

GPU usage

Date published: 2020-07-16

Date modified: 2024-07-31



Legal Notice

© Cloudera Inc. 2024. All rights reserved.

The documentation is and contains Cloudera proprietary information protected by copyright and other intellectual property rights. No license under copyright or any other intellectual property right is granted herein.

Unless otherwise noted, scripts and sample code are licensed under the Apache License, Version 2.0.

Copyright information for Cloudera software may be found within the documentation accompanying each component in a particular release.

Cloudera software includes software from various open source or other third party projects, and may be released under the Apache Software License 2.0 (“ASLv2”), the Affero General Public License version 3 (AGPLv3), or other license terms. Other software included may be released under the terms of alternative open source licenses. Please review the license and notice files accompanying the software for additional licensing information.

Please visit the Cloudera software product page for more information on Cloudera software. For more information on Cloudera support services, please visit either the Support or Sales page. Feel free to contact us directly to discuss your specific needs.

Cloudera reserves the right to change any products at any time, and without notice. Cloudera assumes no responsibility nor liability arising from the use of products, except as expressly agreed to in writing by Cloudera.

Cloudera, Cloudera Altus, HUE, Impala, Cloudera Impala, and other Cloudera marks are registered or unregistered trademarks in the United States and other countries. All other trademarks are the property of their respective owners.

Disclaimer: EXCEPT AS EXPRESSLY PROVIDED IN A WRITTEN AGREEMENT WITH CLOUDERA, CLOUDERA DOES NOT MAKE NOR GIVE ANY REPRESENTATION, WARRANTY, NOR COVENANT OF ANY KIND, WHETHER EXPRESS OR IMPLIED, IN CONNECTION WITH CLOUDERA TECHNOLOGY OR RELATED SUPPORT PROVIDED IN CONNECTION THEREWITH. CLOUDERA DOES NOT WARRANT THAT CLOUDERA PRODUCTS NOR SOFTWARE WILL OPERATE UNINTERRUPTED NOR THAT IT WILL BE FREE FROM DEFECTS NOR ERRORS, THAT IT WILL PROTECT YOUR DATA FROM LOSS, CORRUPTION NOR UNAVAILABILITY, NOR THAT IT WILL MEET ALL OF CUSTOMER’S BUSINESS REQUIREMENTS. WITHOUT LIMITING THE FOREGOING, AND TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, CLOUDERA EXPRESSLY DISCLAIMS ANY AND ALL IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO IMPLIED WARRANTIES OF MERCHANTABILITY, QUALITY, NON-INFRINGEMENT, TITLE, AND FITNESS FOR A PARTICULAR PURPOSE AND ANY REPRESENTATION, WARRANTY, OR COVENANT BASED ON COURSE OF DEALING OR USAGE IN TRADE.

Contents

Configuring GPU usage.....	4
-----------------------------------	----------

Configuring GPU usage

Cloudera Machine Learning supports heterogeneous GPU clusters' configurations with homogenous GPUs within the nodes.

About this task

See the following example on a cluster with two nodes dedicated for GPU workloads:

- GPU Node A - 4 x nVidia A10G
- GPU Node B - 2 x nVidia A100

Procedure

- Set a default GPU accelerator label at: Site Administration Runtime Workload Accelerators .

The default GPU accelerator label is suggested in your workload selection screen.

For backwards compatibility, the default GPU accelerator label is used for those APIv2 requests that do not specify a GPU accelerator label but specify the number of GPUs for the workload.

You can limit the number of GPUs that can be used by a single workload (or a single session, single job and so on).



Note: Quota can only be applied to the total number of GPUs used by a user.



Note: You typically do not need to limit the number of GPUs allowed to be specified for a single workload. Set it to the maximum number of available GPUs on a single node. GPU utilization across nodes requires the use of Cloudera Machine Learning Workers and distributed compute frameworks.

Related Information

[Installing NVIDIA GPU software in ECS](#)

[Using GPUs for Cloudera Machine Learning projects](#)

[Quota management overview](#)