Quick Oracle Cloud links for researchers

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Oracle offers customers and researchers a wide variety of tools and images to make setting up and using Oracle cloud easier and more efficient. Researchers who have some computing expertise may find this collection of references and links helpful, especially if they are new to Cloud computing and/or Oracle Cloud.

**Oracle Cloud Getting Started**

1. [Key concepts and terminology](https://docs.cloud.oracle.com/en-us/iaas/Content/GSG/Concepts/concepts.htm)
2. [Signing in to console](https://docs.cloud.oracle.com/en-us/iaas/Content/GSG/Tasks/signingin.htm), [Sign-in options](https://docs.cloud.oracle.com/en-us/iaas/Content/GSG/Concepts/signinoptions.htm) and [changing your password](https://docs.cloud.oracle.com/en-us/iaas/Content/GSG/Tasks/changingyourpassword.htm)
3. [Setting up your tenancy](https://docs.cloud.oracle.com/en-us/iaas/Content/GSG/Concepts/settinguptenancy.htm)
4. [Tutorial – Launching your first Linux instance](https://docs.cloud.oracle.com/en-us/iaas/Content/GSG/Reference/overviewworkflow.htm)
5. [Tutorial – Launching your first windows instance](https://docs.cloud.oracle.com/en-us/iaas/Content/GSG/Reference/overviewworkflowforWindows.htm)
6. [Object storage and](https://docs.cloud.oracle.com/en-us/iaas/Content/GSG/Tasks/addingbuckets.htm) Pre-authenticated access
7. [Image import and export](https://docs.cloud.oracle.com/en-us/iaas/Content/Compute/Tasks/imageimportexport.htm)
8. [File storage system concepts](https://docs.cloud.oracle.com/en-us/iaas/Content/File/Concepts/filestorageoverview.htm#concepts)
9. [OCI Hands on labs](https://oracle.github.io/learning-library/oci-library/)
10. [New features and navigation updates](https://docs.cloud.oracle.com/en-us/iaas/Content/GSG/Reference/unifiedconsoletaskmapping.htm)
11. [Oracle cloud Free tier](https://docs.cloud.oracle.com/en-us/iaas/Content/FreeTier/freetier.htm) [and FAQ](https://docs.cloud.oracle.com/en-us/iaas/Content/FreeTier/faq.htm)
12. Custom key generation with [puttygen](https://www.ssh.com/ssh/putty/windows/puttygen) [or ssh-keygen](https://www.ssh.com/ssh/keygen/)
13. [Frequently asked Questions](https://docs.cloud.oracle.com/en-us/iaas/Content/GSG/Reference/faq.htm)
14. [Getting help and contacting support](https://docs.cloud.oracle.com/en-us/iaas/Content/GSG/Tasks/contactingsupport.htm)

**Oracle cloud Identity services**

1. [Managing Oracle IDCS users and groups in OCI](https://docs.cloud.oracle.com/en-us/iaas/Content/Identity/Tasks/addingidcsusersandgroups.htm)
2. [Adding Identity users](https://docs.cloud.oracle.com/en-us/iaas/Content/GSG/Tasks/addingusers.htm) for single sign-on
3. [Federated identity for single sign-on](https://docs.oracle.com/en/solutions/fed-sso-options-cloud-customers/index.html" \l "GUID-E61A0BEF-25BC-4DDB-85E6-D5E78BD260A9)
4. [Migrating from on-premise to Oracle identity service](https://docs.oracle.com/en/solutions/migrate-access-management-to-identity-cloud/index.html#GUID-3EC0C9F3-E846-4C31-BBC9-4D7036E8B0E1)

**Databases and moving data**

1. [Oracle Autonomous databases](https://docs.cloud.oracle.com/en-us/iaas/Content/Database/Concepts/adboverview.htm) [and Tools](https://docs.cloud.oracle.com/en-us/iaas/Content/Database/Tasks/adbtools.htm)
2. [MySQL](https://docs.cloud.oracle.com/en-us/iaas/mysql-database/doc/overview-mysql-database-service.html) [and NoSQL](https://docs.cloud.oracle.com/en-us/iaas/nosql-database/doc/nosql-database-cloud.html) Services
3. [Key concepts and terminology](https://docs.cloud.oracle.com/en-us/iaas/Content/GSG/Concepts/concepts.htm)
4. [Migrating databases to cloud](https://docs.cloud.oracle.com/en-us/iaas/Content/Database/Tasks/migrating.htm)
5. [Loading data to autonomous with OCI Functions](https://docs.oracle.com/en/solutions/serverless-dataload-adw/index.html#GUID-7AB1A8CD-0A8B-4C95-BBC9-E553647C23B6)
6. [Single-click move to autonomous](https://docs.oracle.com/en/solutions/migrate-to-autonomous-database-with-mv-to-adb/index.html#GUID-0B1F5F69-9FCC-43EC-BD81-8091B94D935E)

**Automation**

1. [Command line interface (CLI)](https://docs.cloud.oracle.com/en-us/iaas/Content/GSG/Tasks/gettingstartedwiththeCLI.htm)
2. [Oracle Terraform provider](https://docs.cloud.oracle.com/en-us/iaas/Content/API/SDKDocs/terraformgetstarted.htm)

**Images and shapes**

1. [Oracle cloud provided images](https://docs.cloud.oracle.com/en-us/iaas/images/) or [Oracle custom images](https://docs.cloud.oracle.com/en-us/iaas/Content/Compute/Tasks/managingcustomimages.htm)
2. [Image import and export](https://docs.cloud.oracle.com/en-us/iaas/Content/Compute/Tasks/imageimportexport.htm)
3. [Oracle cloud images by data center](https://docs.cloud.oracle.com/en-us/iaas/images/image/eed114e5-cc64-4b02-ad54-c79c7e5b3605/)

**Data science and AI/ML**

1. [Oracle Data science platform](https://docs.cloud.oracle.com/en-us/iaas/data-science/using/overview.htm) [and Tutorials](https://docs.cloud.oracle.com/en-us/iaas/data-science/data-science-tutorial/get-started.htm)
2. [Genome analysis toolkit](https://console.us-ashburn-1.oraclecloud.com/marketplace/application/81390072/usageInformation)
3. [Julia AI/HPC GPU Image](https://console.us-ashburn-1.oraclecloud.com/marketplace/application/79537675/usageInformation)
4. [NVIDIA images and NVIDIA GPU image](https://console.us-ashburn-1.oraclecloud.com/marketplace/application/54854361/usageInformation)
5. [Building a ML sandbox on Oracle cloud](https://docs.oracle.com/en/solutions/machine-learning-sandbox/index.html#GUID-5D9E4043-F6E4-4015-84E7-E7906F048FEE)
6. [Setting up an open-source ML and AI Environment](https://docs.oracle.com/en/solutions/data-science-oci/index.html#GUID-86F3DC92-949D-410E-9520-5C322B7BE24D)
7. [Machine learning autonomously](https://blogs.oracle.com/datascience/machine-learning-autonomously-v2)

**High Performance Computing (HPC)**

1. [Oracle HPC Cluster and](https://cloudmarketplace.oracle.com/marketplace/en_US/listing/67628143)[Oracle HPC File system](https://cloudmarketplace.oracle.com/marketplace/en_US/listing/75560175)
2. [NVIDIA GPU Cloud machine image](https://cloudmarketplace.oracle.com/marketplace/en_US/listing/54854361)
3. [Oracle Linux 7 Cluster Networking Image](https://cloudmarketplace.oracle.com/marketplace/en_US/listing/63394796)
4. [Oracle marketplace slurm image (HPC + Slurm combo)](https://cloudmarketplace.oracle.com/marketplace/en_US/listing/67628143)
5. [Oracle cloud slurm image](https://github.com/oracle-quickstart/oci-slurm)
6. [Github OCI-HPC](https://github.com/oci-hpc)
7. [Enabling HPC Cluster networking](https://blogs.oracle.com/cloud-infrastructure/running-applications-on-oracle-cloud-using-cluster-networking)
8. [Deploy High performance computing on Oracle cloud Infrastructure](https://docs.oracle.com/en/solutions/deploy-hpc-on-oci/index.html#GUID-F216B94E-33C5-44A6-92F8-2DE1E5880242)
9. [Deploy scalable and distributed file system using Lustre](https://docs.oracle.com/en/solutions/deploy-lustre-fs/index.html#GUID-34A915EF-9A45-4848-93F1-B9B7363BCB2C)
10. [Deploy BEEGFS parallel file system](https://docs.oracle.com/en/solutions/deploy-beegfs/index.html#GUID-61DDEA18-1EEA-47B1-903C-57EBA3CACC4D)
11. UoB [Cluster in the cloud](https://cluster-in-the-cloud.readthedocs.io/en/latest/)
12. [Cluster in the cloud - github](https://github.com/clusterinthecloud/docs)
13. [Molecular dynamics NAMD runbook](https://github.com/oci-hpc/oci-hpc-runbook-namd) and [GROMACS runbooks](https://github.com/oci-hpc/oci-hpc-runbook-gromacs)

**Performance and Benchmarking**

1. [Block volume performance guidelines](https://docs.cloud.oracle.com/en-us/iaas/Content/Block/Concepts/blockvolumeperformance.htm)
2. [Block volume performance tests on Linux instances](https://docs.cloud.oracle.com/en-us/iaas/Content/Block/References/samplefiocommandslinux.htm)
3. [Compute NVMe Performance](https://docs.cloud.oracle.com/en-us/iaas/Content/Compute/Concepts/computeperformance.htm?Highlight=NVME%20performance)
4. [Github Cloud harmony benchmark tests](https://github.com/cloudharmony/block-storage)
5. [NVIDIA Ampere architecture in depth](https://developer.nvidia.com/blog/nvidia-ampere-architecture-in-depth/#:~:text=The%20larger%20and%20faster%20L1,programmability%20and%20reduce%20software%20complexity.)
6. [Optimizing HPC with Oracle cloud on Intel](https://blogs.oracle.com/cloud-infrastructure/optimize-your-high-performance-computing-with-oracle-cloud-on-intel)

**Management and Troubleshooting**

1. [Monitoring and telemetry](https://docs.cloud.oracle.com/en-us/iaas/Content/Monitoring/Concepts/monitoringoverview.htm)
2. [Hanging connections](https://docs.cloud.oracle.com/en-us/iaas/Content/Network/Troubleshoot/connectionhang.htm)
3. [Getting started with cloud shell](https://docs.cloud.oracle.com/en-us/iaas/Content/API/Concepts/cloudshellgettingstarted.htm)

**Usage, billing and credit control**

1. [Oracle cloud storage costs](https://www.oracle.com/cloud/storage/pricing.html)
2. [Resource billing for stopped instances](https://docs.cloud.oracle.com/en-us/iaas/Content/Compute/Tasks/restartinginstance.htm#resource-billing)
3. [Oracle cloud universal credit PaaS and IaaS service descriptions](http://www.oracle.com/us/corporate/contracts/paas-iaas-universal-credits-3940775.pdf)
4. [Compute GPU price list](https://www.oracle.com/cloud/price-list.html#compute-gpu)