



# **Anthos on bare metal**

## **NetApp Solutions**

NetApp  
August 16, 2023

This PDF was generated from [https://docs.netapp.com/us-en/netapp-solutions/containers/baremetal-anthos/bmanthos\\_solution\\_overview.html](https://docs.netapp.com/us-en/netapp-solutions/containers/baremetal-anthos/bmanthos_solution_overview.html) on August 16, 2023. Always check docs.netapp.com for the latest.

# Table of Contents

Anthos on bare metal .....	1
Solution requirements .....	1

# Anthos on bare metal

## Solution requirements

### Hardware requirements

#### Compute: bring your own server

The hardware-agnostic capabilities of Anthos on bare metal allow you to select a compute platform optimized for your use case. Therefore, you can match your existing infrastructure and reduce capital expenditure.

The following table lists the minimum number of compute hardware components that are required to implement this solution, although the hardware models used can vary based on customer requirements.

Usage	Hardware and model	Quantity
Admin nodes	Cisco UCS B200	3
Worker nodes	HP Proliant DL360	4

#### Storage: NetApp ONTAP

The following table lists the minimum number of storage-hardware components needed to implement the solution, although the hardware models used can vary based on customer requirements.

Hardware	Model	Quantity
NetApp AFF	NetApp AFF A300	2 (1 HA pair)

### Software requirements

The software versions identified in the following table were used by NetApp and our partners to validate the solution with NetApp, although the software components used can vary based on customer requirements.

Software	Purpose	Version
Ubuntu	OS on 3 Admins	20.04
	OS on Worker4	20.04
	OS on Worker3	18.04
CentOS	OS on Worker2	8.2
Red Hat Enterprise Linux	OS on Worker1	8.1
Anthos on bare metal	Container Orchestration	1.6.0
NetApp ONTAP	Storage OS	9.7P8
NetApp Astra Trident	Container Storage Management	20.10



This multi-OS environment shows the interoperability with supported OS versions of the Anthos on bare metal solution. We anticipate that customers will standardize on one or a subset of operating systems for deployment.

For Anthos on bare metal hardware and software requirements, see the [Anthos on bare metal documentation](#) page.

Next: [Deployment summary](#).

## Copyright information

Copyright © 2023 NetApp, Inc. All Rights Reserved. Printed in the U.S. No part of this document covered by copyright may be reproduced in any form or by any means—graphic, electronic, or mechanical, including photocopying, recording, taping, or storage in an electronic retrieval system—without prior written permission of the copyright owner.

Software derived from copyrighted NetApp material is subject to the following license and disclaimer:

THIS SOFTWARE IS PROVIDED BY NETAPP “AS IS” AND WITHOUT ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, WHICH ARE HEREBY DISCLAIMED. IN NO EVENT SHALL NETAPP BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

NetApp reserves the right to change any products described herein at any time, and without notice. NetApp assumes no responsibility or liability arising from the use of products described herein, except as expressly agreed to in writing by NetApp. The use or purchase of this product does not convey a license under any patent rights, trademark rights, or any other intellectual property rights of NetApp.

The product described in this manual may be protected by one or more U.S. patents, foreign patents, or pending applications.

LIMITED RIGHTS LEGEND: Use, duplication, or disclosure by the government is subject to restrictions as set forth in subparagraph (b)(3) of the Rights in Technical Data -Noncommercial Items at DFARS 252.227-7013 (FEB 2014) and FAR 52.227-19 (DEC 2007).

Data contained herein pertains to a commercial product and/or commercial service (as defined in FAR 2.101) and is proprietary to NetApp, Inc. All NetApp technical data and computer software provided under this Agreement is commercial in nature and developed solely at private expense. The U.S. Government has a non-exclusive, non-transferrable, nonsublicensable, worldwide, limited irrevocable license to use the Data only in connection with and in support of the U.S. Government contract under which the Data was delivered. Except as provided herein, the Data may not be used, disclosed, reproduced, modified, performed, or displayed without the prior written approval of NetApp, Inc. United States Government license rights for the Department of Defense are limited to those rights identified in DFARS clause 252.227-7015(b) (FEB 2014).

## Trademark information

NETAPP, the NETAPP logo, and the marks listed at <http://www.netapp.com/TM> are trademarks of NetApp, Inc. Other company and product names may be trademarks of their respective owners.