



# Replace NIC

## StorageGRID Appliances

NetApp  
June 07, 2024

# Table of Contents

- Replace NIC ..... 1
- Replace internal NIC in the SGF6112 or SG6100-CN ..... 1
- Replace external NIC in the SG6100-CN ..... 8

# Replace NIC

## Replace internal NIC in the SGF6112 or SG6100-CN

You might need to replace an internal Network Interface Card (NIC) in the SGF6112 or SG6100-CN if it is not functioning optimally or if it has failed.

Use these procedures to:

- Remove the NIC
- Reinstall the NIC

### Remove the internal NIC

#### Before you begin

- You have the correct replacement NIC.
- You have determined the [location of the NIC to replace](#).
- You have [physically located the SGF6112 appliance or SG6100-CN controller](#) where you are replacing the NIC in the data center.



A [controlled shutdown of the appliance](#) is required before removing the appliance from the rack.

- You have disconnected all cables and [removed the appliance cover](#).

#### About this task

To prevent service interruptions, confirm that all other Storage Nodes are connected to the grid before starting the Network Interface Card (NIC) replacement or replace the NIC during a scheduled maintenance window when periods of service disruption are acceptable. See the information about [monitoring node connection states](#).

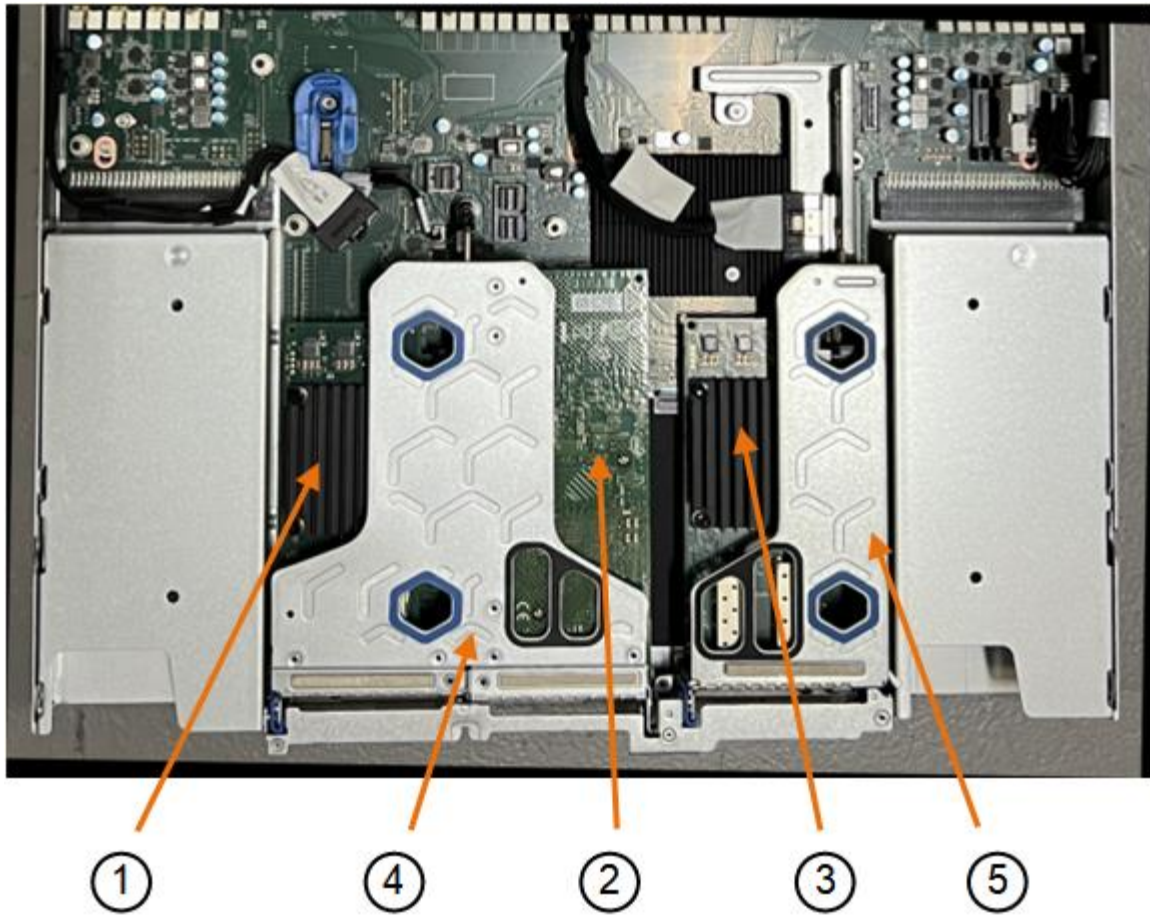


If you have ever used an ILM rule that creates only one copy of an object, you must replace the NIC during a scheduled maintenance window because you might temporarily lose access to those objects during this procedure. See information about [why you should not use single-copy replication](#).

#### Steps

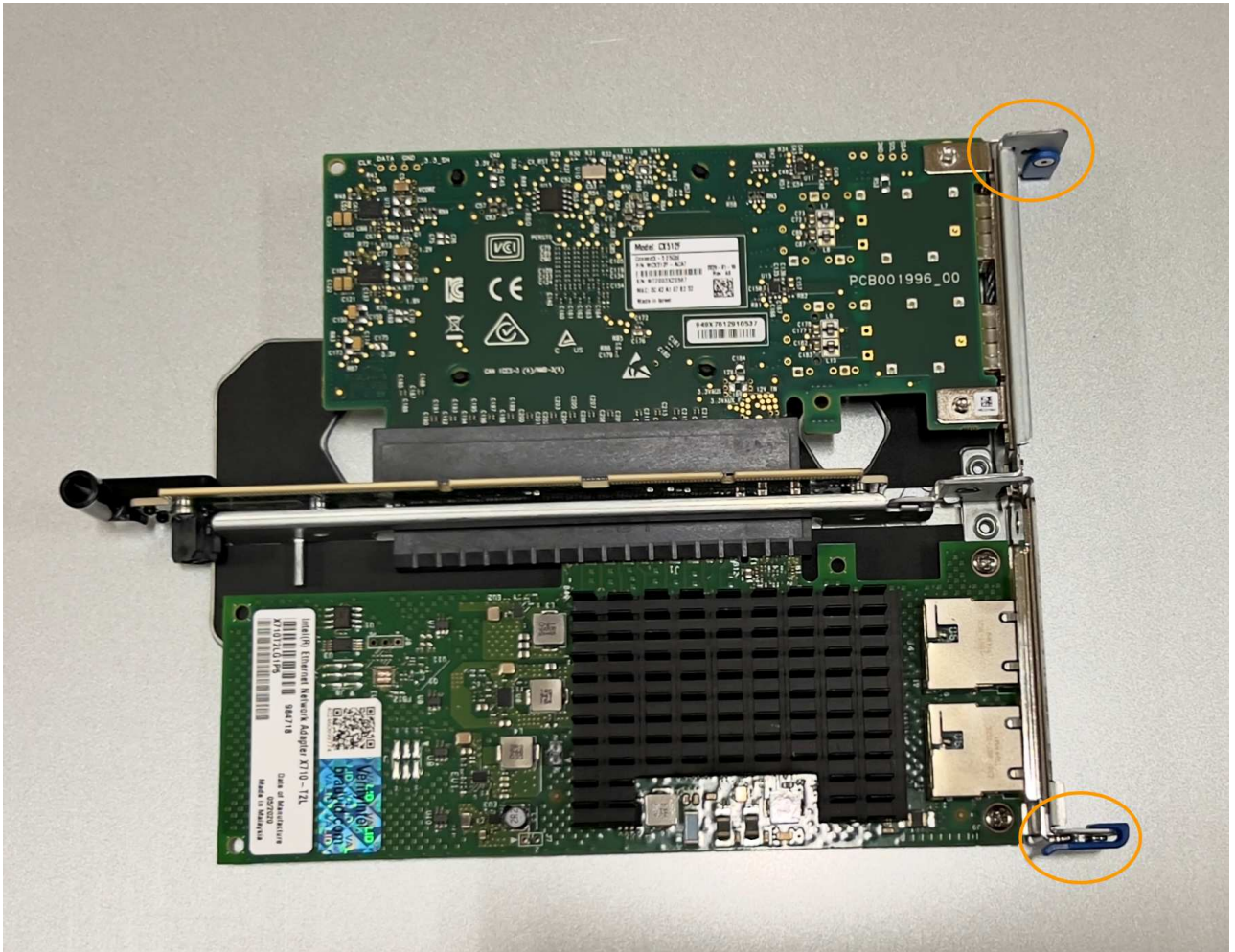
1. Wrap the strap end of the ESD wristband around your wrist, and secure the clip end to a metal ground to prevent static discharge.
2. Locate the riser assembly that contains the NIC at the rear of the appliance.

The three NICs in the appliance are in two riser assemblies in the positions in the chassis shown in the photograph (Rear of appliance with top cover removed shown):



	Device or Part name	Description
1	hic1/hic2	10/25-GbE Ethernet network ports in the two-port riser assembly
2	mtc1/mtc2	1/10GBase-T management ports in the two-port riser assembly
3	hic3/hic4	10/25-GbE Ethernet network ports in the one-port riser assembly
4	Two-slot riser assembly	Support for one of the 10/25-GbE NICs and the 1/10GBase-T NIC
5	One-slot riser assembly	Support for one of the 10/25-GbE NICs

3. Grasp the riser assembly with the failed NIC through the blue-marked holes and carefully lift it upwards. Move the riser assembly toward the front of the chassis as you lift it to allow the external connectors in its installed NICs to clear the chassis.
4. Place the riser on a flat anti-static surface with the metal frame side down to access the NICs.
  - **Two-slot riser assembly with two NICs**



◦ One-slot riser assembly with one NIC



5. Open the blue latch (circled) on the NIC to be replaced and carefully remove the NIC from the riser assembly. Rock the NIC slightly to help remove the NIC from its connector. Don't use excessive force.
6. Place the NIC on a flat anti-static surface.

## Reinstall the internal NIC

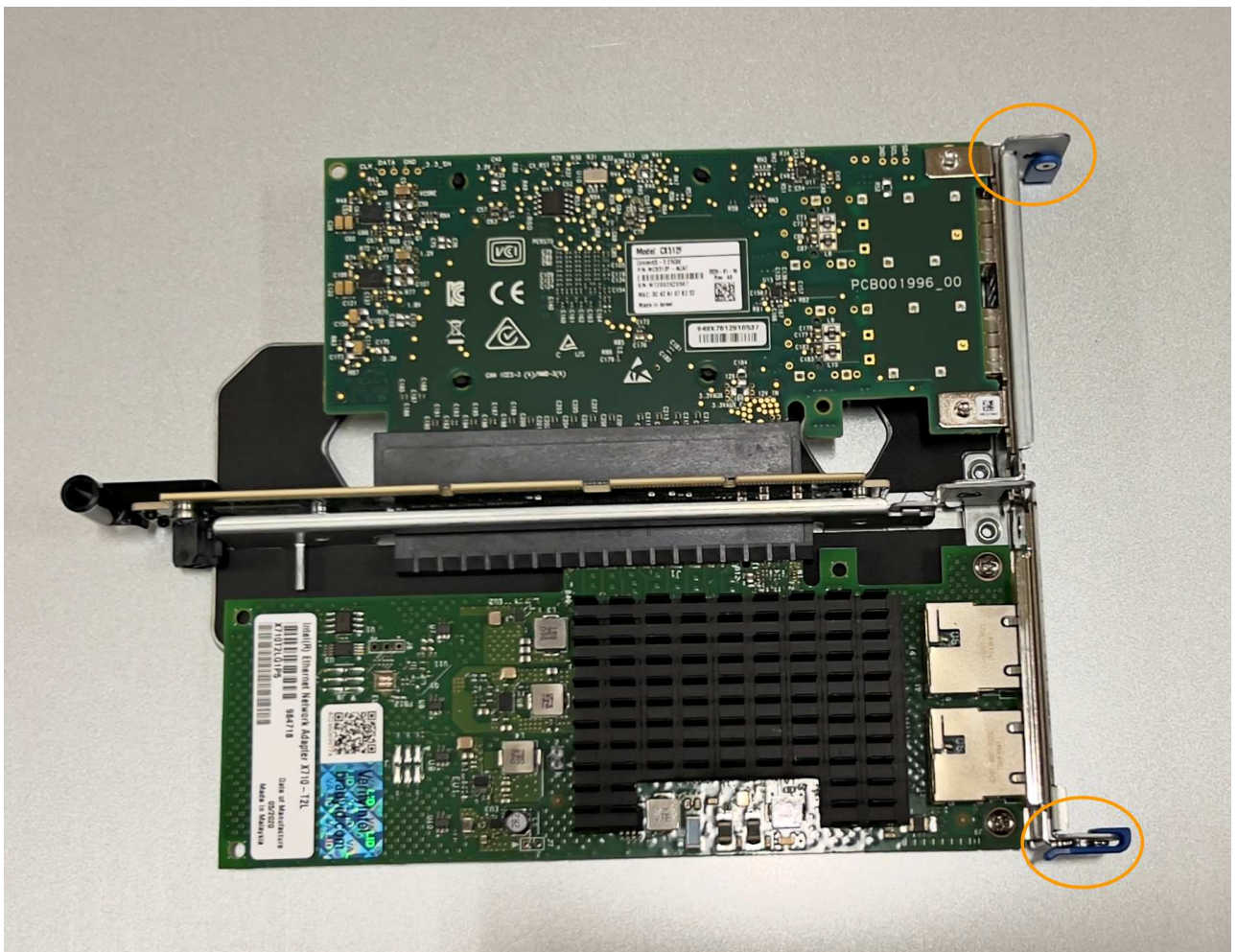
Install the replacement NIC into the same location as the one that was removed.

### Before you begin

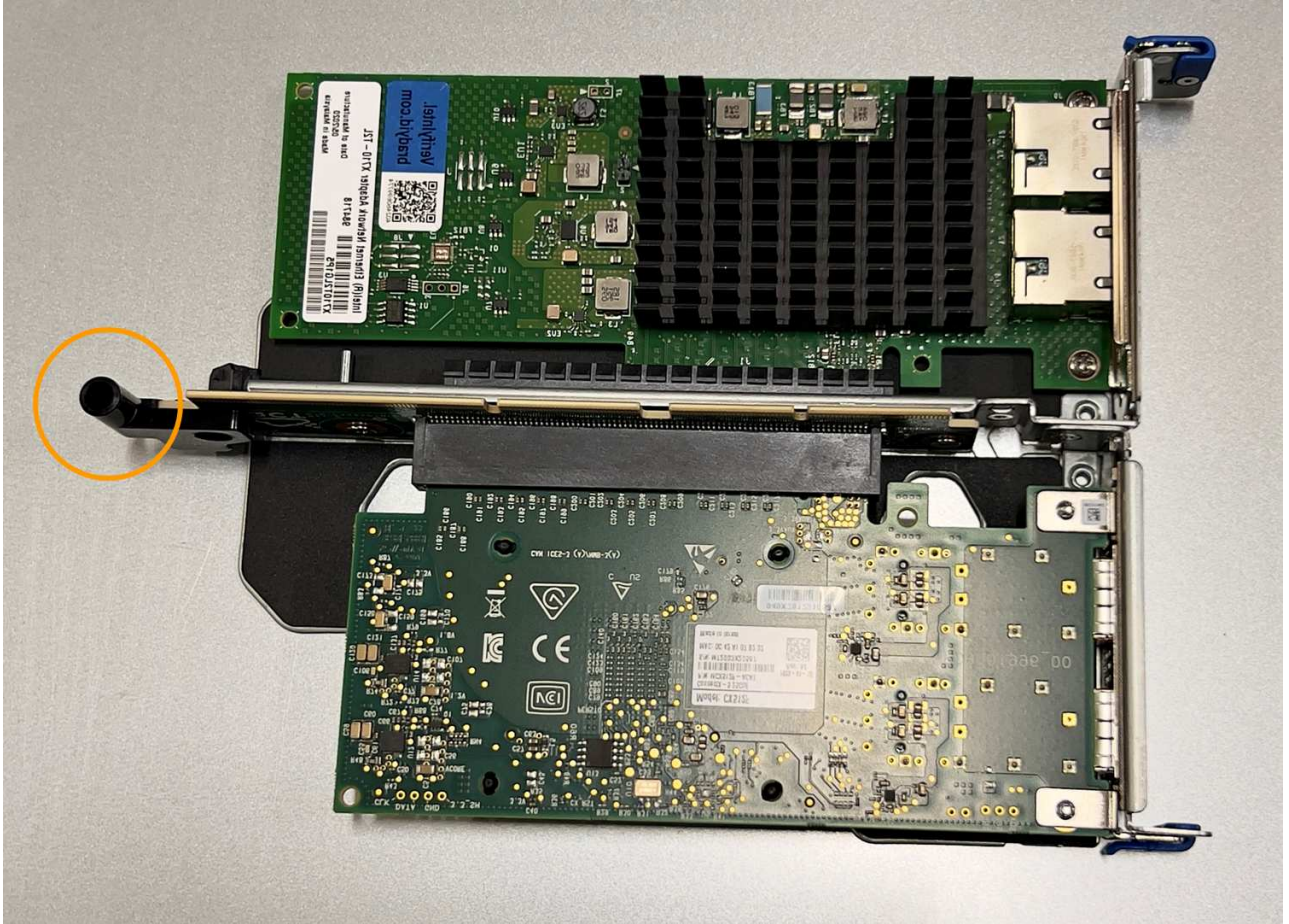
- You have the correct replacement NIC.
- You have removed the existing failed NIC.

### Steps

1. Wrap the strap end of the ESD wristband around your wrist, and secure the clip end to a metal ground to prevent static discharge.
2. Remove the replacement NIC from its packaging.
3. If you are replacing one of the NICs in the two-slot riser assembly, do the following:
  - a. Ensure the blue latch is in the open position.
  - b. Align the NIC with its connector on the riser assembly. Carefully press the NIC into the connector until it is fully seated, as shown in the photograph, and then close the blue latch.



- c. Locate the alignment hole on the two-slot riser assembly (circled) that aligns with a guide pin on the system board to ensure correct riser assembly positioning.

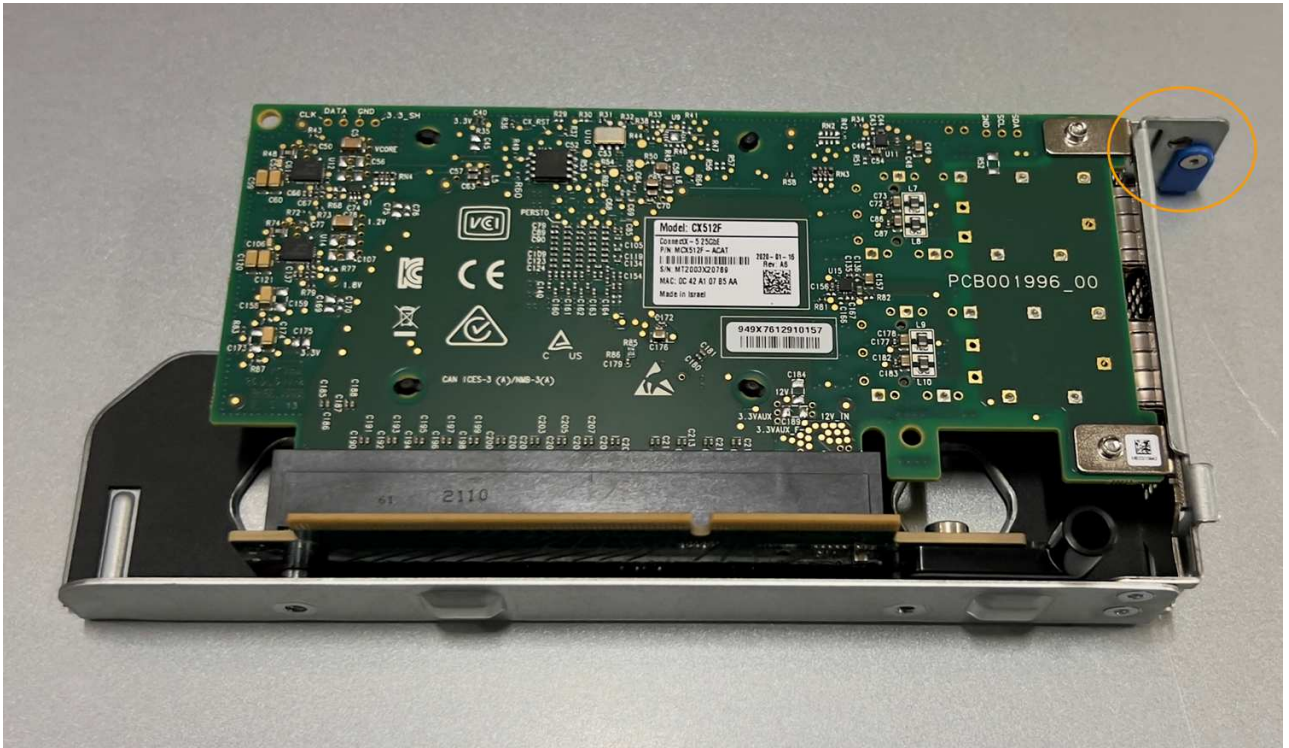


- d. Locate the guide pin on the system board

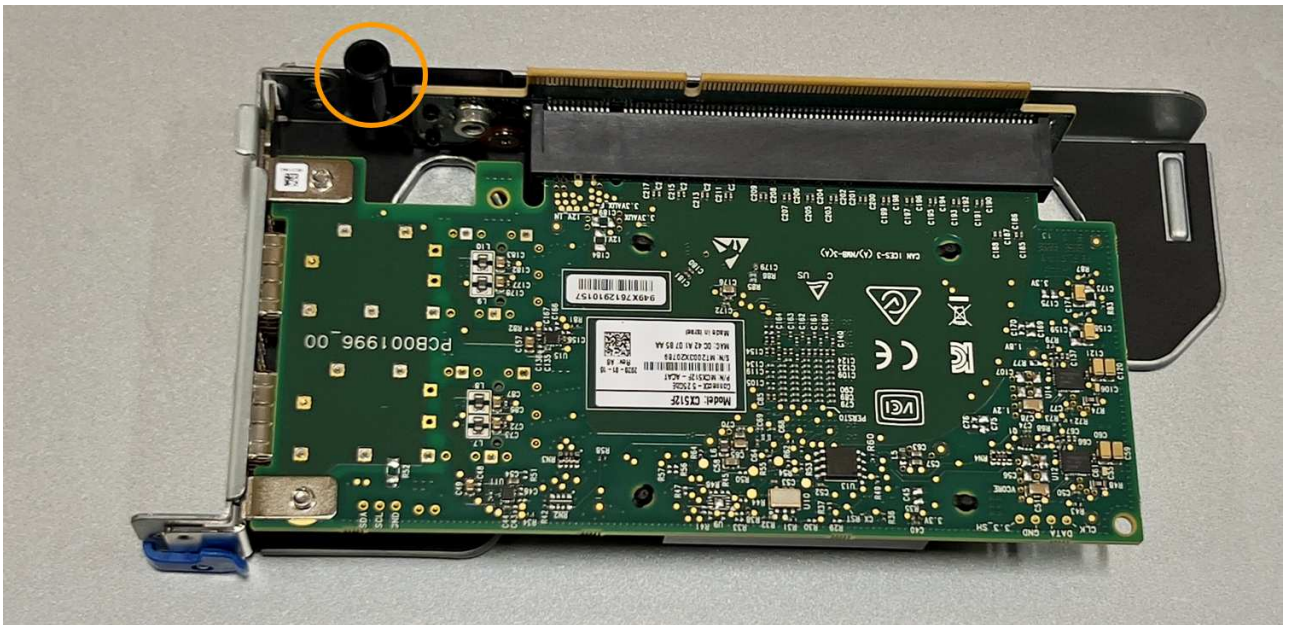


- e. Position the riser assembly in the chassis, making sure that it aligns with the connector on the system board and guide pin.
  - f. Carefully press the two-slot riser assembly in place along its center line, next to the blue-marked holes, until it is fully seated.
4. If you are replacing the NIC in the one-slot riser assembly, do the following:
- a. Ensure the blue latch is in the open position.
  - b. Align the NIC with its connector on the riser assembly. Carefully press the NIC into the connector until it is fully seated as shown in the photograph and close the blue latch.





- c. Locate the alignment hole on the one-slot riser assembly (circled) that aligns with a guide pin on the system board to ensure correct riser assembly positioning.



- d. Locate the guide pin on the system board



- e. Position the one-slot riser assembly in the chassis, making sure that it aligns with the connector on the system board and guide pin.
  - f. Carefully press the one-slot riser assembly in place along its center line, next to the blue-marked holes, until it is fully seated.
5. Remove the protective caps from the NIC ports where you will be reinstalling cables.

#### After you finish

If you have no other maintenance procedures to perform in the appliance, reinstall the appliance cover, return the appliance to the rack, attach cables, and apply power.

After replacing the part, return the failed part to NetApp, as described in the RMA instructions shipped with the kit. See the [Part Return & Replacements](#) page for further information.

## Replace external NIC in the SG6100-CN

You might need to replace an external Network Interface Card (NIC) in the SG6100-CN if it is not functioning optimally or if it has failed.

Use these procedures to:

- Remove the NIC
- Reinstall the NIC

#### Before you begin

- You have the correct replacement NIC.
- You have determined the [location of the NIC to replace](#).



- You have [physically located the SG6100-CN controller](#) where you are replacing the NIC in the data center.



Hot-swapping is **not** supported for this procedure. A [controlled shutdown of the appliance](#) is required before disconnecting cables and removing the NIC.

- You have disconnected all cables, including the two power cords on the SG6100-CN.
- **Optional:** You have removed the controller from the rack if required by local regulations. Removal is not required as the the NIC is externally accessible.

### About this task

To prevent service interruptions, confirm that all other Storage Nodes are connected to the grid before started the Network Interface Card (NIC) replacement or replace the NIC during a scheduled maintenance window when periods of service disruption are acceptable. See information about [monitoring node connection states](#).



If you have ever used an ILM rule that creates only one copy of an object, you must replace the NIC during a scheduled maintenance window because you might temporarily lose access to those objects during this procedure. See information about [why you should not use single-copy replication](#).

## Remove the external NIC

### Steps

1. Wrap the strap end of an ESD wristband around your wrist, and secure the clip end to a metal ground to prevent static discharge.
2. Use a screwdriver to loosen the screw on the faceplate of the NIC.



Hot-swapping is **not** supported for this procedure. The controller must be disconnected from power before removing the NIC.

3. Carefully remove the NIC by pulling on the faceplate handle. Place the NIC on a flat, anti-static surface.

## Reinstall the external NIC

### Steps

1. Wrap the strap end of an ESD wristband around your wrist, and secure the clip end to a metal ground to prevent static discharge.
2. Remove the replacement NIC from its packaging.
3. Align the NIC with the opening in the chassis and carefully push it in until fully seated.
4. Tighten the screw on the faceplate of the NIC.

### After you finish

If you have no other maintenance procedures to perform in the appliance, return the appliance to the rack if it was removed, attach cables, and apply power.

After replacing the part, return the failed part to NetApp, as described in the RMA instructions shipped with the kit. See the [Part Return & Replacements](#) page for further information.

## Copyright information

Copyright © 2024 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.