20. What software packages are available?

As part of the User Support Services we will allow users to access to a repository of Open Source SW tools that can be used in the IaaS. Additionally we allow users to select (as a free of charge option) pre-configured VM templates with open source tools or libraries. More details on the available tools are published in the <u>Tools</u> page of the Services section of the ONDA Web Portal.

Cloud Resources Services

21. How do I select the right Virtual Server?

ONDA offers 3 types of Virtual Servers instances: General Purpose, Computing-Intensive and Memory-Intensive.

- General Purpose instances have memory to CPU ratios suitable for most general purpose applications and come with fixed performance.
- Computing-Intensive instances have proportionally more CPU resources than memory and are well suited for scale out compute-intensive applications and High Performance Computing (HPC) workloads.
- Memory-Intensive instances offer larger memory sizes for memory-intensive applications, including database and memory caching applications.

For detailed information please visit our <u>Virtual Servers</u> page in the Services section.

22. Where can I find the costs of the available Virtual Servers?

The costs are displayed below. They are available on the ONDA User Portal for registered users. Please note that prices may vary according to market.

Model	RAM	Processor	Storage	Bandwidth inbound	Bandwidth outbound	Monthly cost	Hourly cost
b2-7	7 GB	2 vCores	50 GB	256 Mbps	256 Mbps	22 €/m (excl. VAT)	0,062 €/h (excl. VAT)
b2-15	15 GB	4 vCores	100 GB	256 Mbps	256 Mbps	42 €/m (excl. VAT)	0,117 €/h (excl. VAT)
b2-30	30 GB	8 vCores	200 GB	511 Mbps	511 Mbps	85 €/m (excl. VAT)	0,237 €/h (excl. VAT)
b2-60	60 GB	16 vCores	400 GB	511 Mbps	511 Mbps	165 €/m (excl. VAT)	0,459 €/h (excl. VAT)
r2-15	15 GB	2 vCores	50 GB	256 Mbps	256 Mbps	32 €/m (excl. VAT)	0,089 €/h (excl. VAT)
r2-30	30 GB	2 vCores	50 GB	256 Mbps	256 Mbps	37 €/m (excl. VAT)	0,103 €/h (excl. VAT)
r2-60	60 GB	4 vCores	100 GB	256 Mbps	256 Mbps	72 €/m (excl. VAT)	0,20 €/h (excl. VAT)
r2- 120	120 GB	8 vCores	200 GB	511 Mbps	511 Mbps	145 €/m (excl. VAT)	0,403 €/h (excl. VAT)



r2- 240	240 GB	16 vCores	400 GB			285 €/m (excl. VAT)	0,792 €/h (excl. VAT)
c2-7	7 GB	2 vCores	50 GB	256 Mbps	256 Mbps	32 €/m (excl. VAT)	0,089 €/h (excl. VAT)
c2-15	15 GB	4 vCores	100 GB	256 Mbps	256 Mbps	62 €/m (excl. VAT)	0,173 €/h (excl. VAT)
c2-30	30 GB	8 vCores	200 GB	511 Mbps	511 Mbps	125 €/m (excl. VAT)	0,348 €/h (excl. VAT)
c2-60	60 GB	16 vCores	400 GB	511 Mbps	511 Mbps	245 €/m (excl. VAT)	0,681 €/h (excl. VAT)
c2- 120	120 GB	32 vCores	400 GB			485 €/m (excl. VAT)	1,348 €/h (excl. VAT)

23. How can I buy a Virtual Server?

- Register to the ONDA User Portal from the Login/Register link
- Login to the ONDA User Portal and click on your Personal Area
- Create a Wallet
- Now you can access your Virtual Server infrastructure area where you can recharge your Wallet
- From your Virtual Server area, select the Virtual Servers solution more convenient for your needs (General Purpose, Computing-Intensive and Memory-Intensive), then go to the instance you want to order and choose either the Fast or the Advanced Wizard

24. What is the difference between the Fast Wizard and the Advanced Wizard when creating a Virtual Server?

- The Fast Wizard allows users to create a Virtual Server just in 2 steps, which include entering a name for the Virtual Server, selecting the Payment Plan (hourly or monthly), selecting the Operating System and choosing to add or not persistent storage.
- The Advanced Wizard consists of 7 steps, where users can select a number of advanced options on storage, network topology and network configuration

With both Wizards, you are able in the final step to download the SSH Private Key generated for the system, which you will then have to keep in a safe place.

25. How quickly will my Virtual Server be running?

The creation of the Virtual Server may take a few minutes, after which you are immediately able to access it.

26. How do I access my Virtual Server?

Find more details on the ONDA User Portal Tutorials available from the Help section.



27. How can I replace the lost SSH key pair?

If you have lost your SSH key you might be unable to connect to your instance if you have not configured any alternative way to do so.

To access your instance, we have provided you with a rescue mode which allows you to log in with a password and then change your files.

A detailed guide explaining how to configure the admin user's "authorized_keys" file is available here.

28. How can I put my instance in rescue mode?

If something has been poorly configured or you have lost your SSH key, you may not be able to access your instance anymore. We suggest that you use the rescue mode to access your data and correct your different configuration files.

The way this works is quite simple: your instance is launched on a new image, or an instance with a basic configuration. You instance disk is attached to your instance as an additional disk - you therefore just have to mount it in order to access the data.

A detailed guide explaining how to use the rescue mode is available here.

29. How can I delete my Virtual Server?

After logging in to the ONDA User Portal, go to Virtual Servers > My Console, click Manage Server and directly *delete* the server.

30. How can I change the hostname of my instance?

The cloud-init program lets you configure your Public Cloud instance when you create it but also each time you reboot. Therefore, if you want to reconfigure your hostname, whether due to an error when creating your instance, or because you need to reconfigure your mail server for example, you will need to disable the cloud-init program that configures the hostname, to prevent it from being reset.

A detailed guide explaining how to reconfigure cloud-init is available here.

31. How can I add storage volume to my Virtual Server?

During the Virtual Server creation (using both the Fast Wizard and the Advanced Wizard) you are able to add a standard persistent storage to your system (please note that charges apply).

If using the Advanced Wizard, you are also able to create additional storage (please note that charges apply).

Persistent storage volumes are available with sizes from 10GB to 2TB.

You can create as many volumes as you want, and attach them to a single instance. Each volume can only be attached to a single instance at a time, but you can attach it to other instances after detaching it from the first instance.

You are also able to add a Disk Volume at a later stage after the Virtual Server creation, by going to Virtual Servers > My Console, clicking the *Manage Server* link of the server you want to update, and attach the size you want (please note that charges apply).



32. What happens to my persistent storage if I delete my Virtual Server?

If you would like to keep your persistent storage volume even when you delete your Virtual Server, make sure you select NO to the question "Delete volume at instance deletion?" when you create the Virtual Server, after having added the persistent storage.

If you select YES, the persistent storage volume will be deleted at instance deletion. Please note that if you will be charged for keeping your persistent storage, even if you have deleted your Virtual Server.

33. Is my Virtual Server secure?

All our Cloud resources are protected by security solutions such as the Anti-DDos service, which is included as a standard.

34. Can I test the speed of the disks?

You can test the speed of the disks through the process of testing the number of input/output operations per second (IOPS) that your disks are able to achieve.

A detailed guide explaining how to test your disks speed is available here.

35. What operating systems are supported?

ONDA offers a certain number of ready-to-use operating systems (e.g. Ubuntu, Debian, CentOS) in the form of system images used to start up the instances. The system images are standard operating systems, proposing a minimal base system.

They allow you to start off with a ready-to-use system, and configure the server straight away to suit your needs.

36. Can I order a Cloud Private Instance?

The baseline offer of ONDA includes public cloud resources. If you are interested to get access to a custom solution fitting your requirements, you can <u>Contact Us</u> via the web form available on the ONDA Web Portal.

37. Can I host my data on ONDA?

You can request us to host your data on ONDA as a public or private collection through our dedicated <u>Data Hosting</u> Service. We migrate your data from your infrastructure and make your data available through all the DIAS interfaces and services according to your data policy.



Payments

38. Which pricing models are available?

Billing is simple: hourly (pay per use) or monthly billing (subscription) for cloud resource ordered.

You can select monthly or hourly billing when creating the instances.

39. What is the Wallet?

The Wallet is your means of payment for the Cloud resources you order from ONDA. At the time of Wallet creation, you will have to enter some mandatory information needed for invoicing and review the ONDA Terms and Conditions.

After the Wallet is created, you will have to recharge it, therefore creating a credit. When you order a Virtual Server, the exact amount of money that you are spending is deducted from your Wallet. Depending on how much money you recharged, you might have a remaining credit.

40. What payments methods does ONDA accept?

ONDA protects payments via PayPal protocol. Users are able to recharge the Wallet by using:

- PayPal
- all major Debit or Credit cards (including Visa, MasterCard, American Express, Discover, JCB, Diner's Club) through the PayPal interface, even without a PayPal account

41. How is money deducted from my Wallet?

Money is deducted from your Wallet according to the pricing model you choose:

- if you choose the Monthly Plan, the monthly cost for the selected Virtual Server will be debited within 1 hour from the Virtual Server creation.
 - Subsequently, the monthly cost will be deducted at the end of each month.
- if you choose the Hourly Plan, you will be debited every hour. You should therefore make sure you have enough credit in your Wallet before you order a Virtual Server. After one hour, the recharged amount is decreased according to the selected hourly cost: at the end of the Virtual Server creation, up to two hours, the recharged amount is decreased according to the selected monthly cost.

42. How do I view my ONDA transactions?

You can visualise all your transactions in the Virtual Servers area of the ONDA User Portal by clicking on Wallet > Wallet Transactions from the navigation menu.



Helpdesk

43. How can I contact you?

If you have questions or you need help you can:

- Contact Us via the web form available on the ONDA Web Portal
- If you are a registered user, submit a support ticket from the ONDA User Portal (link available from the menu)

44. What are the terms and conditions for using ONDA?

Our <u>Terms & Conditions</u> are available on the ONDA Web Portal footer. Users who wish to create an ONDA account have to agree to our Terms & Conditions to complete the registration.