



# Deploy Postgres From a Helm Chart

## Project Astra

Erika Barcott, Ben Cammett  
November 11, 2020

This PDF was generated from <https://docs.netapp.com/us-en/project-astra/solutions/postgres-deploy-from-helm-chart.html> on November 17, 2020. Always check docs.netapp.com for the latest.

# Table of Contents

- Deploy Postgres From a Helm Chart ..... 1
  - System Requirements ..... 1
  - Namespace Requirements ..... 1
  - Install Postgres ..... 1

# Deploy Postgres From a Helm Chart

Learn how to exercise the Astra beta program workflow by deploying Postgres from a Helm chart. After you deploy Postgres on your cluster, you can register the application with Astra.

Postgres is a validated app for the Astra Beta program. [Learn the difference between Validated and Standard apps.](#)



The Astra Beta Program only supports Postgres 11.7.

## System Requirements

In order to deploy Postgres from a Helm chart for the Astra alpha program, you need the following:

- A fresh GKE cluster which has been added to Astra.
- Updated versions of Helm (version 3.2+) and Kubectl installed.
- Kubeconfig configured using the gcloud tool with a command like `gcloud container clusters get-credentials my-cluster-name`

## Namespace Requirements

**You must deploy your app in a namespace other than the default.** In the following example, we create and use the namespace `testdb` for the deployment.

**A namespace which is empty for more than 60 seconds will be ignored by Astra.** Thus, you want to be sure to deploy your app into your namespace within one minute after you create the namespace.

In the following example, we use `&&` to concatenate the commands for creating the namespace and deploying the app. We recommend this approach, as it ensures the commands are run in sequence even if you get interrupted.

We recommend the use of `&&` instead of `;` to concatenate commands. `&&` is conditional, and only runs the second command if the first command completes successfully.



You must deploy your app after the cluster is added to Astra, not before.

## Install Postgres

To exercise the Astra alpha workflow, we recommend the [standard stable chart](#).



You must deploy the Helm chart in a namespace other than the default.

Deploy Postgres with the command:

```
kubectl create namespace testdb && helm install stable/postgresql --namespace testdb  
--set postgresqlPassword=U9dH9HT4pWS,postgresqlDatabase=test_db --generate-name
```

This does the following:

- Creates the `testdb` namespace.
- Deploys Postgres on the `testdb` namespace.
- Creates a database named `test_db`
- Creates a user `test_db_user` with password `U9dH9HT4pWS`



This method of setting the password at deployment is insecure. Only use this command when setting up Postgres for a sandbox deployment to use Astra alpha program. We do not recommend this for a production environment.

After the Helm chart is deployed, it will be automatically detected by Astra, at which point you can register the app with Astra. Please note that for the Astra alpha program, it can take up to 5 minutes for applications to show up in the Discovered Applications list after being installed.

## Copyright Information

Copyright © 2020 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.

RESTRICTED RIGHTS LEGEND: Use, duplication, or disclosure by the government is subject to restrictions as set forth in subparagraph (c)(1)(ii) of the Rights in Technical Data and Computer Software clause at DFARS 252.277-7103 (October 1988) and FAR 52-227-19 (June 1987).

## 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.