

# Customer Service Guide

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### **Hardware**

**July 2020**

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## Preface

This guide explains how to replace the Customer Replaceable Units (CRU).

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**See** The Bull support web site for the most up-to-date product information, documentation, firmware updates, software fixes and service offers:  
<http://support.bull.com>

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**Important** **ATTENTION: Please read carefully the safety instructions before you perform the procedures described in this manual.**  
***Multilingual Safety Notices Guide***

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## Intended Readers

This guide is intended for use by administrators and operators.



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## Chapter 1. Servicing a network antenna

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**Important** **ATTENTION:** Please read carefully the safety instructions before you perform the procedures described in this manual.

*Multilingual Safety Notices Guide*

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**C004**  **CAUTION**

**C004:**

**Static electricity can damage the server and other electronic devices. To avoid damage, keep static-sensitive devices in their static-protective packages until you are ready to install them.**

**To reduce the possibility of damage from electrostatic discharge, observe the following precautions:**

**Limit your movement. Movement can cause static electricity to build up around you.**

**Wear an electrostatic-discharge wrist strap.**

**Handle the device carefully, holding it by its edges or its frame.**

**Do not touch solder joints, pins, or exposed circuitry.**

**Do not leave the device where others can handle and damage it.**

**While the device is still in its static-protective package, touch it to an unpainted metal surface on the outside of the server for at least 2 seconds. This drains static electricity from the package and from your body.**

**Remove the device from its package and install it directly into the server without setting down the device. If it is necessary to set down the device, put it back into its static-protective package. Do not place the device on the server cover or on a metal surface.**

**Take additional care when you handle devices during cold weather.**

**Heating reduces indoor humidity and increases static electricity.**

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**See** BullSequana Edge Description Guide, 86 A1 65FR to locate the antenna.

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## 1.1. Removing a network antenna

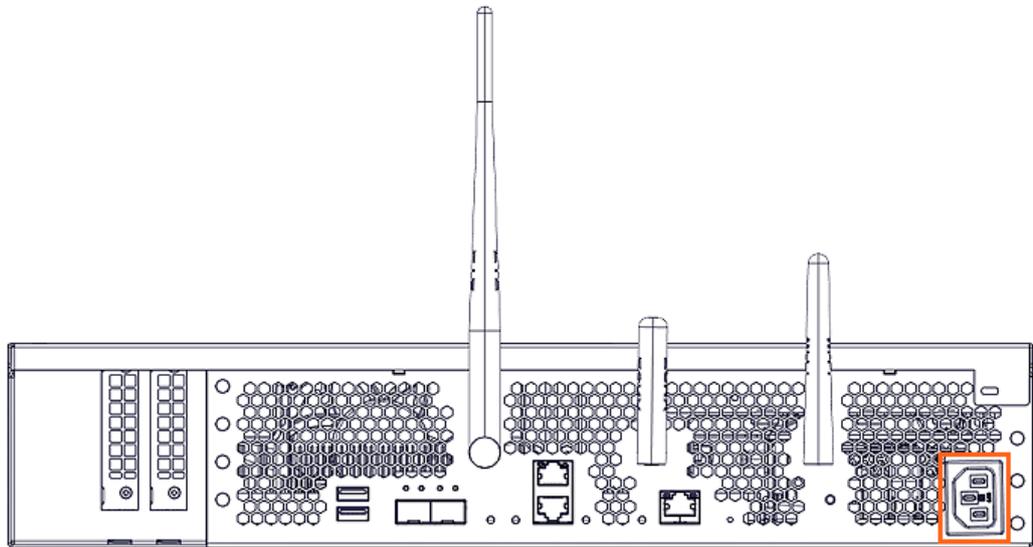
### Required Tools

None

### Procedure

1. **Unpack the new component on a clean ESD-protected work surface**
2. **Power off the server**
3. **Disconnect the power supply cable**

 **Rear view**



4. **Remove the aesthetic top cover if the aesthetic covers are present**

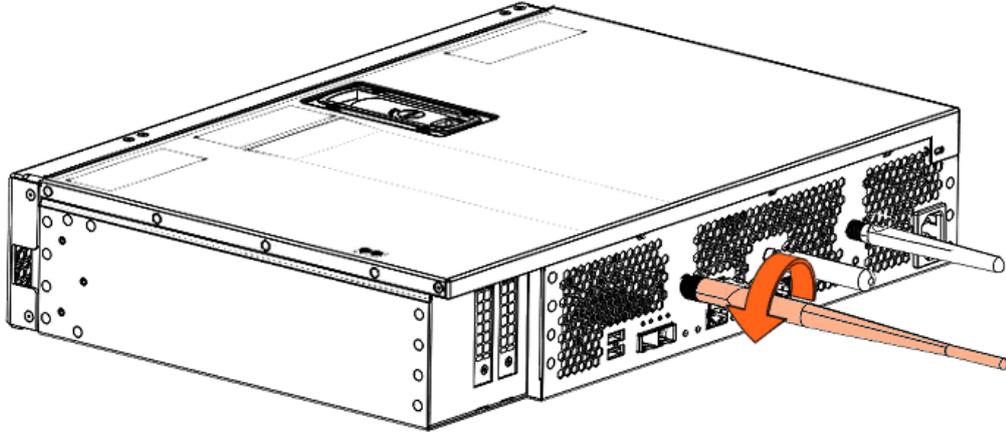
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**See** [Appendix A Servicing the top aesthetic cover](#)

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## 5. Remove the external antenna

 Rear view



## 1.2. Installing a network antenna

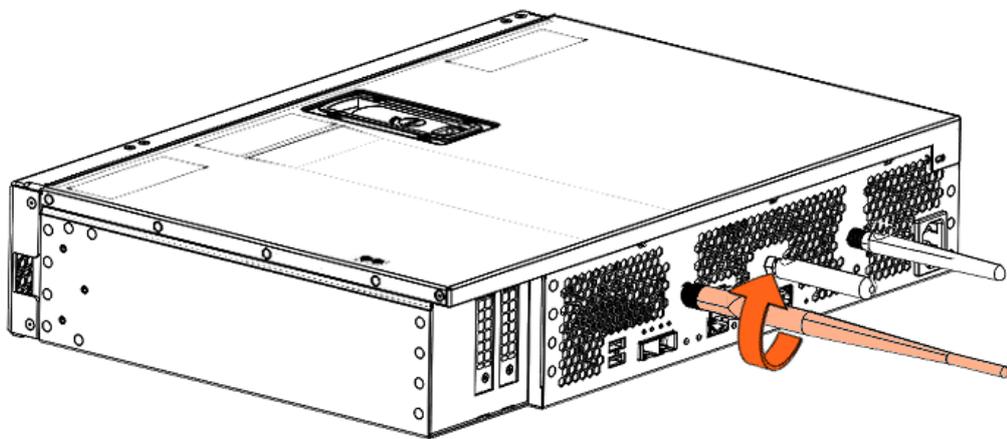
### Required Tools

None

### Procedure

1. Take hold of the new component
2. Install the external antenna

 Rear view



3. Install the aesthetic top cover if the aesthetic covers are present

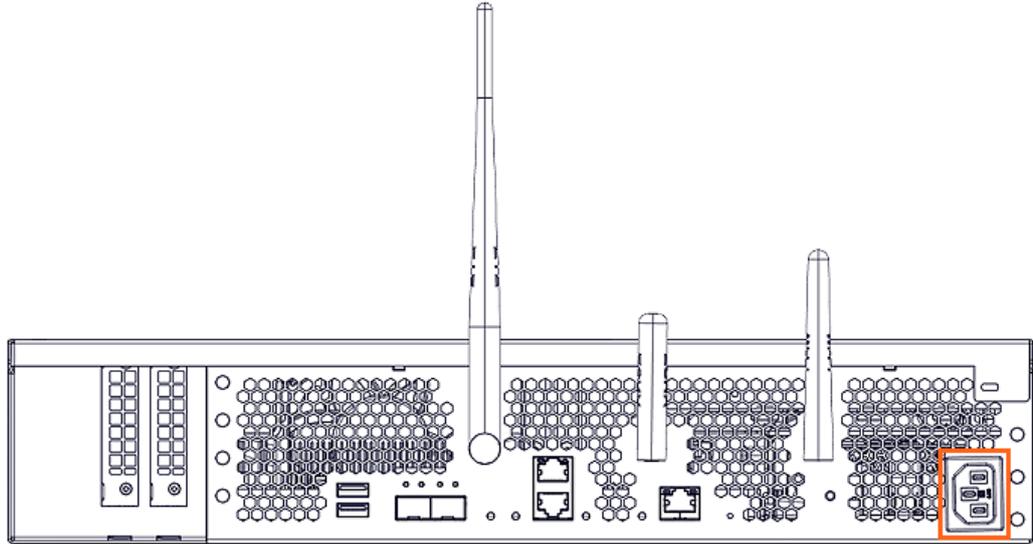
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**See** [Appendix A Servicing the top aesthetic cover](#)

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#### 4. Connect the power supply cable

 Rear view



#### 5. Power on the server



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## Chapter 2. Servicing a fan

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**Important ATTENTION:** Please read carefully the safety instructions before you perform the procedures described in this manual.

*Multilingual Safety Notices Guide*

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**C004**  **CAUTION**

**C004:**

**Static electricity can damage the server and other electronic devices. To avoid damage, keep static-sensitive devices in their static-protective packages until you are ready to install them.**

**To reduce the possibility of damage from electrostatic discharge, observe the following precautions:**

**Limit your movement. Movement can cause static electricity to build up around you.**

**Wear an electrostatic-discharge wrist strap.**

**Handle the device carefully, holding it by its edges or its frame.**

**Do not touch solder joints, pins, or exposed circuitry.**

**Do not leave the device where others can handle and damage it.**

**While the device is still in its static-protective package, touch it to an unpainted metal surface on the outside of the server for at least 2 seconds. This drains static electricity from the package and from your body.**

**Remove the device from its package and install it directly into the server without setting down the device. If it is necessary to set down the device, put it back into its static-protective package. Do not place the device on the server cover or on a metal surface.**

**Take additional care when you handle devices during cold weather.**

**Heating reduces indoor humidity and increases static electricity.**

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**See** BullSequana Edge Description Guide, 86 A1 65FR to locate the fan.

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## 2.1. Removing a fan

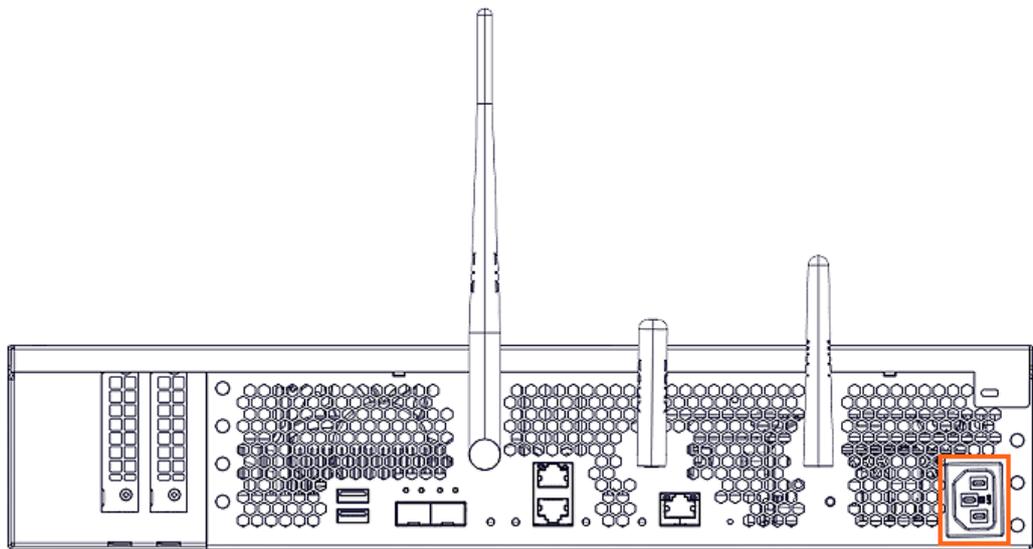
### Required Tools

None

### Procedure

1. **Unpack the new component on a clean ESD-protected work surface**
2. **Power off the server**
3. **Disconnect the power supply cable**

 **Rear view**



4. **Remove the top aesthetic cover if aesthetic covers are present**

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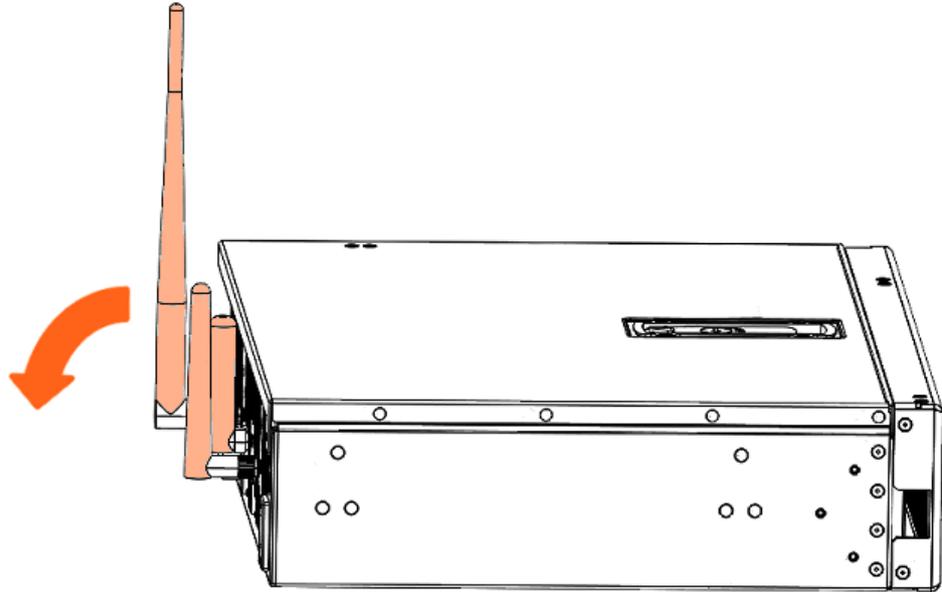
**See** [Appendix A Servicing the top aesthetic cover](#)

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## 5. Remove the cover

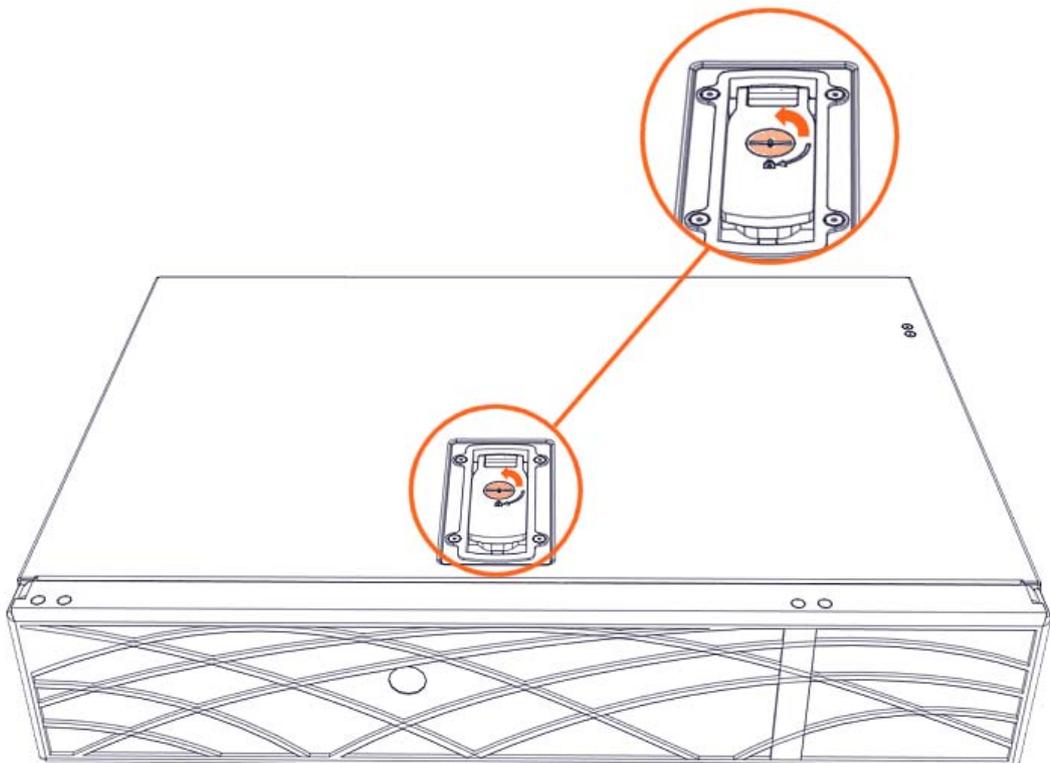
1. Rotate the external antennas to the horizontal position.

 **Side view**



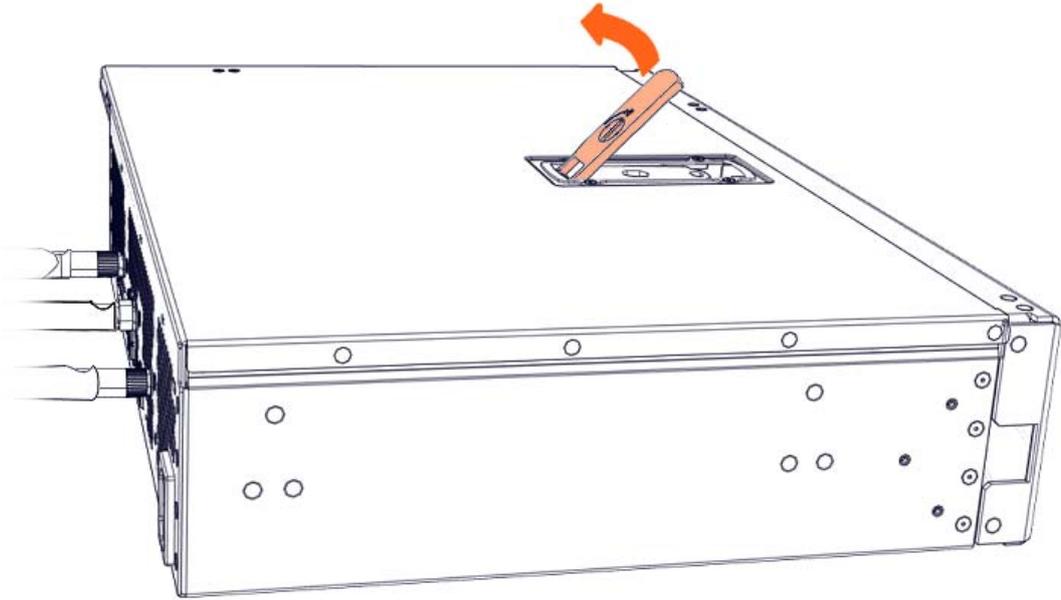
2. Unlock the cover latch.

 **Front view**



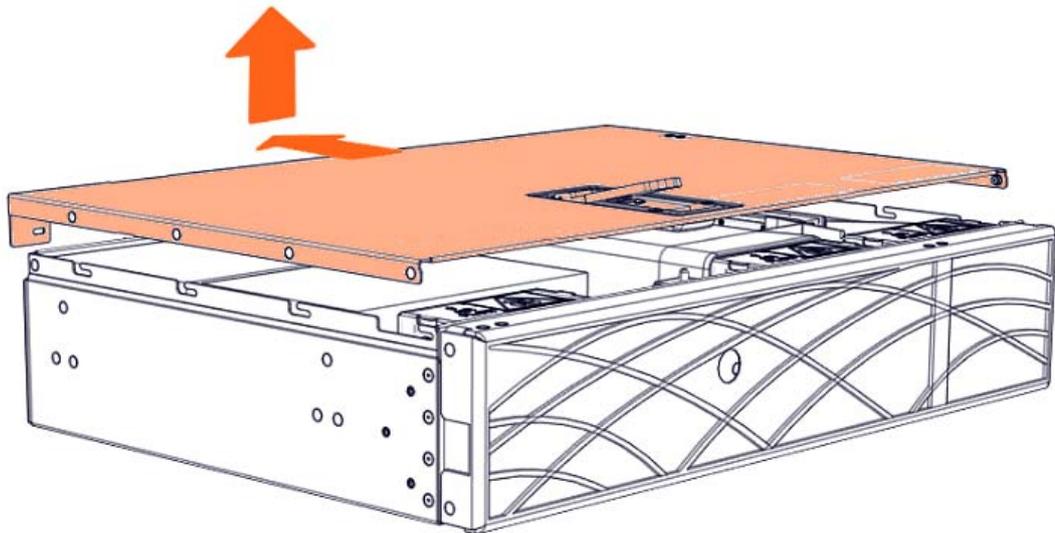
3. Pull the latch up.

 **Side view**



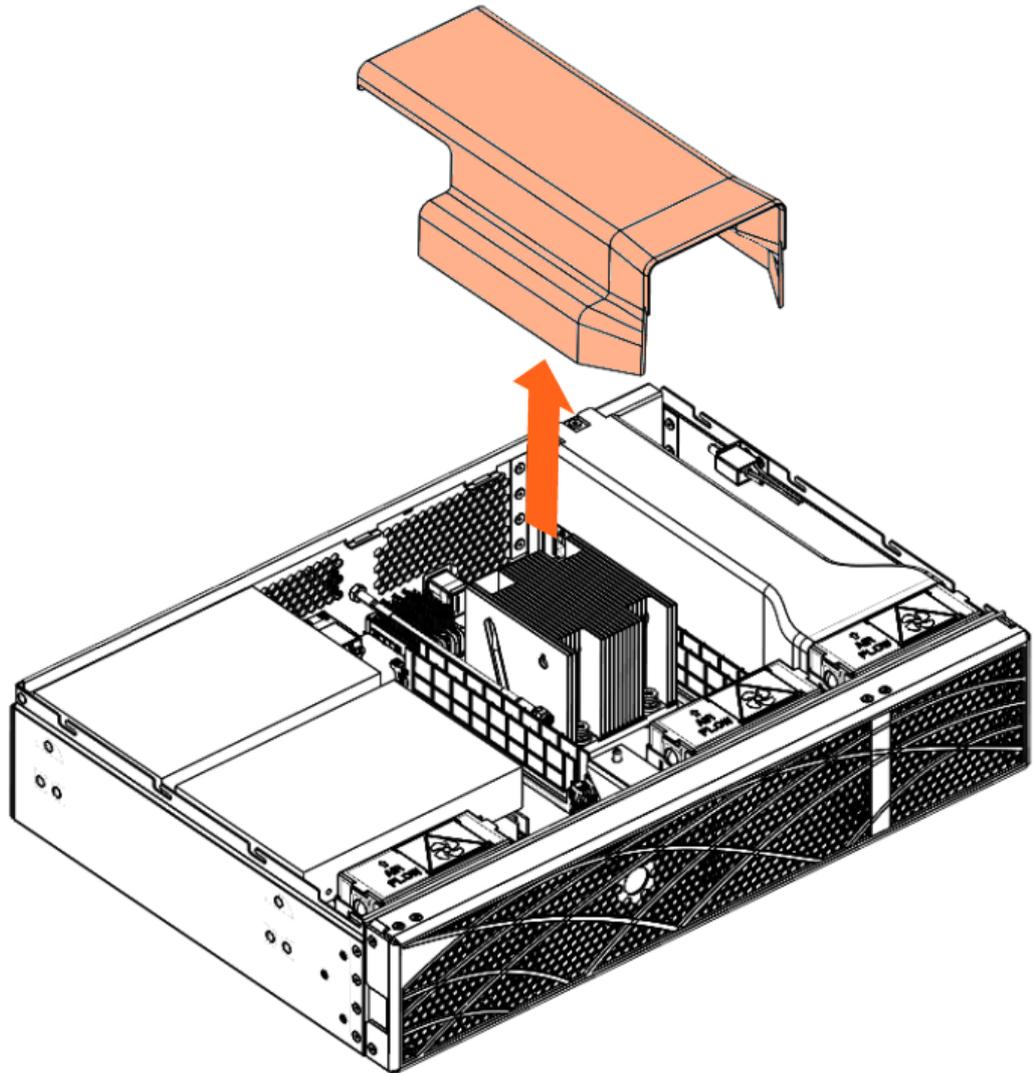
4. Remove the cover.

 **Front view**



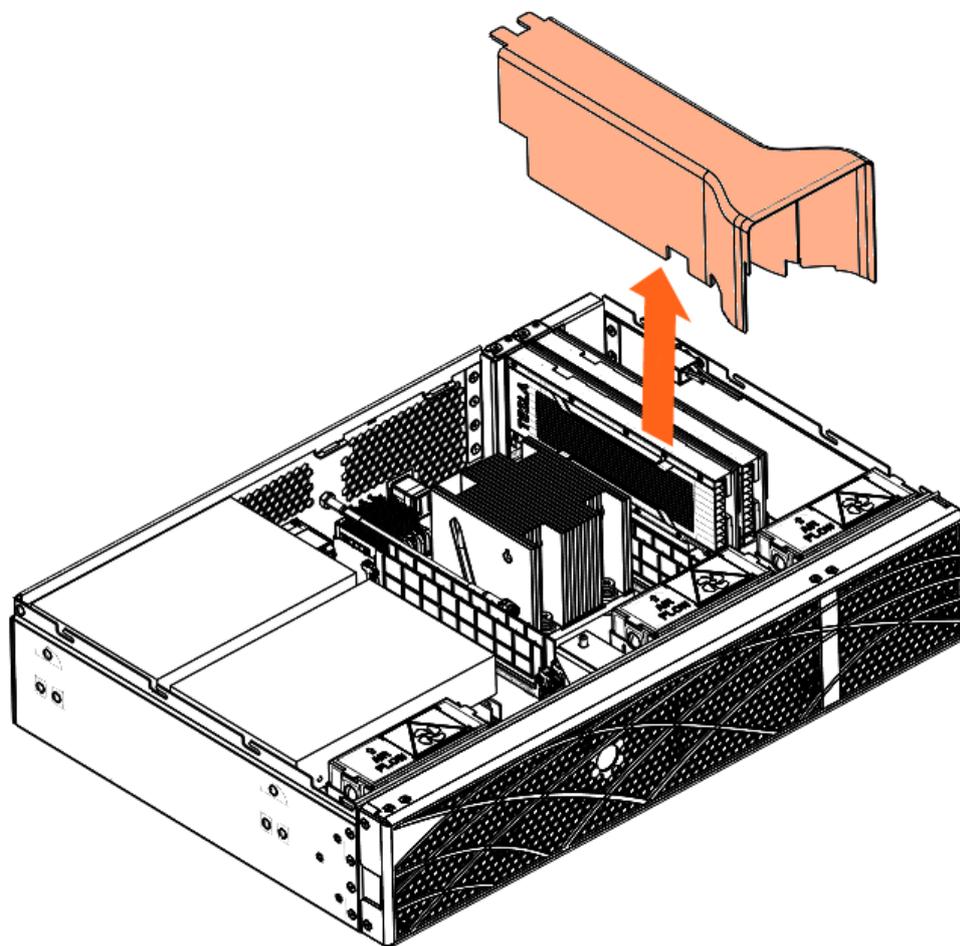
## 6. Remove the processor air duct

 Front view



**7. Remove the accelerator air duct if present**

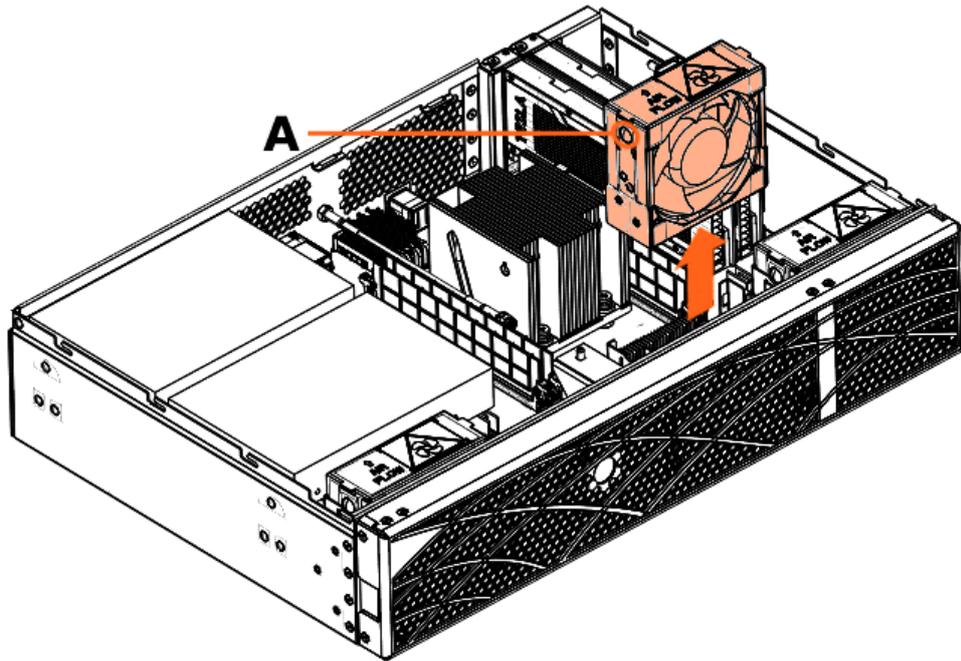
 **Front view**



## 8. Remove the fan

1. Disconnect the fan cable.
2. Press the fan latch (A) in.
3. Pull the fan up.

 **Front view**



## 2.2. Installing a fan

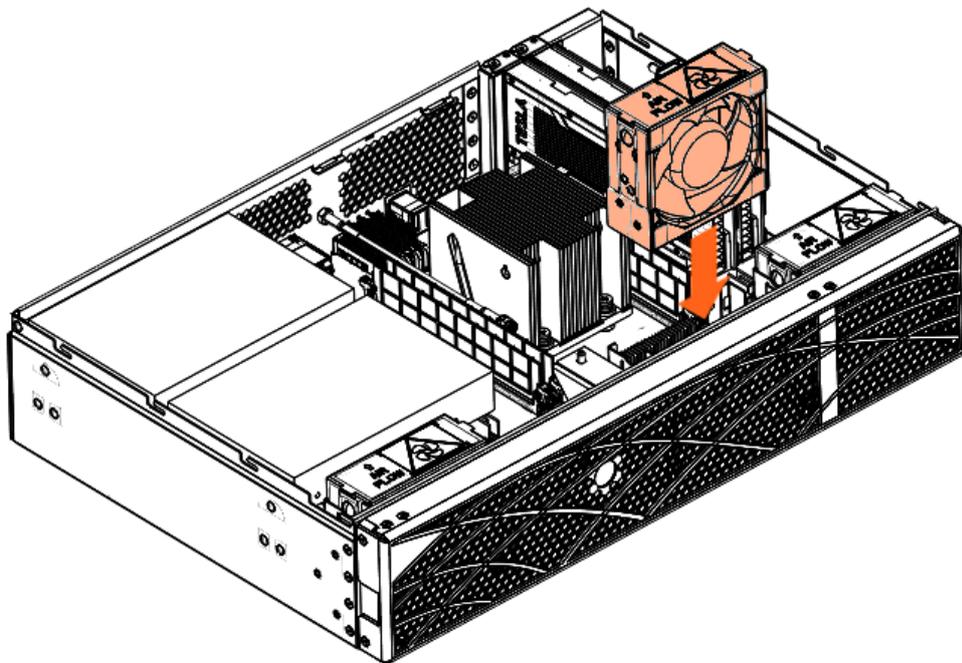
### Required Tools

None

### Procedure

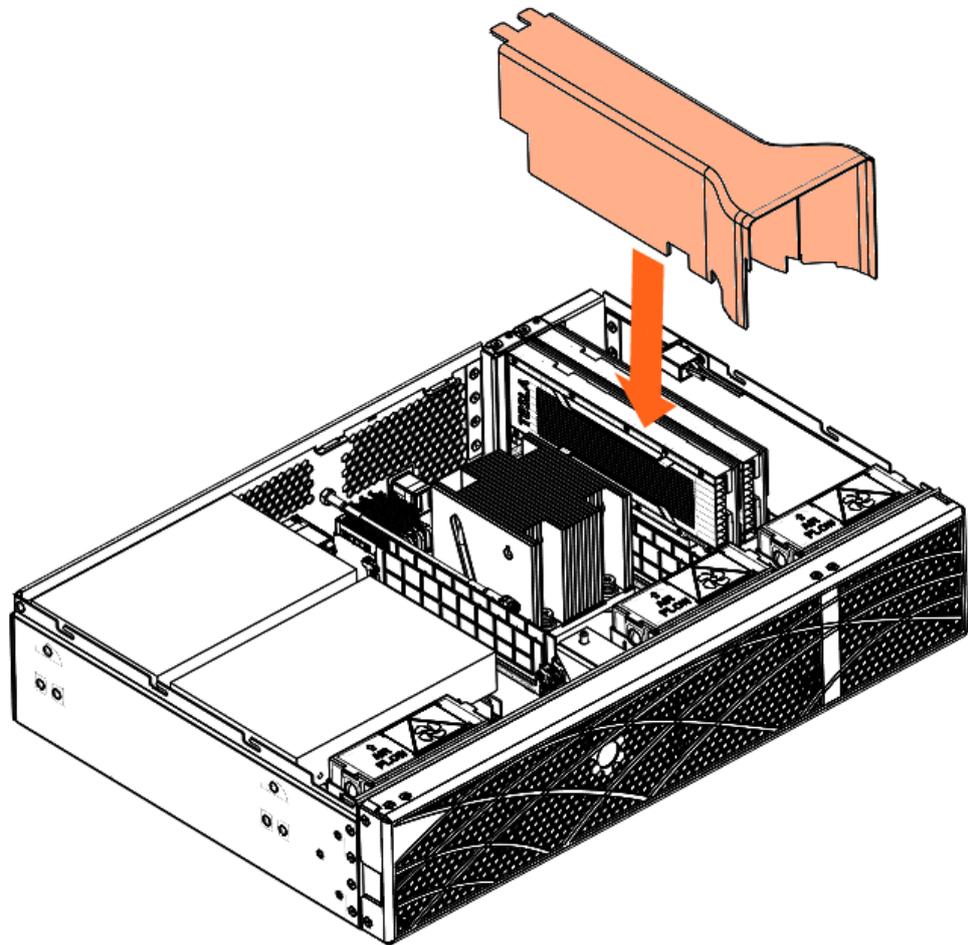
1. Take hold of the new component
2. Install the fan
  1. Put the fan into place.
  2. Connect the fan cable.

 Front view



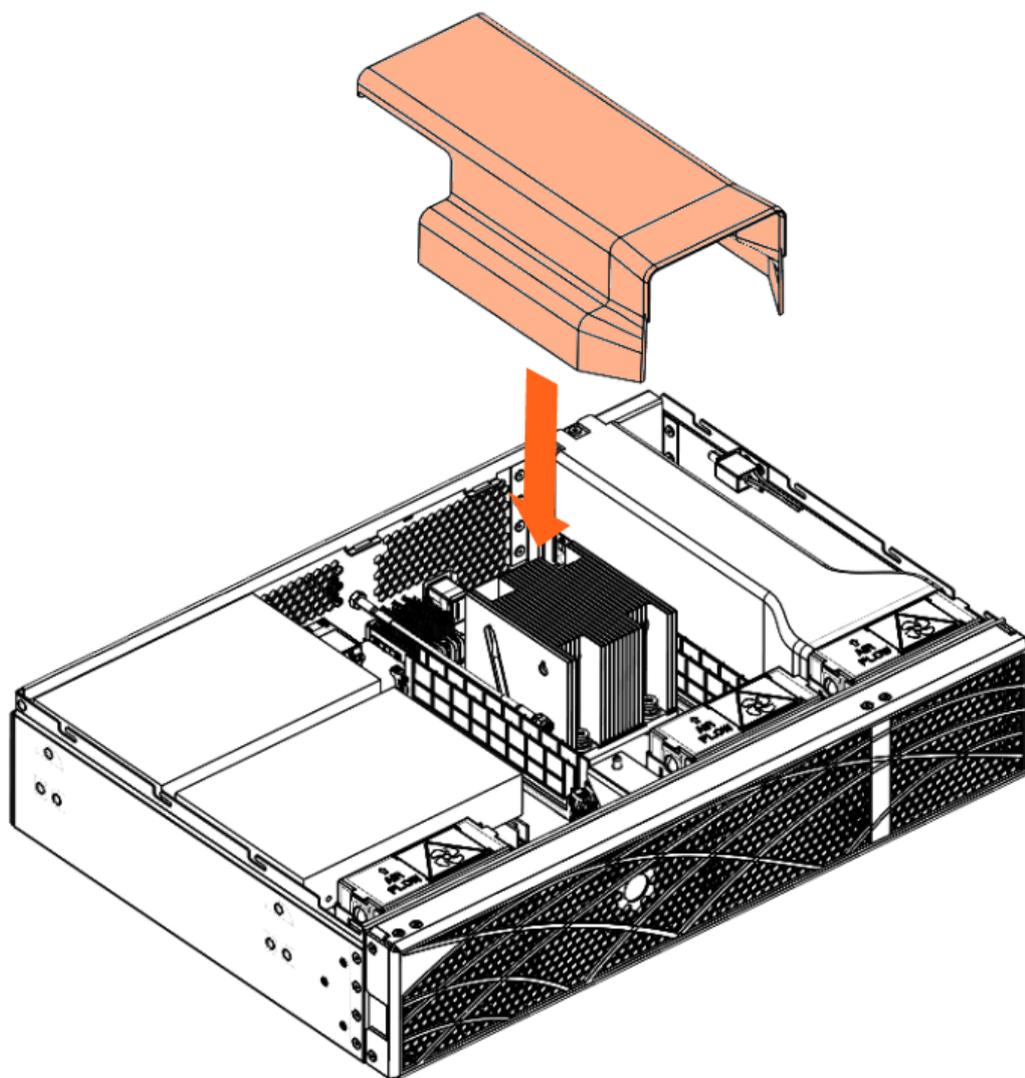
### 3. Install the accelerator air duct if present

 Front view



#### 4. Install the processor air duct

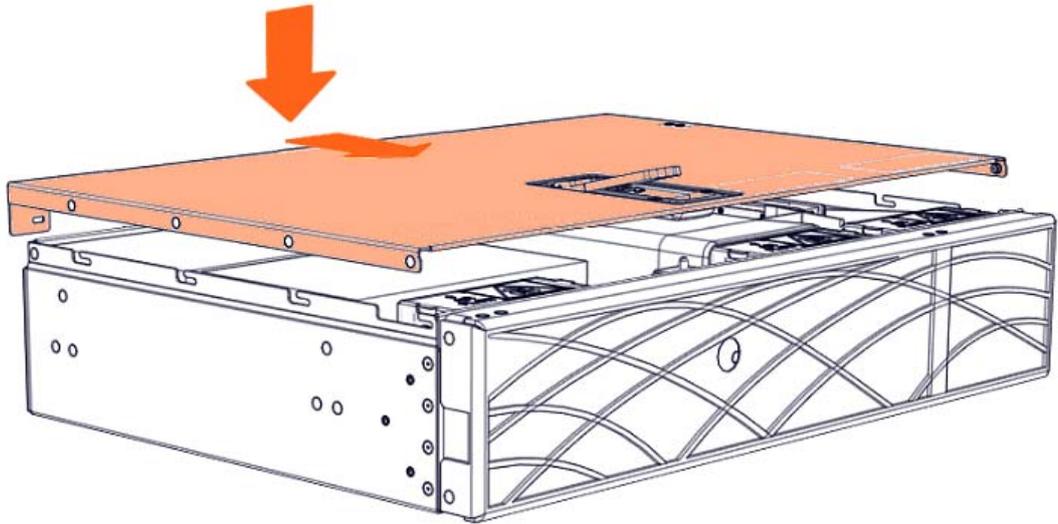
 Front view



## 5. Install the cover

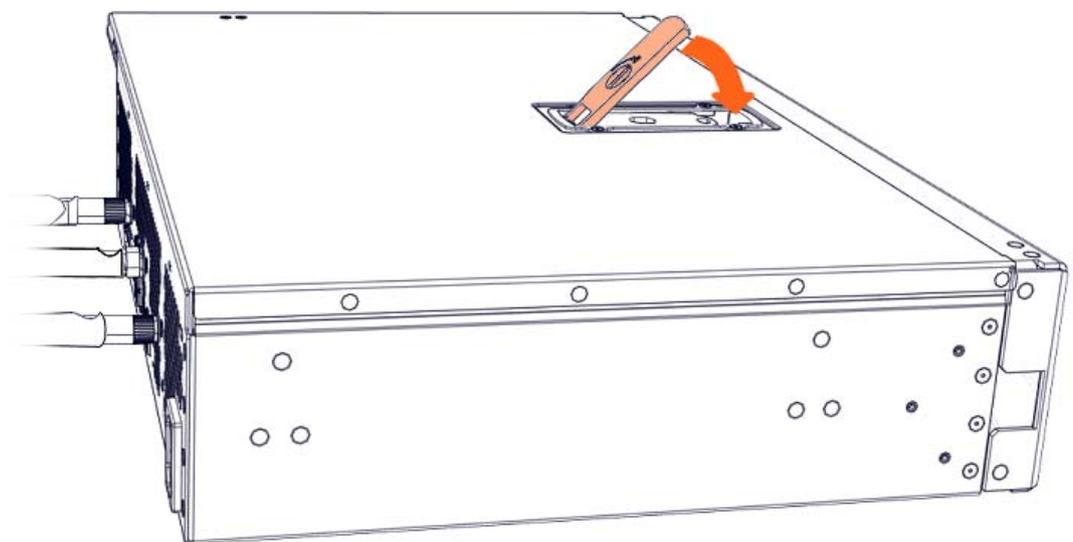
1. Put the cover into place.

 **Front view**



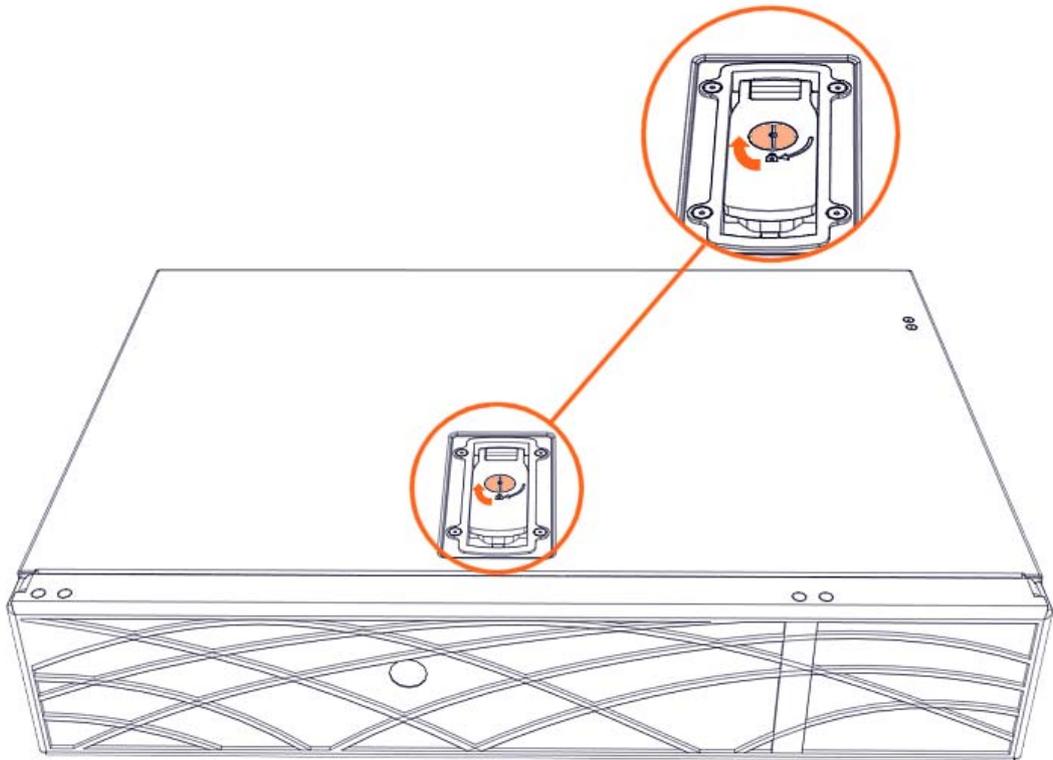
2. Close the latch.

 **Side view**



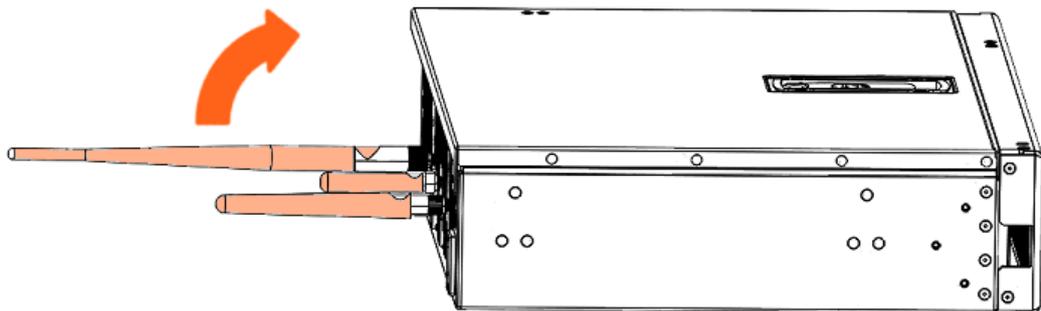
3. Lock the latch to secure the cover in place.

 **Front view**



4. Rotate the external antennas to the vertical position.

 **Side view**

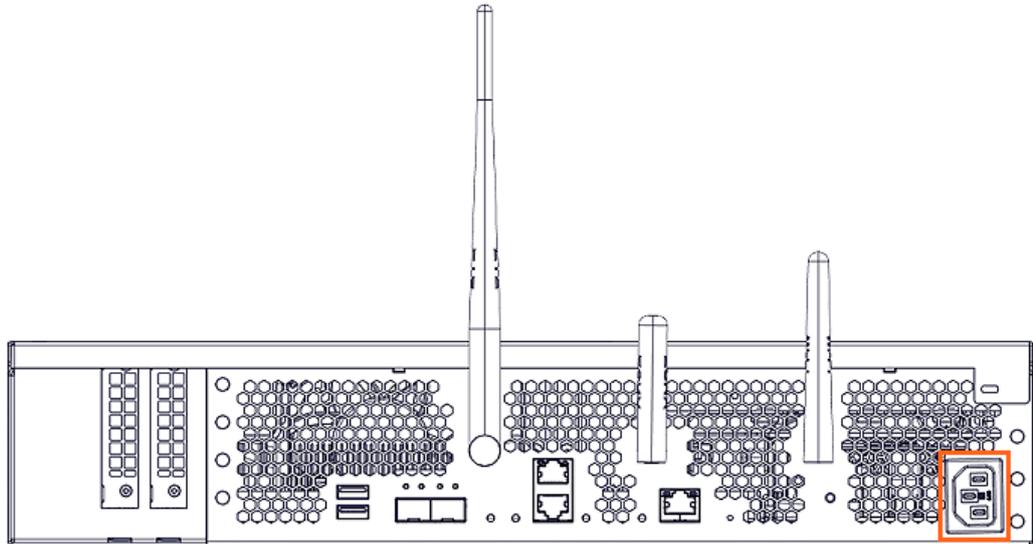


**6. Install the top aesthetic cover if aesthetic covers are present**

**See** [Appendix A Servicing the top aesthetic cover](#)

## 7. Connect the power supply cable

 Rear view



## 8. Power on the server



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## Chapter 3. Servicing the processor air duct

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**Important** **ATTENTION:** Please read carefully the safety instructions before you perform the procedures described in this manual.

*Multilingual Safety Notices Guide*

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**C004**  **CAUTION**

**C004:**

**Static electricity can damage the server and other electronic devices. To avoid damage, keep static-sensitive devices in their static-protective packages until you are ready to install them.**

**To reduce the possibility of damage from electrostatic discharge, observe the following precautions:**

**Limit your movement. Movement can cause static electricity to build up around you.**

**Wear an electrostatic-discharge wrist strap.**

**Handle the device carefully, holding it by its edges or its frame.**

**Do not touch solder joints, pins, or exposed circuitry.**

**Do not leave the device where others can handle and damage it.**

**While the device is still in its static-protective package, touch it to an unpainted metal surface on the outside of the server for at least 2 seconds. This drains static electricity from the package and from your body.**

**Remove the device from its package and install it directly into the server without setting down the device. If it is necessary to set down the device, put it back into its static-protective package. Do not place the device on the server cover or on a metal surface.**

**Take additional care when you handle devices during cold weather.**

**Heating reduces indoor humidity and increases static electricity.**

---

**See** BullSequana Edge Description Guide, 86 A1 65FR to locate the processor air duct.

---

## 3.1. Removing the processor air duct

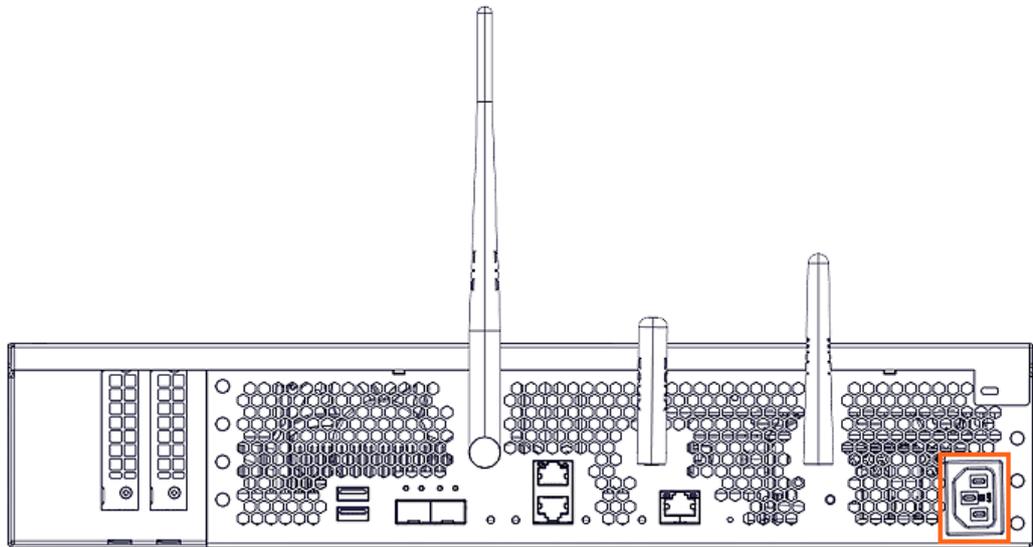
### Required Tools

None

### Procedure

1. **Unpack the new component on a clean ESD-protected work surface**
2. **Power off the server**
3. **Disconnect the power supply cable**

 **Rear view**



4. **Remove the top aesthetic cover if aesthetic covers are present**

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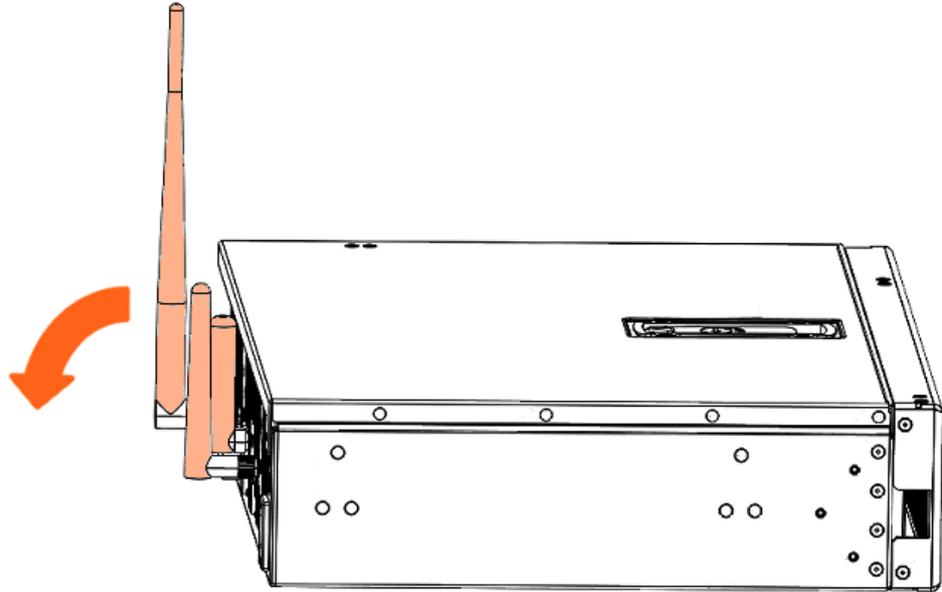
**See** [Appendix A Servicing the top aesthetic cover](#)

---

## 5. Remove the cover

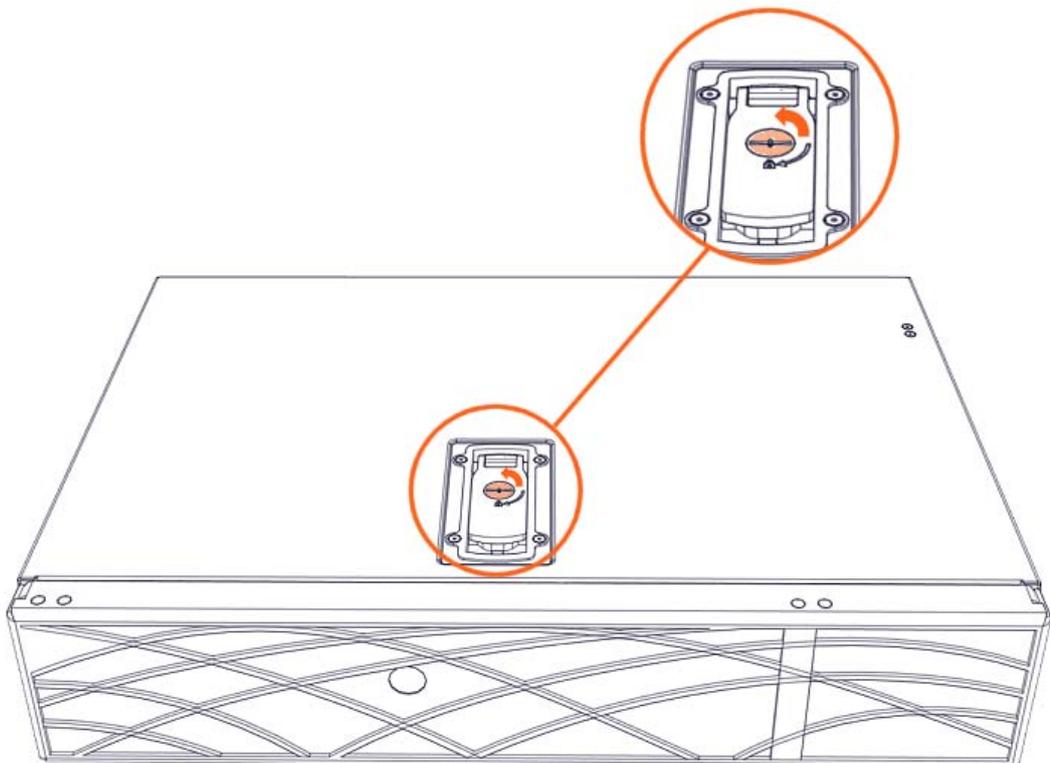
1. Rotate the external antennas to the horizontal position.

 **Side view**



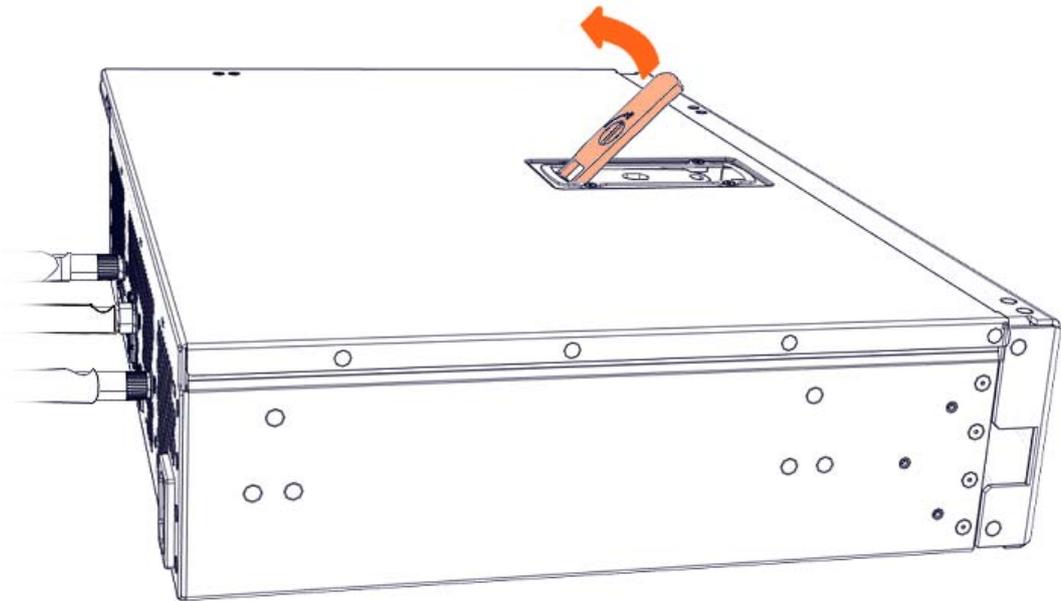
2. Unlock the cover latch.

 **Front view**



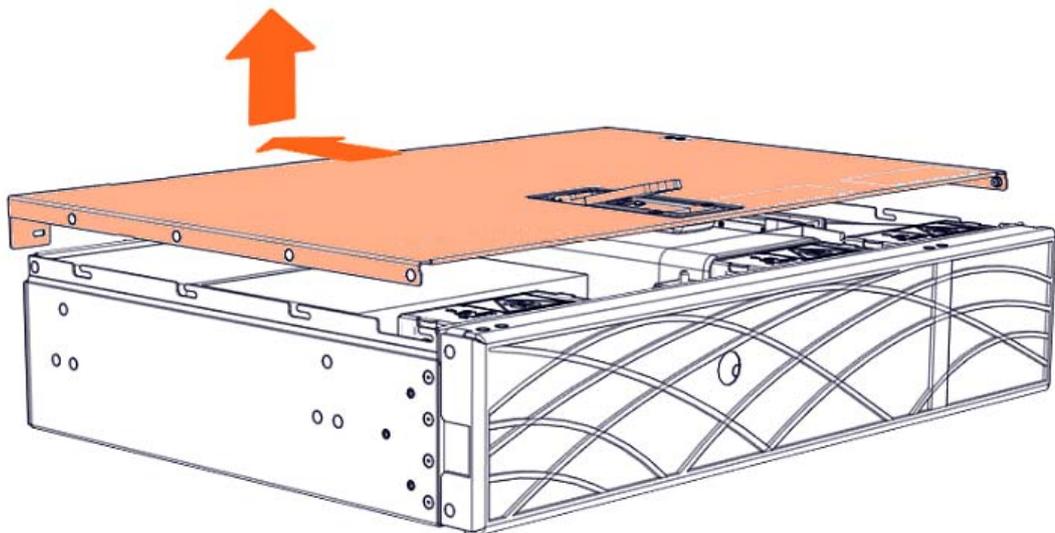
3. Pull the latch up.

 **Side view**



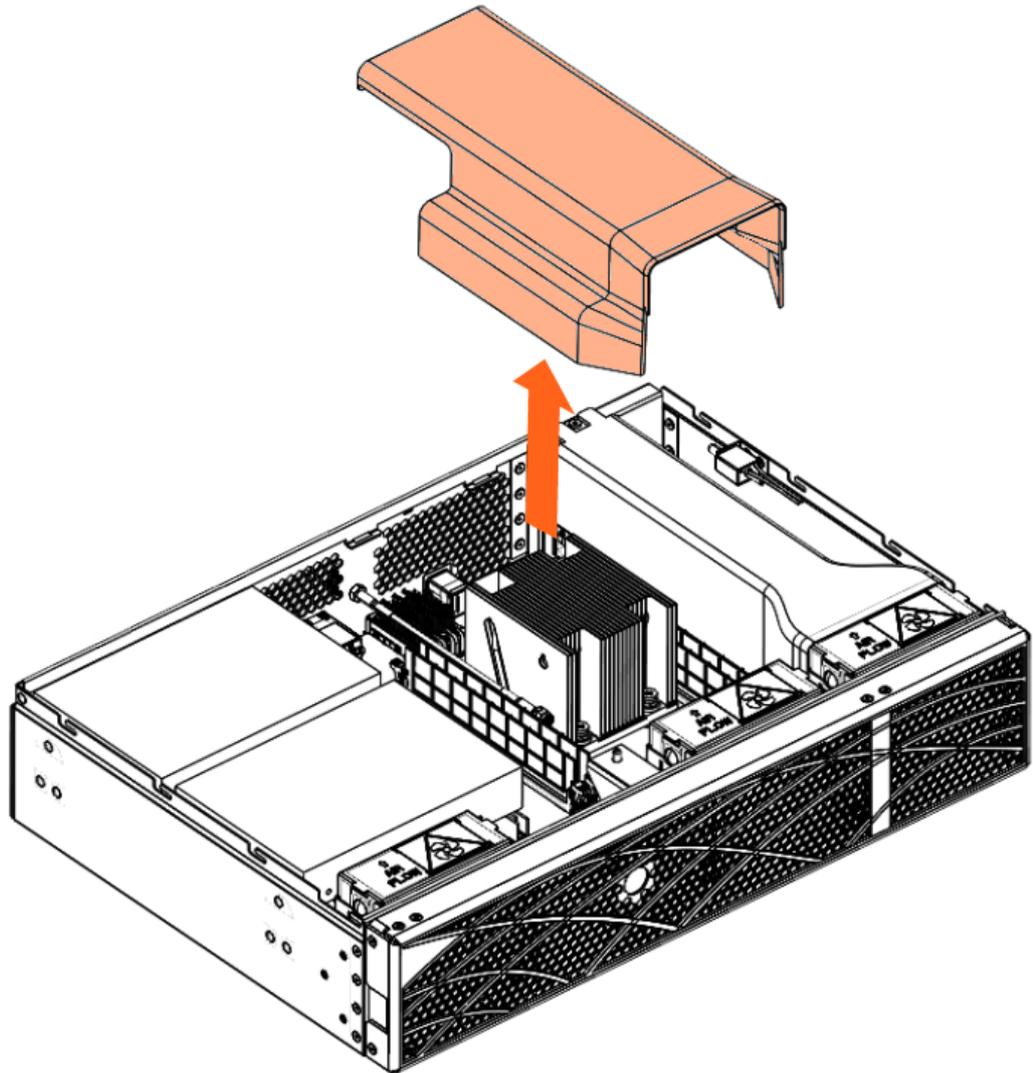
4. Remove the cover.

 **Front view**



## 6. Remove the processor air duct

 Front view



## 3.2. Installing the processor air duct

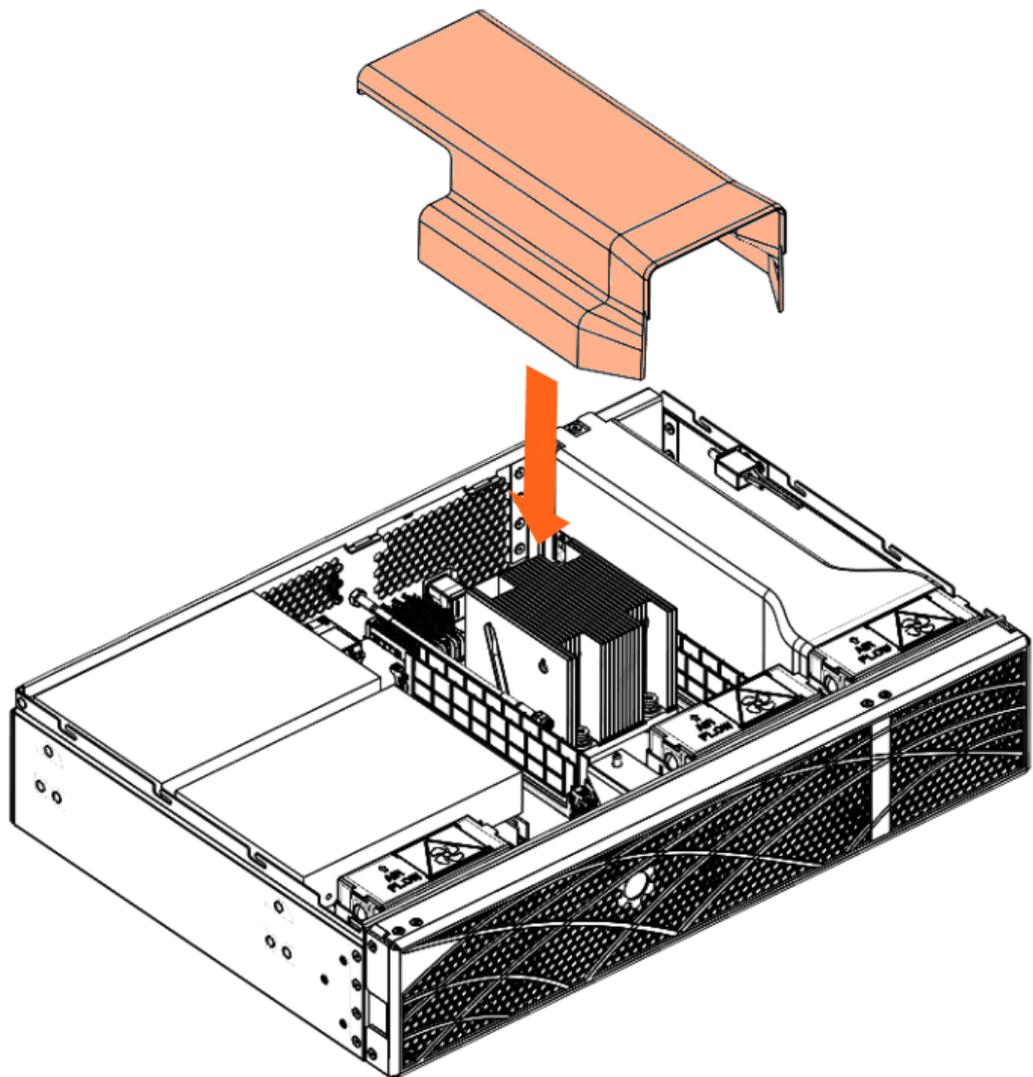
### Required Tools

None

### Procedure

1. Take hold of the new component
2. Install the processor air duct

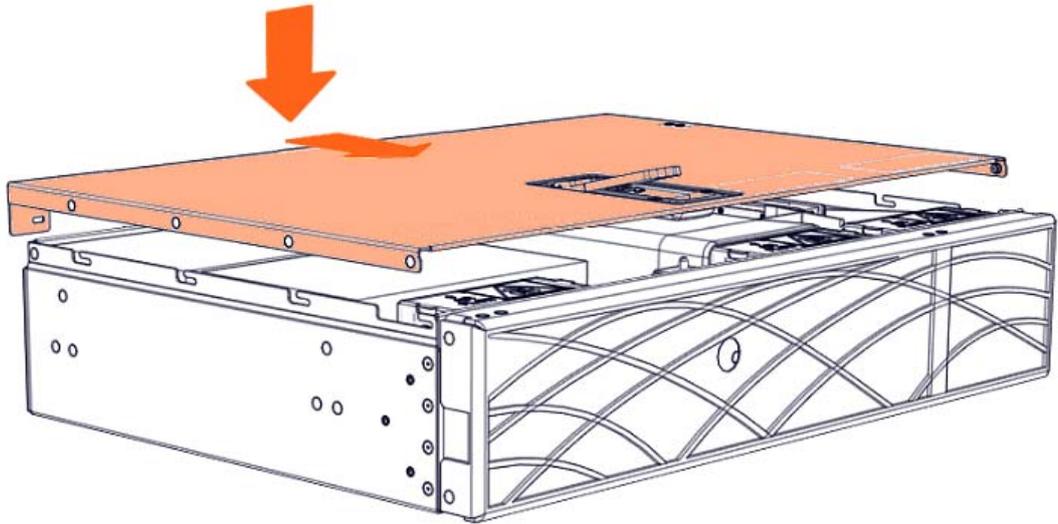
 Front view



### 3. Install the cover

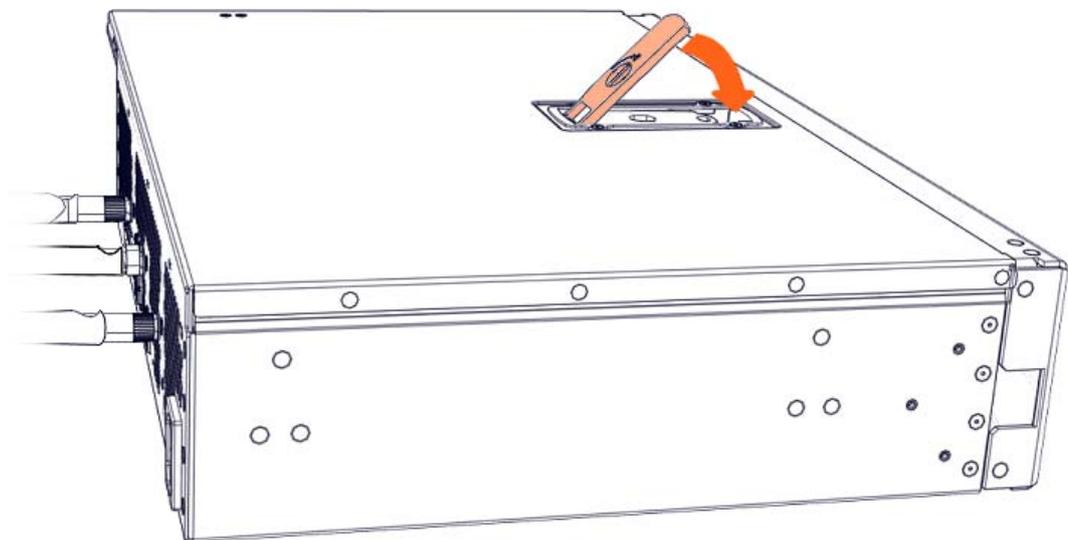
1. Put the cover into place.

 **Front view**



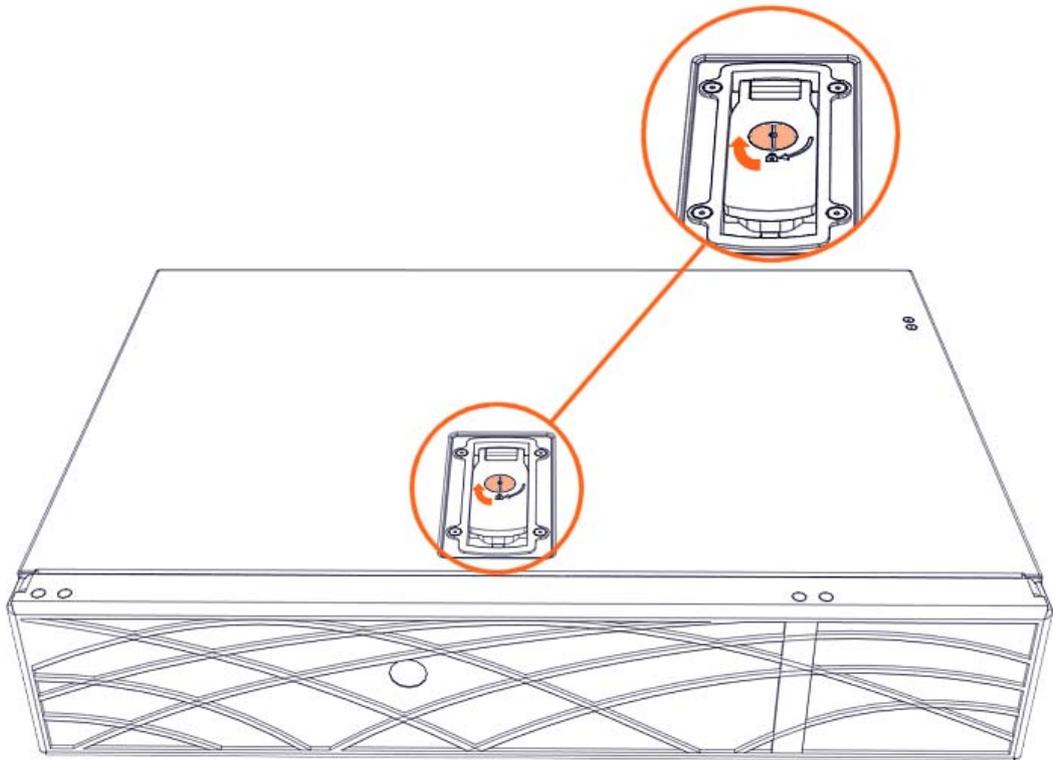
2. Close the latch.

 **Side view**



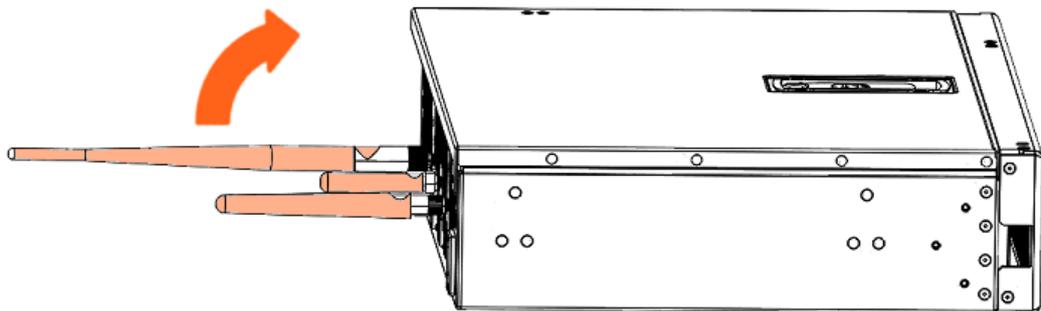
3. Lock the latch to secure the cover in place.

 **Front view**



4. Rotate the external antennas to the vertical position.

 **Side view**



**4. Install the top aesthetic cover if aesthetic covers are present**

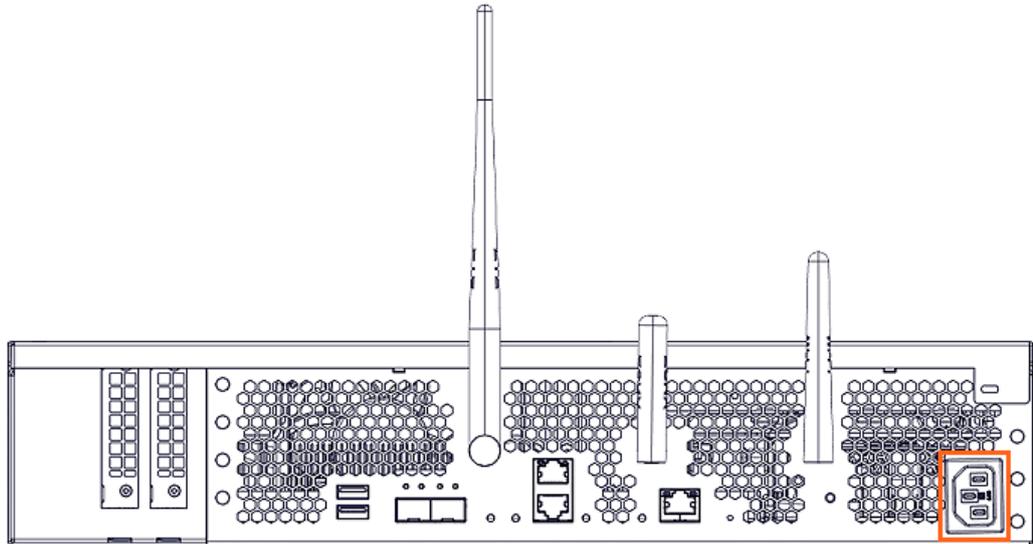
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**See** [Appendix A Servicing the top aesthetic cover](#)

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**5. Connect the power supply cable**

 **Rear view**



**6. Power on the server**



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## Chapter 4. Servicing a memory module

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**Important** **ATTENTION:** Please read carefully the safety instructions before you perform the procedures described in this manual.

*Multilingual Safety Notices Guide*

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**C004**  **CAUTION**

**C004:**

**Static electricity can damage the server and other electronic devices. To avoid damage, keep static-sensitive devices in their static-protective packages until you are ready to install them.**

**To reduce the possibility of damage from electrostatic discharge, observe the following precautions:**

**Limit your movement. Movement can cause static electricity to build up around you.**

**Wear an electrostatic-discharge wrist strap.**

**Handle the device carefully, holding it by its edges or its frame.**

**Do not touch solder joints, pins, or exposed circuitry.**

**Do not leave the device where others can handle and damage it.**

**While the device is still in its static-protective package, touch it to an unpainted metal surface on the outside of the server for at least 2 seconds. This drains static electricity from the package and from your body.**

**Remove the device from its package and install it directly into the server without setting down the device. If it is necessary to set down the device, put it back into its static-protective package. Do not place the device on the server cover or on a metal surface.**

**Take additional care when you handle devices during cold weather.**

**Heating reduces indoor humidity and increases static electricity.**

---

**See** BullSequana Edge Description Guide, 86 A1 65FR to locate the memory module.

---

## 4.1. Removing a memory module

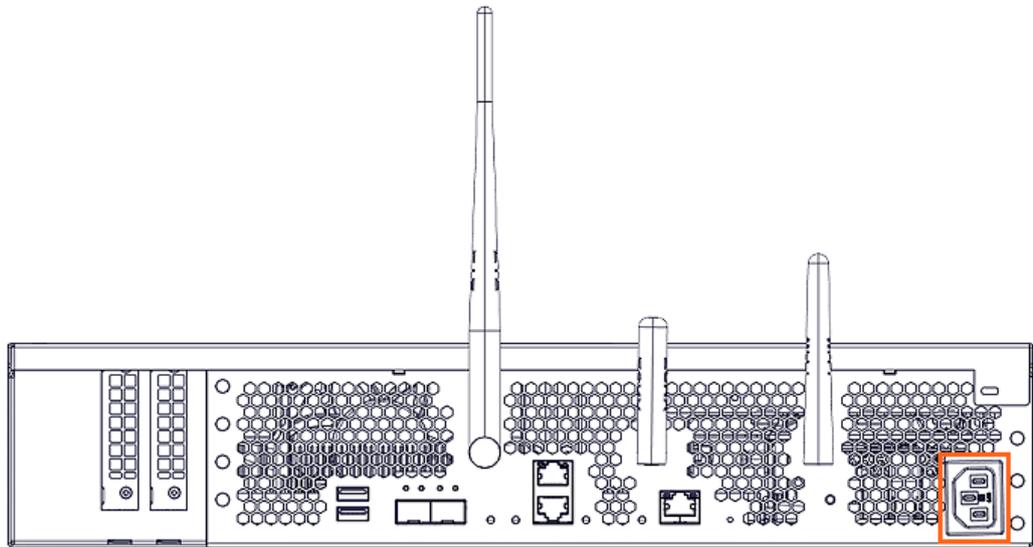
### Required Tools

None

### Procedure

1. **Unpack the new component on a clean ESD-protected work surface**
2. **Power off the server**
3. **Disconnect the power supply cable**

 **Rear view**



4. **Remove the top aesthetic cover if aesthetic covers are present**

---

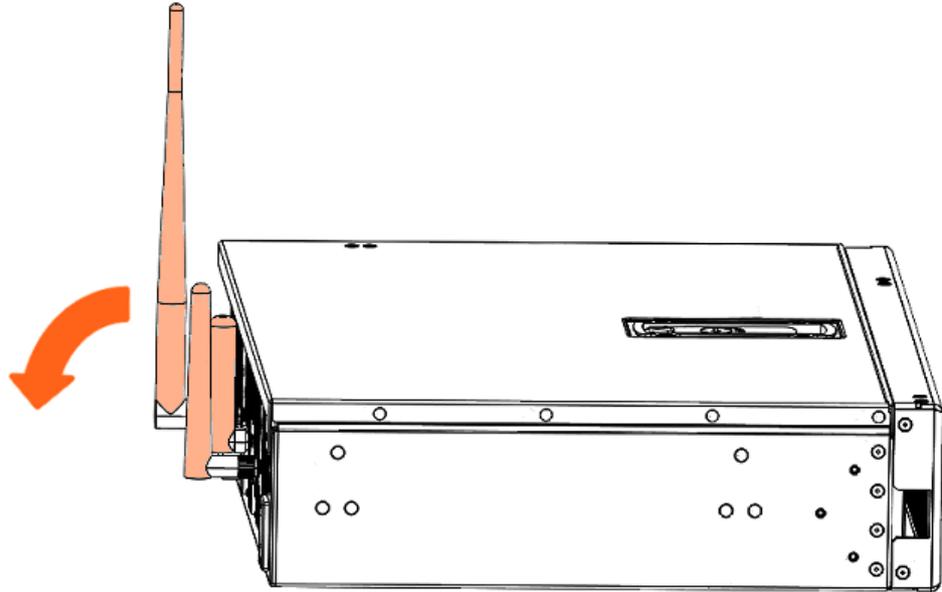
**See** [Appendix A Servicing the top aesthetic cover](#)

---

## 5. Remove the cover

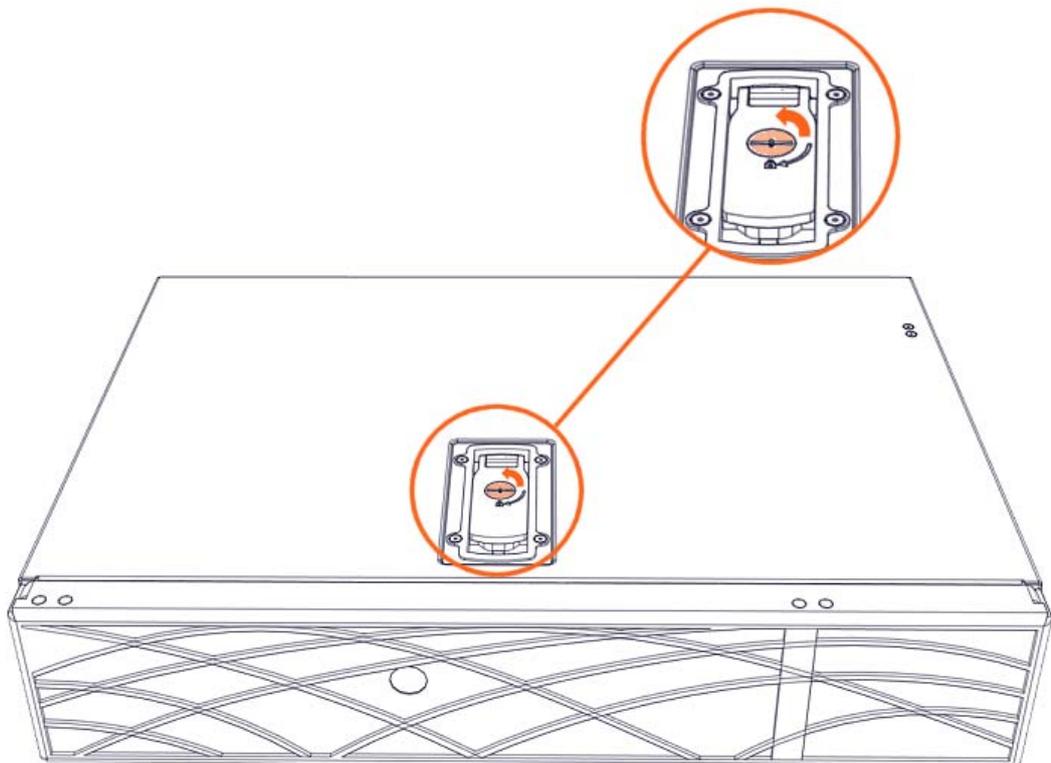
1. Rotate the external antennas to the horizontal position.

 **Side view**



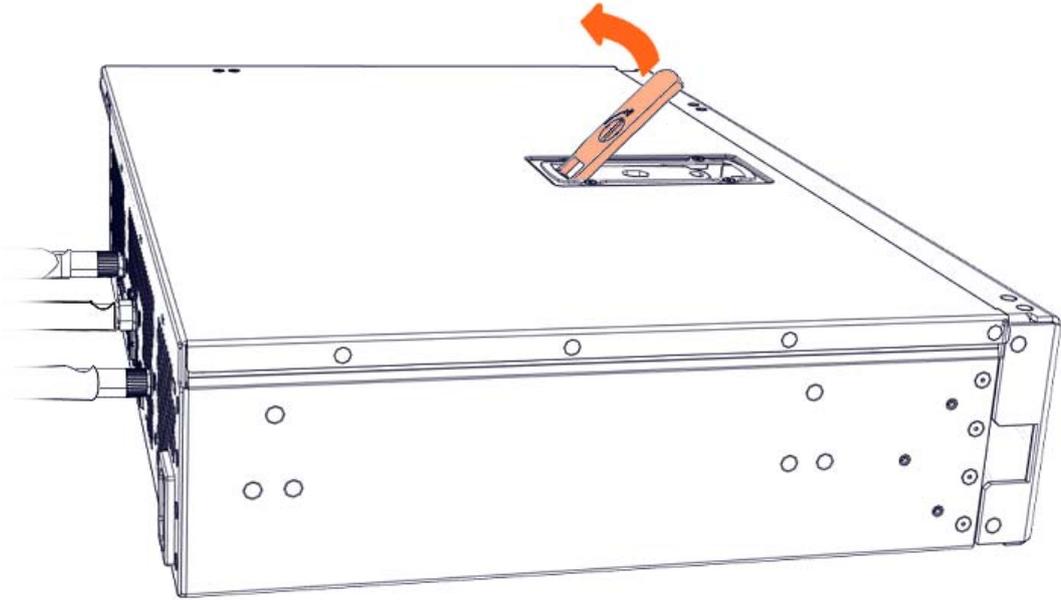
2. Unlock the cover latch.

 **Front view**



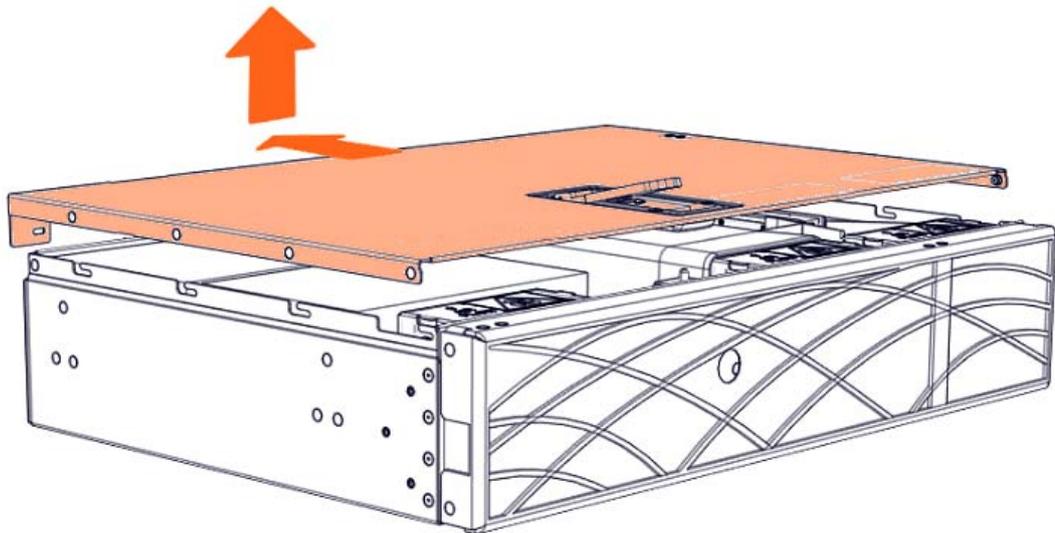
3. Pull the latch up.

 **Side view**



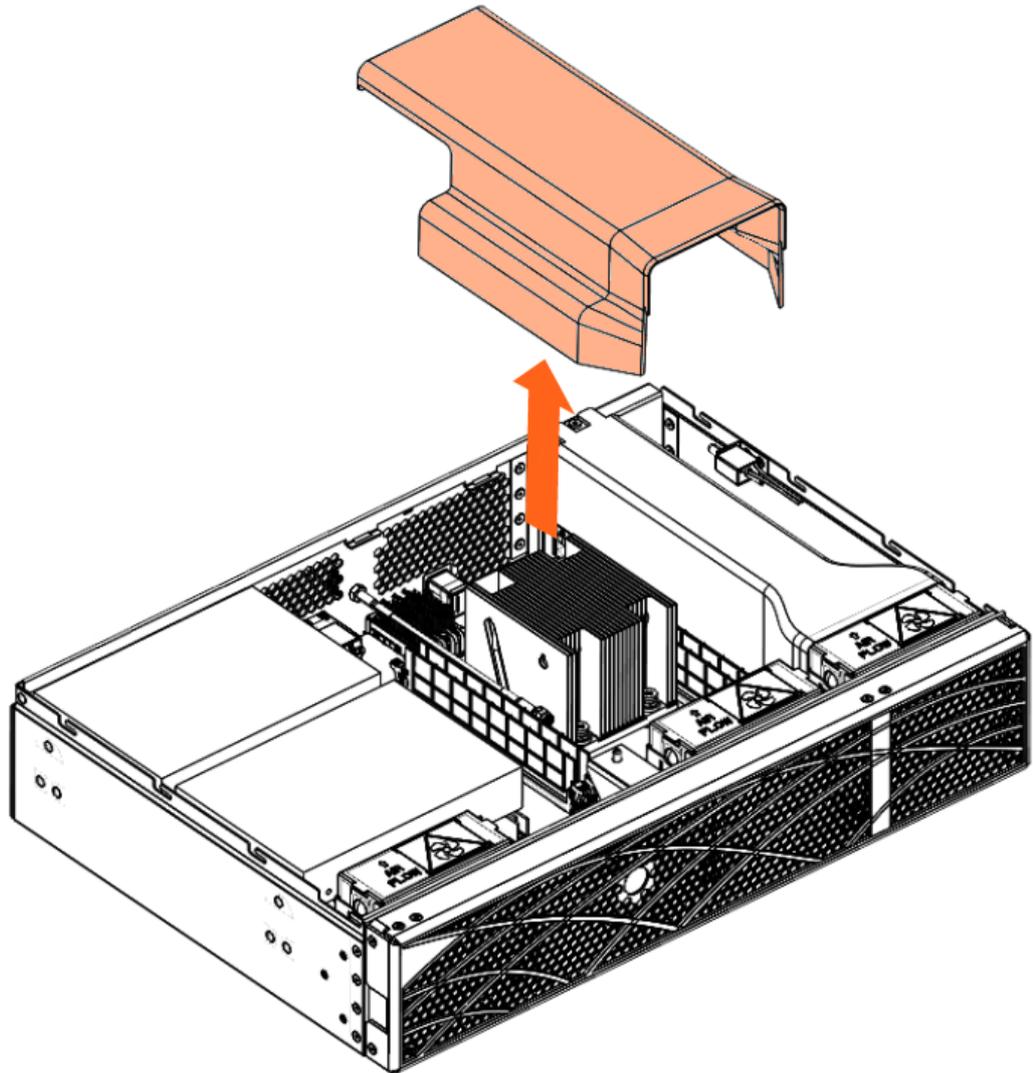
4. Remove the cover.

 **Front view**



## 6. Remove the processor air duct

 Front view



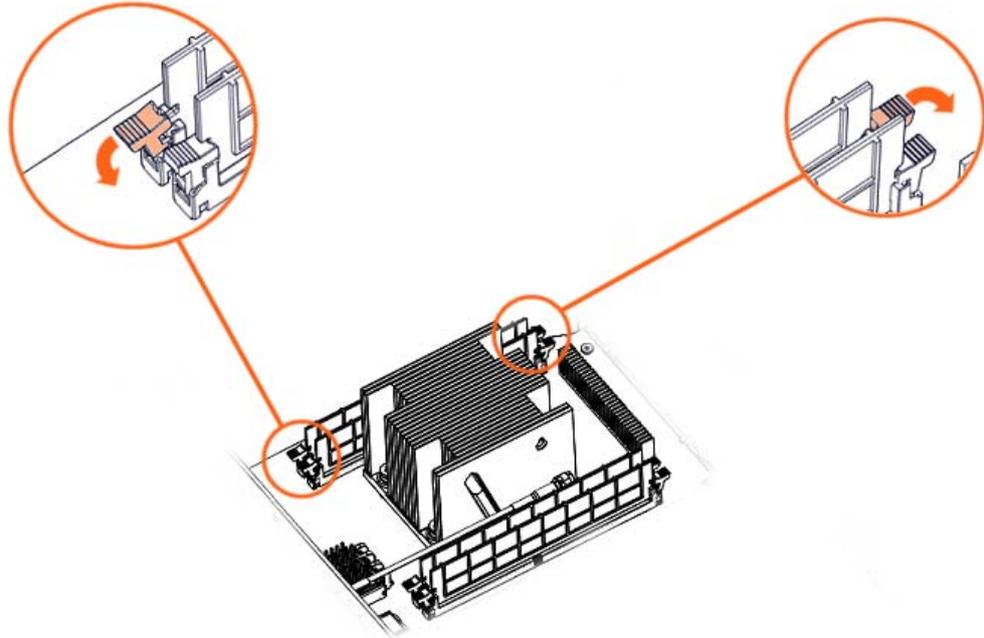
## 7. Remove the memory module

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**Important** Always hold the module by the edges to avoid electrical and structural damage.

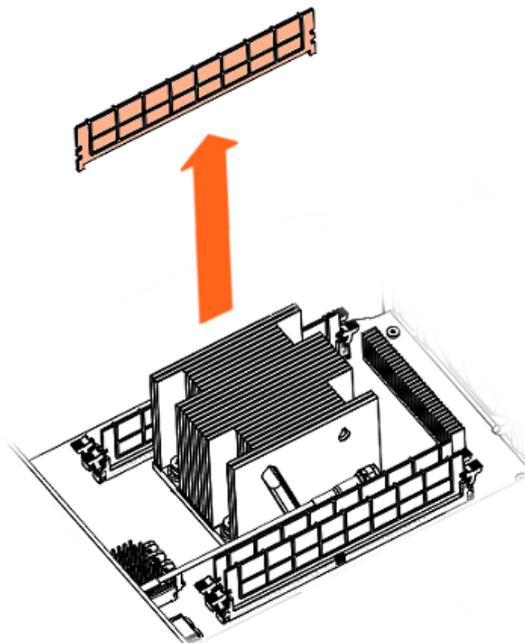
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1. Press the retention latches down to release the memory module



2. Remove the memory module

 **Front view**



## 4.2. Installing a memory module

### Required Tools

None

### Procedure

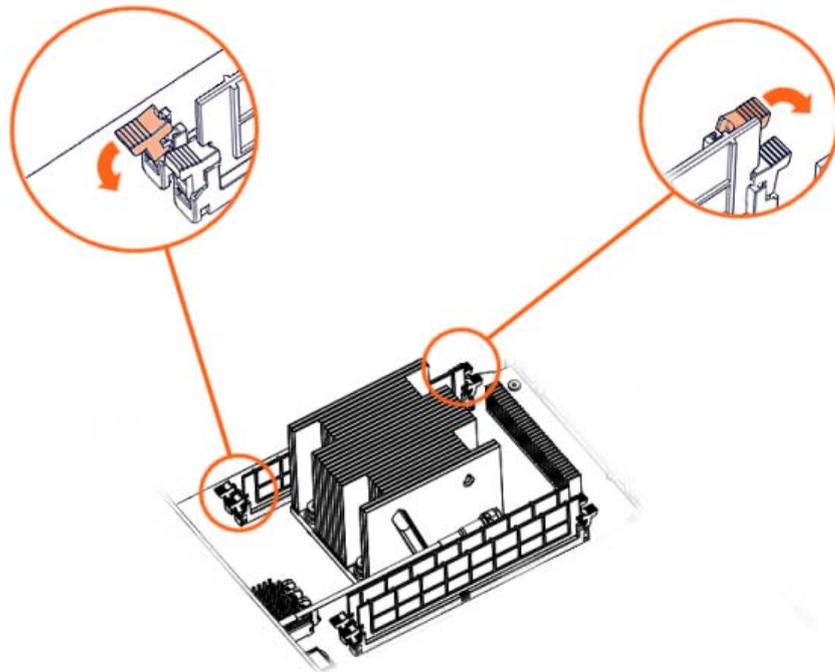
1. Take hold of the new component
2. Install the memory module

---

**Important** Always hold the module by the edges to avoid electrical and structural damage.

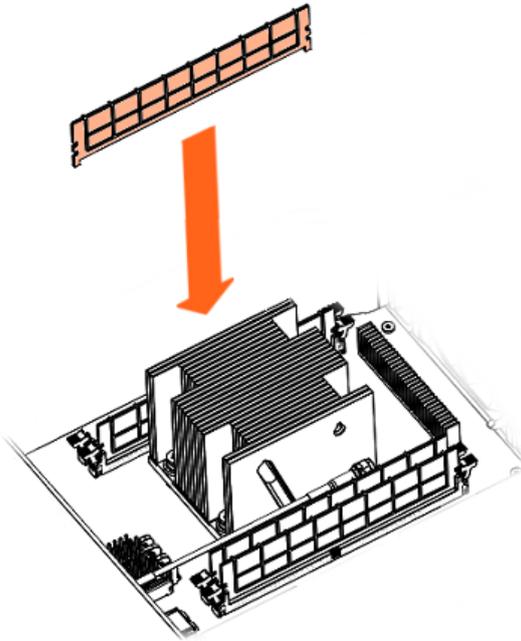
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1. Make sure that the retention latches at both ends of the memory module connector are pushed outward to the open position.



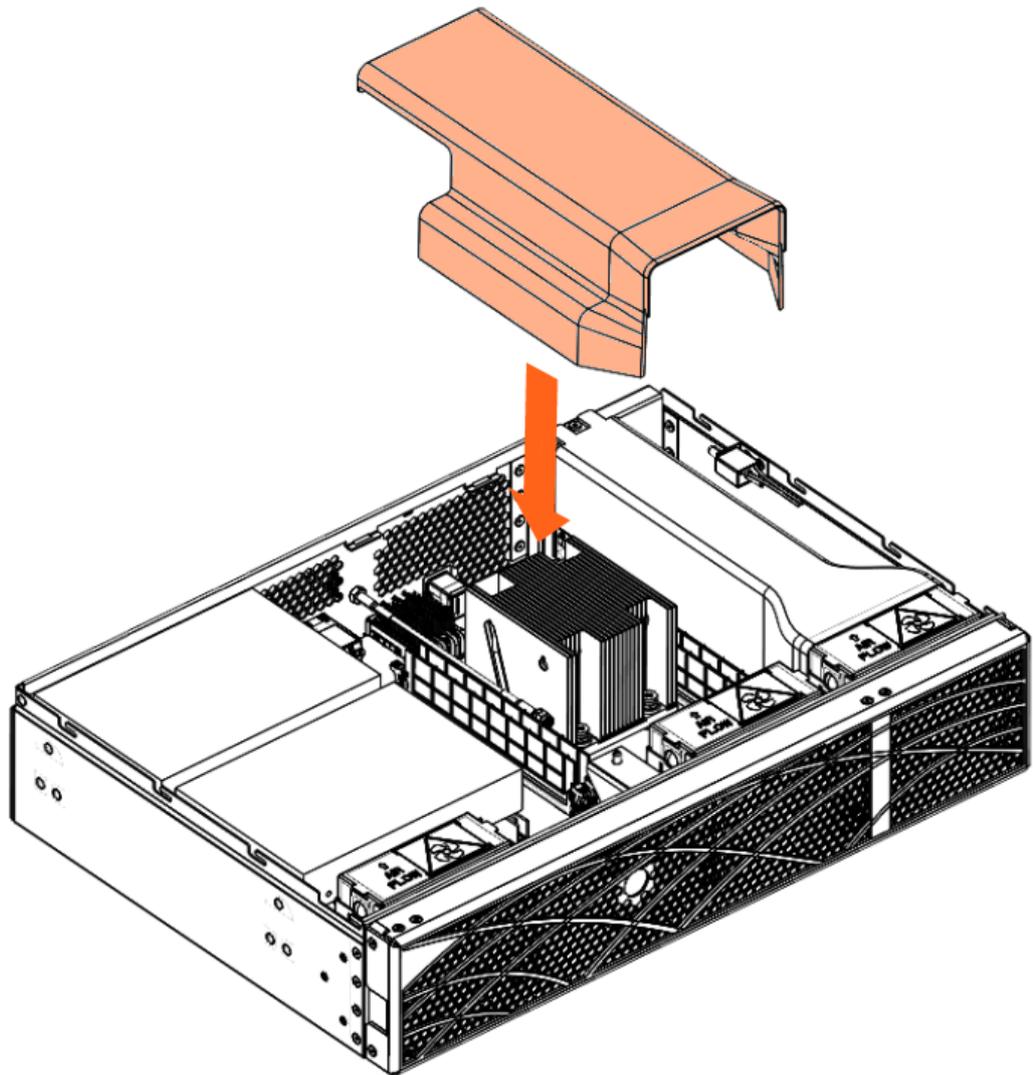
- Carefully push down on each side of the memory module until it sits in the slot and the retention latches close.

 **Front view**



### 3. Install the processor air duct

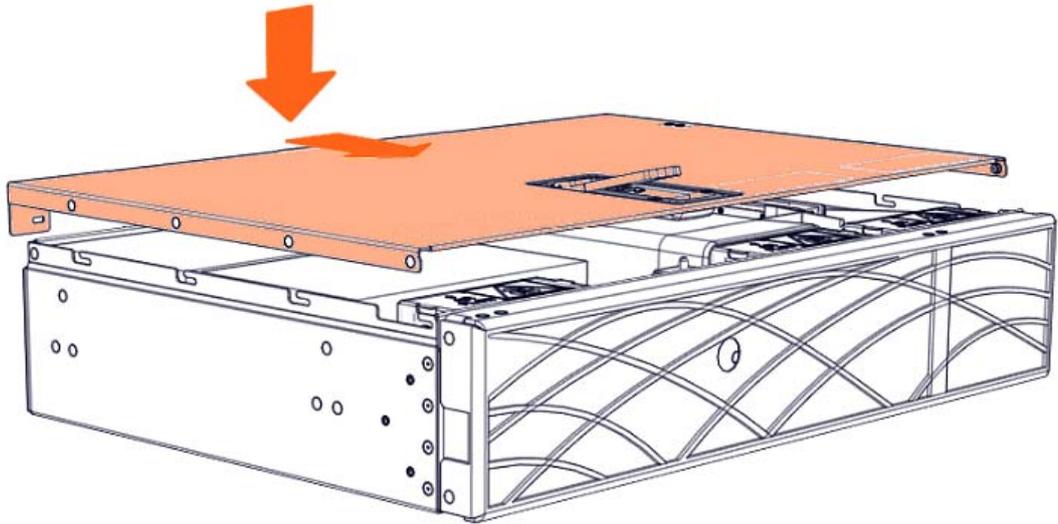
 Front view



#### 4. Install the cover

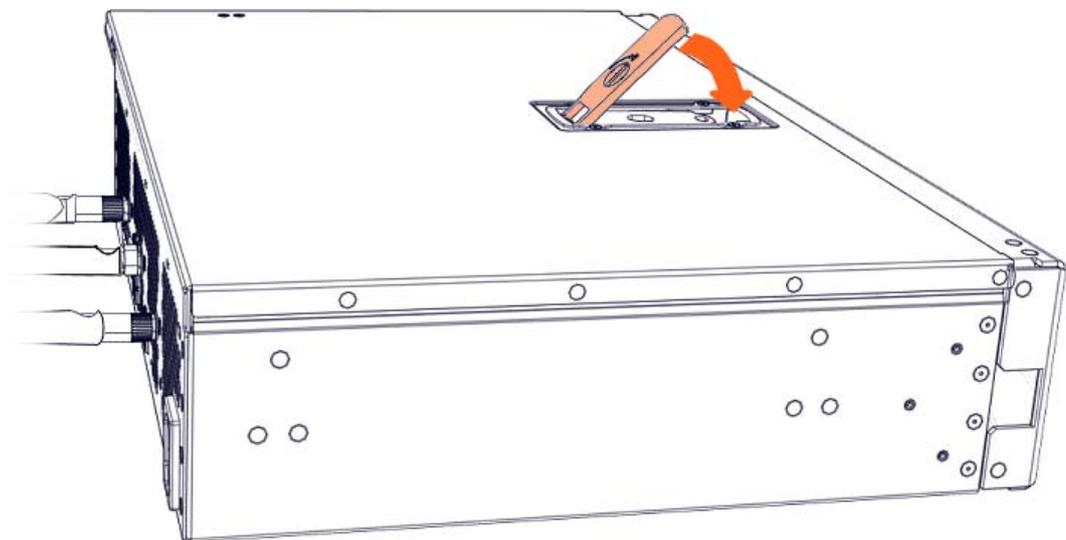
1. Put the cover into place.

 **Front view**



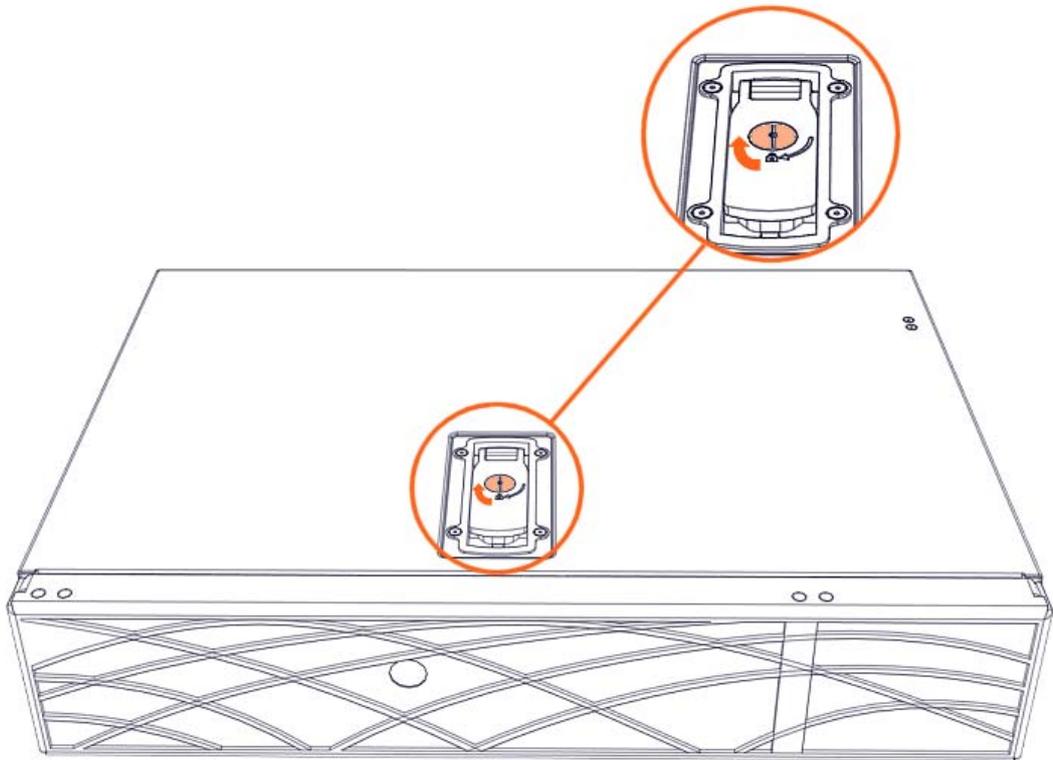
2. Close the latch.

 **Side view**



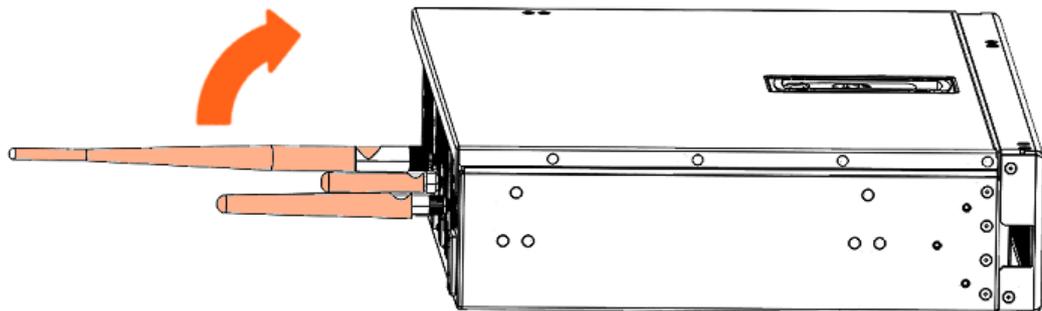
3. Lock the latch to secure the cover in place.

 **Front view**



4. Rotate the external antennas to the vertical position.

 **Side view**



5. **Install the top aesthetic cover if aesthetic covers are present**

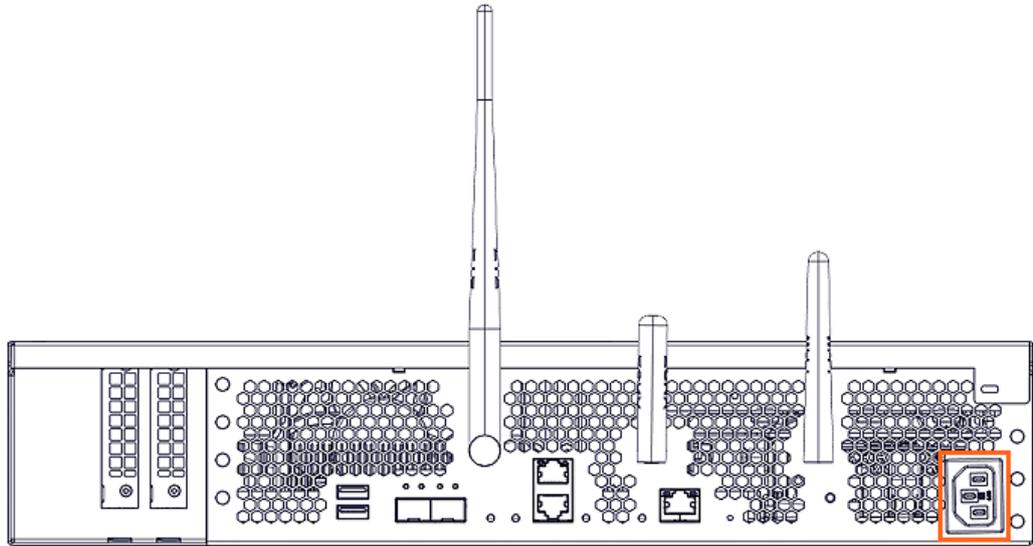
---

**See** [Appendix A Servicing the top aesthetic cover](#)

---

## 6. Connect the power supply cable

 Rear view



## 7. Power on the server

---

## Chapter 5. Servicing an accelerator

---

**Important** **ATTENTION:** Please read carefully the safety instructions before you perform the procedures described in this manual.

*Multilingual Safety Notices Guide*

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**C004**  **CAUTION**

**C004:**

**Static electricity can damage the server and other electronic devices. To avoid damage, keep static-sensitive devices in their static-protective packages until you are ready to install them.**

**To reduce the possibility of damage from electrostatic discharge, observe the following precautions:**

**Limit your movement. Movement can cause static electricity to build up around you.**

**Wear an electrostatic-discharge wrist strap.**

**Handle the device carefully, holding it by its edges or its frame.**

**Do not touch solder joints, pins, or exposed circuitry.**

**Do not leave the device where others can handle and damage it.**

**While the device is still in its static-protective package, touch it to an unpainted metal surface on the outside of the server for at least 2 seconds. This drains static electricity from the package and from your body.**

**Remove the device from its package and install it directly into the server without setting down the device. If it is necessary to set down the device, put it back into its static-protective package. Do not place the device on the server cover or on a metal surface.**

**Take additional care when you handle devices during cold weather.**

**Heating reduces indoor humidity and increases static electricity.**

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**See** BullSequana Edge Description Guide, 86 A1 65FR to locate the accelerator.

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## 5.1. Removing an accelerator

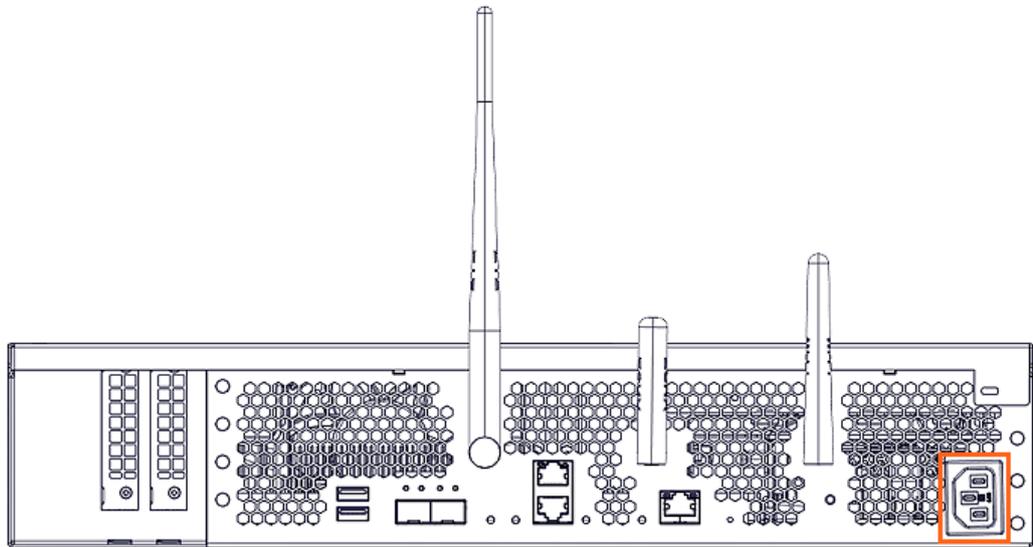
### Required Tools

T10 Torx screwdriver

### Procedure

1. **Unpack the new component on a clean ESD-protected work surface**
2. **Power off the server**
3. **Disconnect the power supply cable**

 **Rear view**



4. **Remove the top aesthetic cover if aesthetic covers are present**

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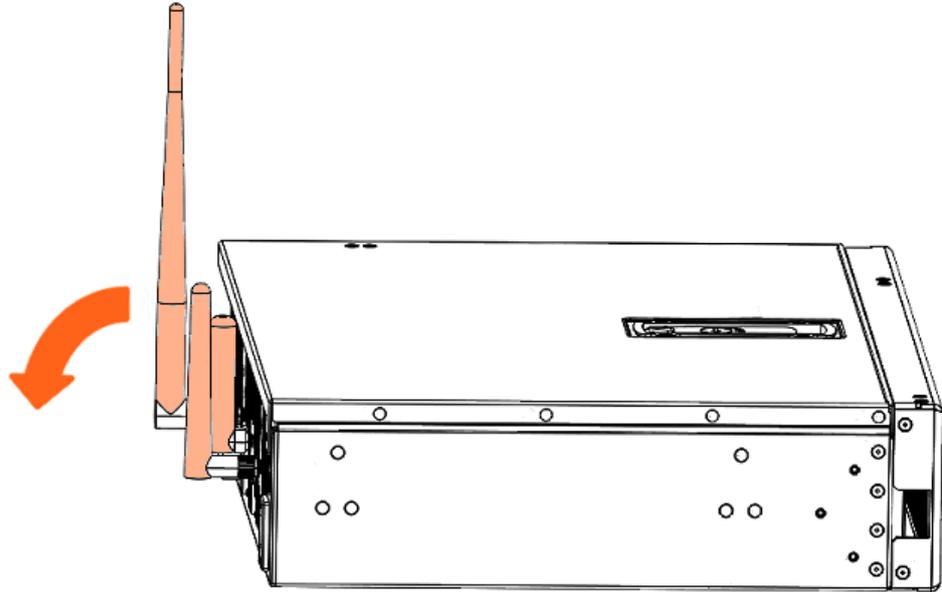
**See** [Appendix A Servicing the top aesthetic cover](#)

---

## 5. Remove the cover

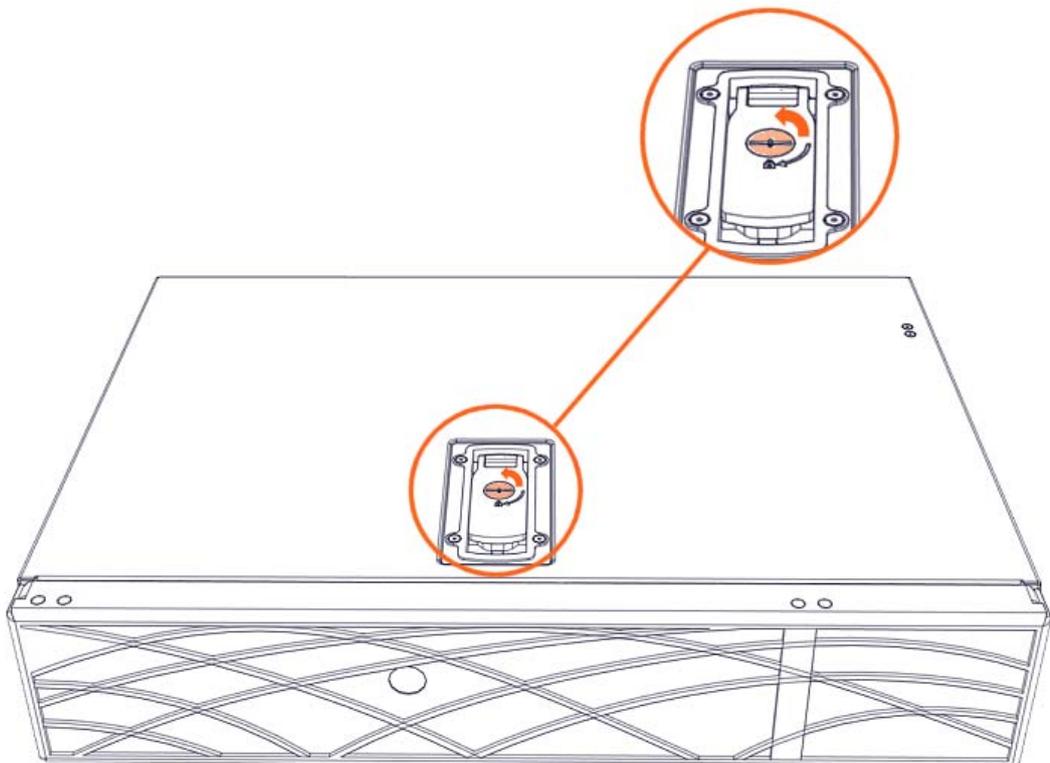
1. Rotate the external antennas to the horizontal position.

 **Side view**



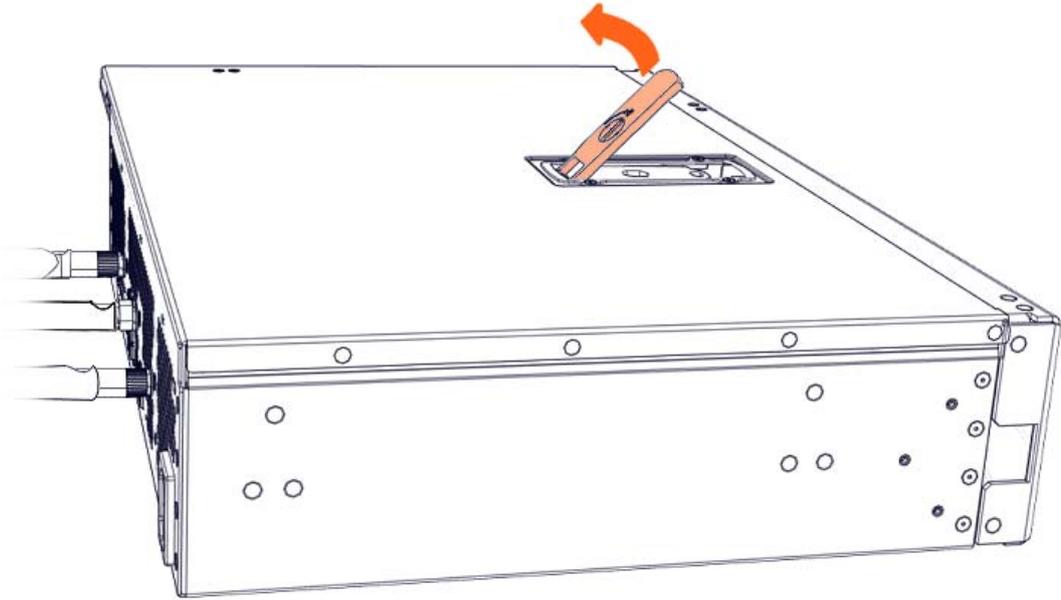
2. Unlock the cover latch.

 **Front view**



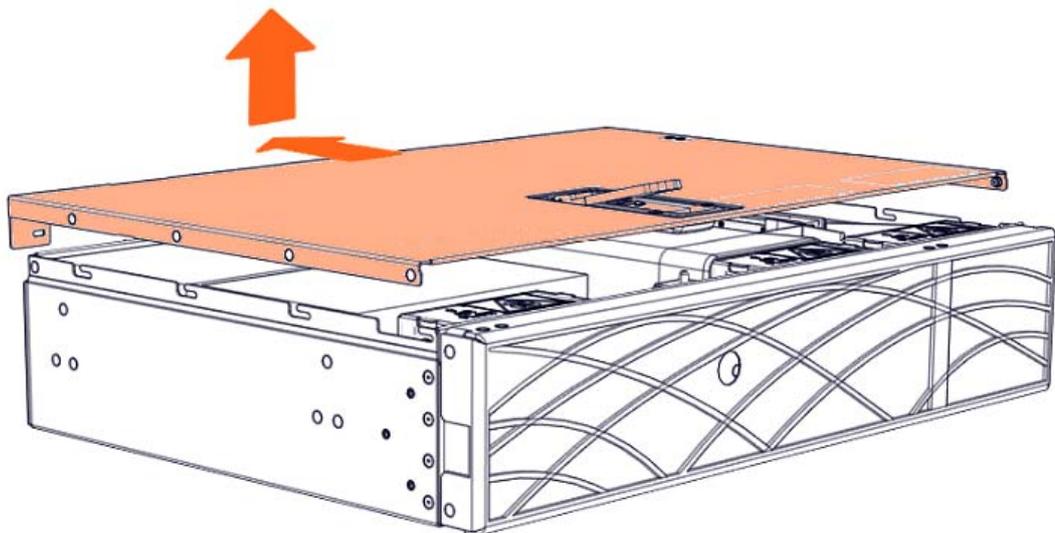
3. Pull the latch up.

 **Side view**



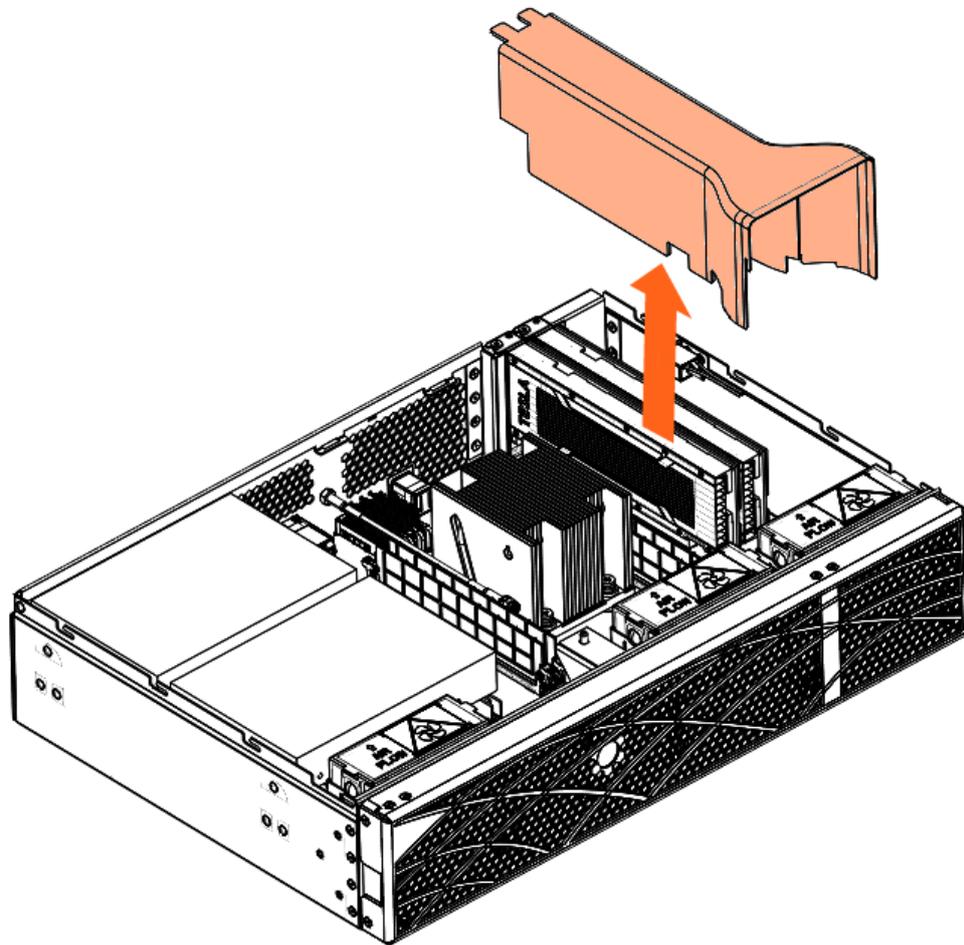
4. Remove the cover.

 **Front view**



**6. Remove the accelerator air duct if present**

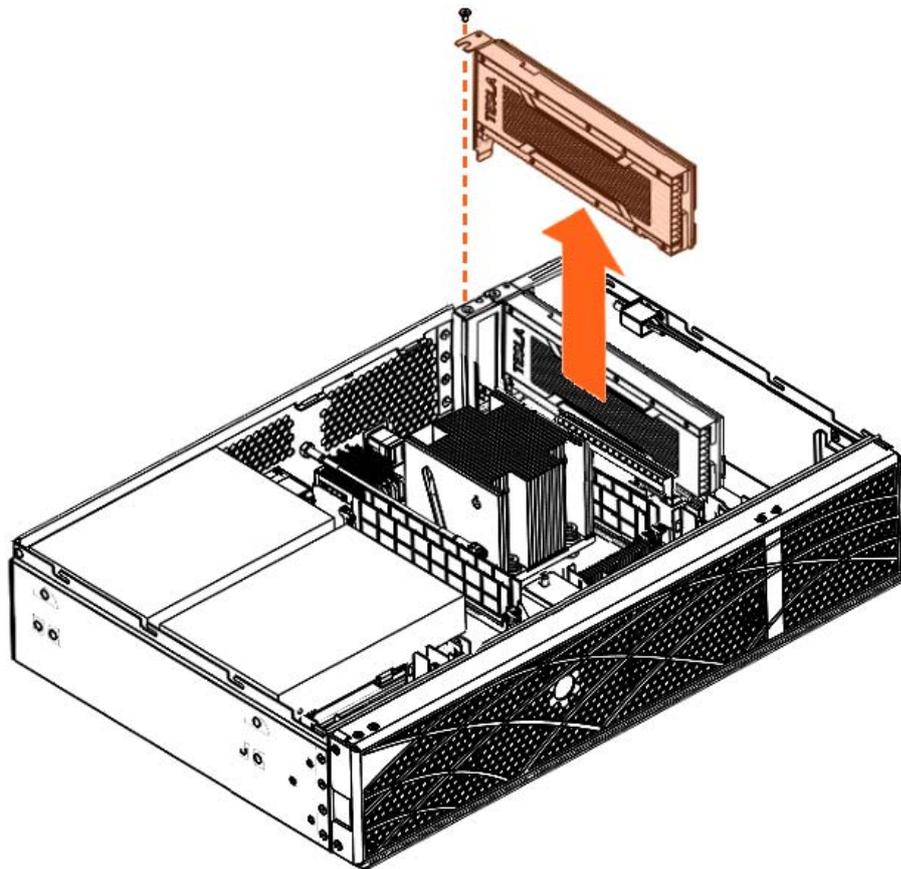
 **Front view**



## 7. Remove the accelerator

1. Remove the screw.
2. Pull the accelerator out.

 **Front view**



## 5.2. Installing an accelerator

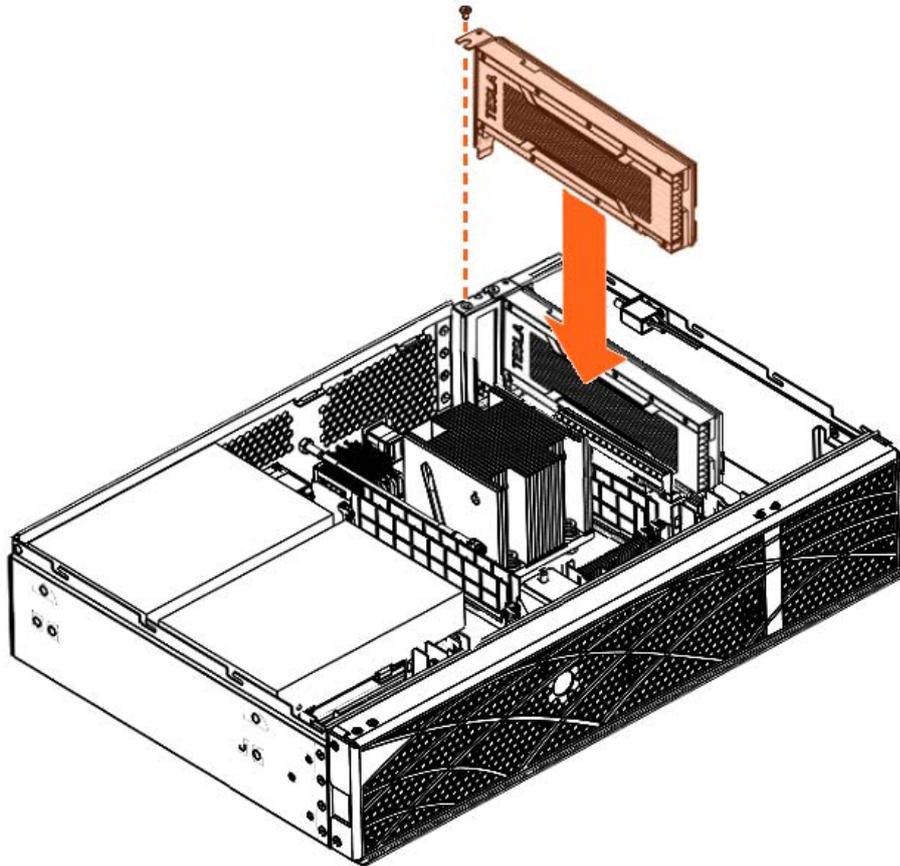
### Required Tools

T10 Torx screwdriver

### Procedure

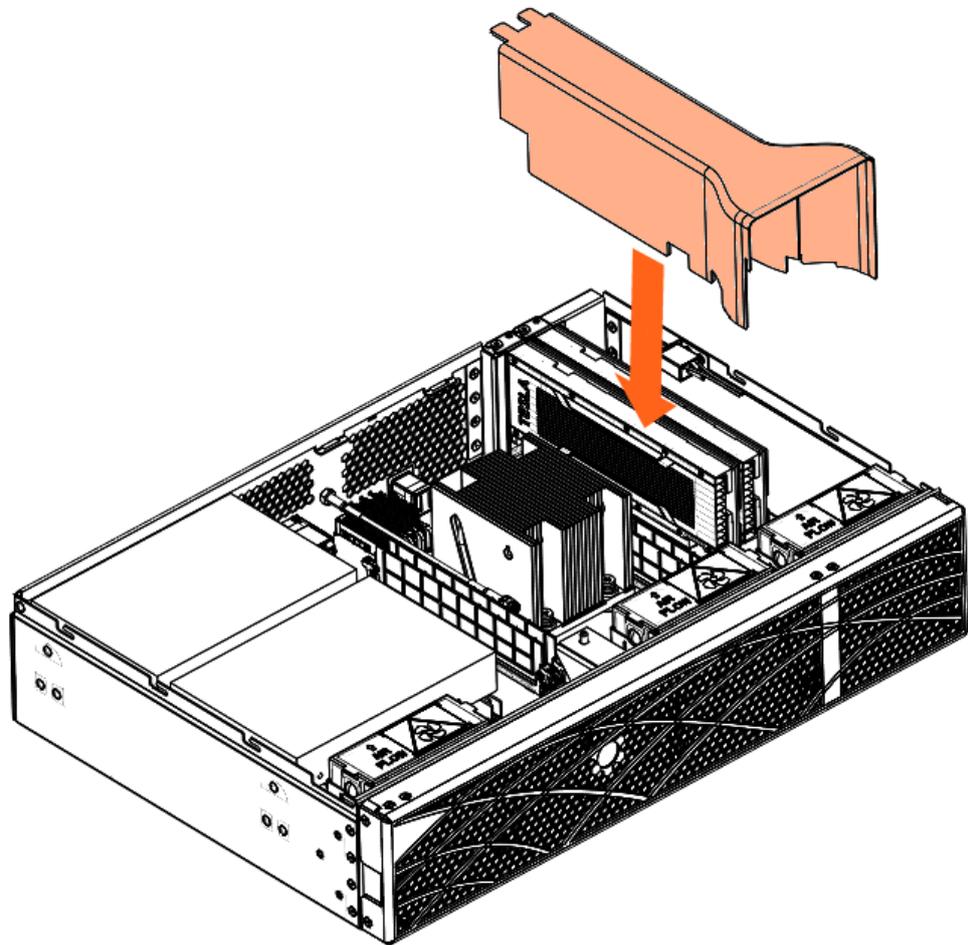
1. **Take hold of the new component**
2. **Install the accelerator**
  1. Position the accelerator.
  2. Tighten the screw.

 **Top view**



### 3. Install the accelerator air duct if present

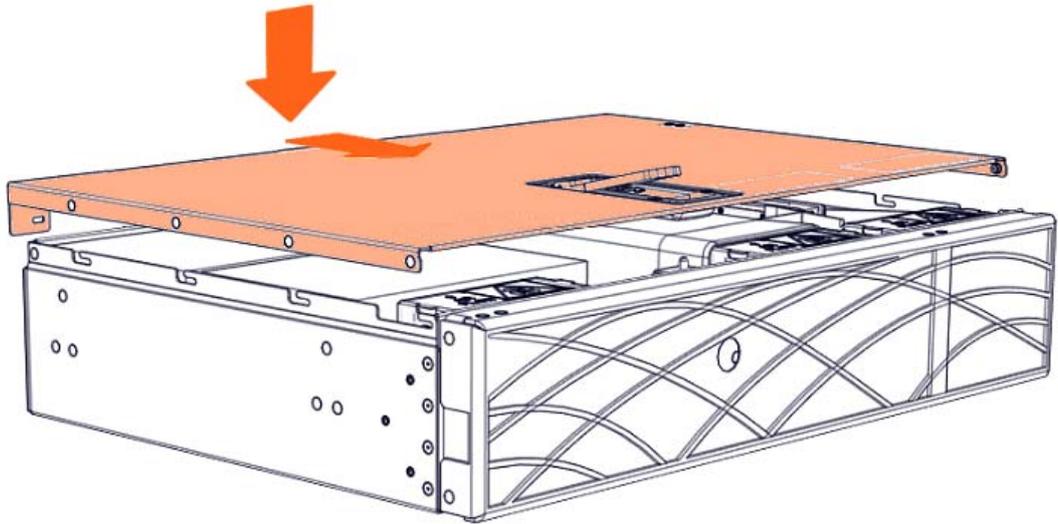
 Front view



#### 4. Install the cover

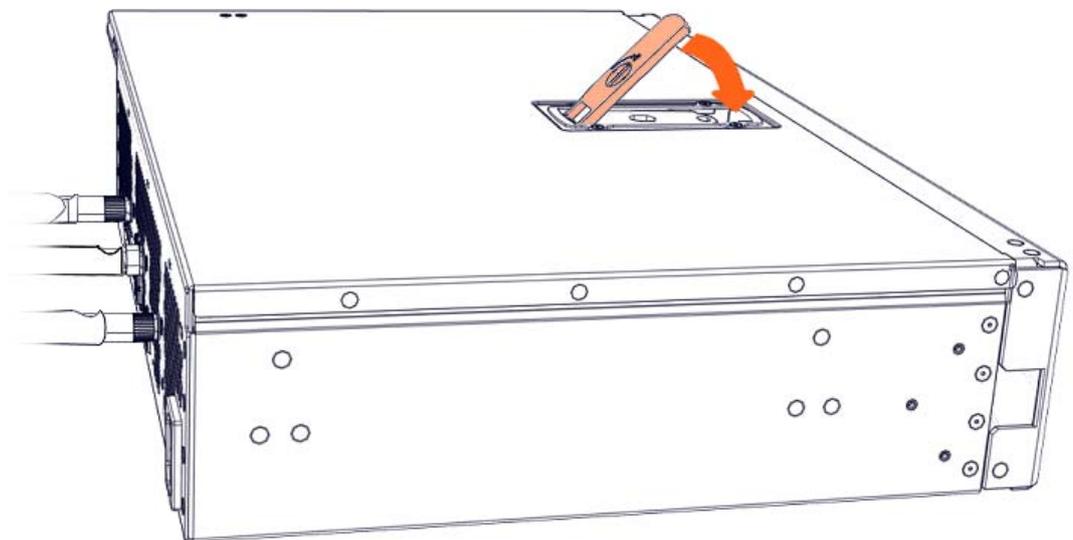
1. Put the cover into place.

 **Front view**



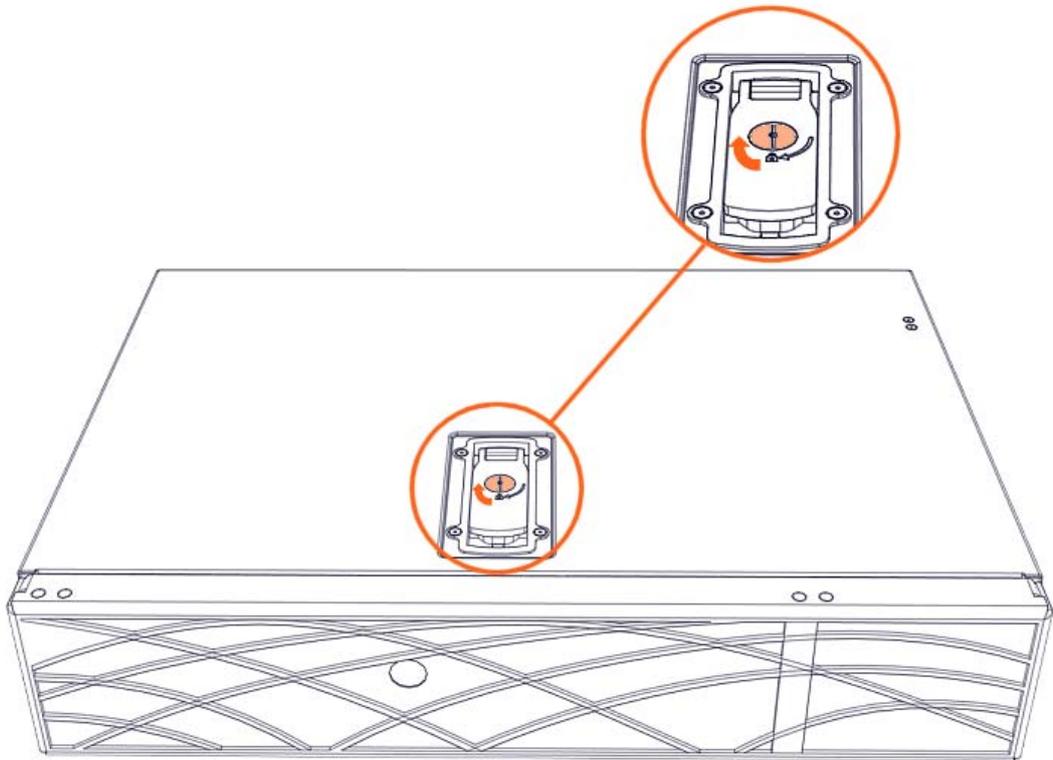
2. Close the latch.

 **Side view**



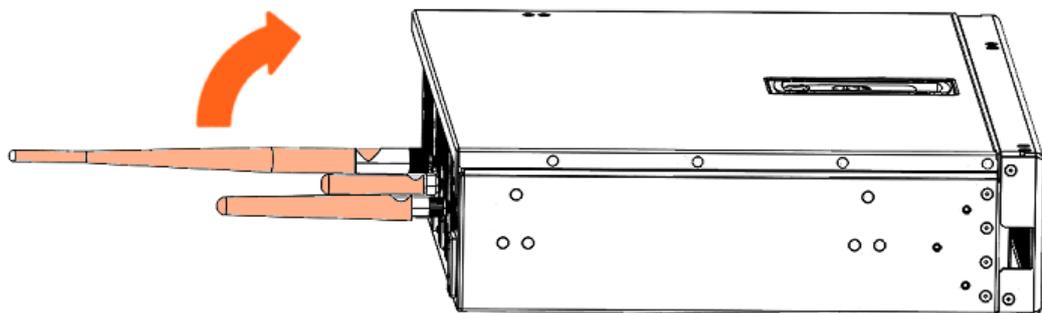
3. Lock the latch to secure the cover in place.

 **Front view**



4. Rotate the external antennas to the vertical position.

 **Side view**



**5. Install the top aesthetic cover if aesthetic covers are present**

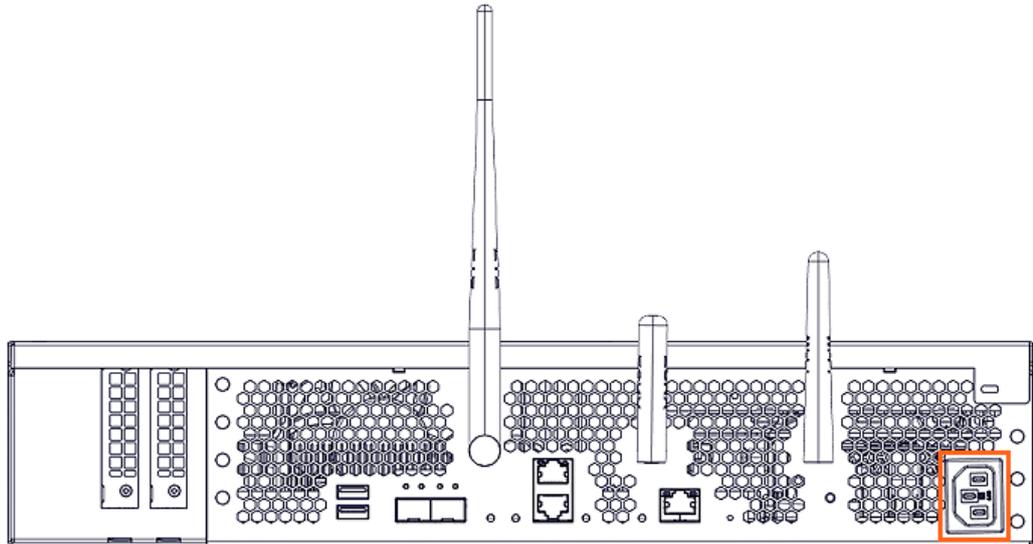
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**See** [Appendix A Servicing the top aesthetic cover](#)

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## 6. Connect the power supply cable

 Rear view



## 7. Power on the server



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## Chapter 6. Servicing a 2.5" disk

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**Important ATTENTION:** Please read carefully the safety instructions before you perform the procedures described in this manual.

*Multilingual Safety Notices Guide*

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**C004**  **CAUTION**

**C004:**

**Static electricity can damage the server and other electronic devices. To avoid damage, keep static-sensitive devices in their static-protective packages until you are ready to install them.**

**To reduce the possibility of damage from electrostatic discharge, observe the following precautions:**

**Limit your movement. Movement can cause static electricity to build up around you.**

**Wear an electrostatic-discharge wrist strap.**

**Handle the device carefully, holding it by its edges or its frame.**

**Do not touch solder joints, pins, or exposed circuitry.**

**Do not leave the device where others can handle and damage it.**

**While the device is still in its static-protective package, touch it to an unpainted metal surface on the outside of the server for at least 2 seconds. This drains static electricity from the package and from your body.**

**Remove the device from its package and install it directly into the server without setting down the device. If it is necessary to set down the device, put it back into its static-protective package. Do not place the device on the server cover or on a metal surface.**

**Take additional care when you handle devices during cold weather.**

**Heating reduces indoor humidity and increases static electricity.**

---

**See** BullSequana Edge Description Guide, 86 A1 65FR to locate the disk.

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## 6.1. Removing a 2.5" disk

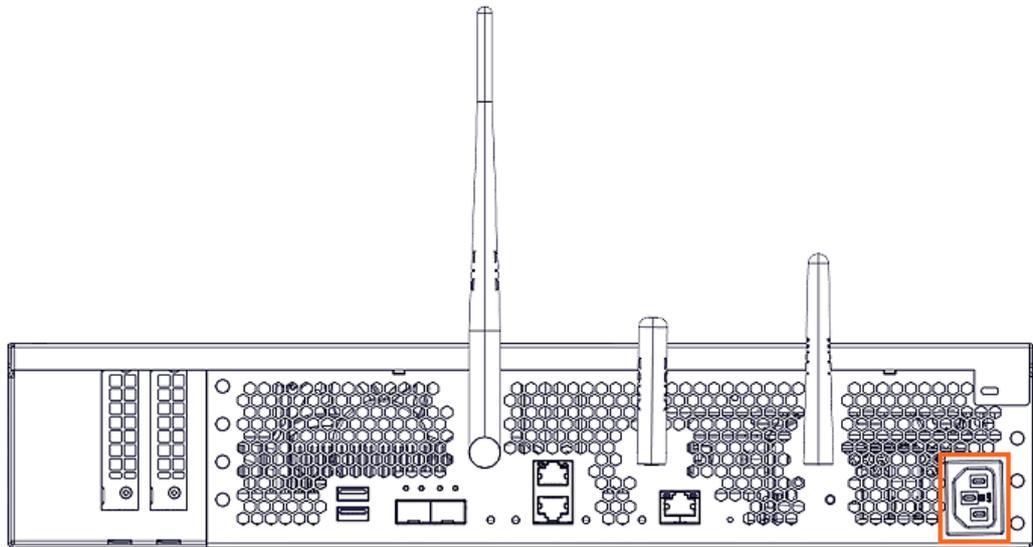
### Required Tools

Flat screwdriver

### Procedure

1. **Unpack the new component on a clean ESD-protected work surface**
2. **Power off the server**
3. **Disconnect the power supply cable**

 **Rear view**



4. **Remove the top aesthetic cover if aesthetic covers are present**

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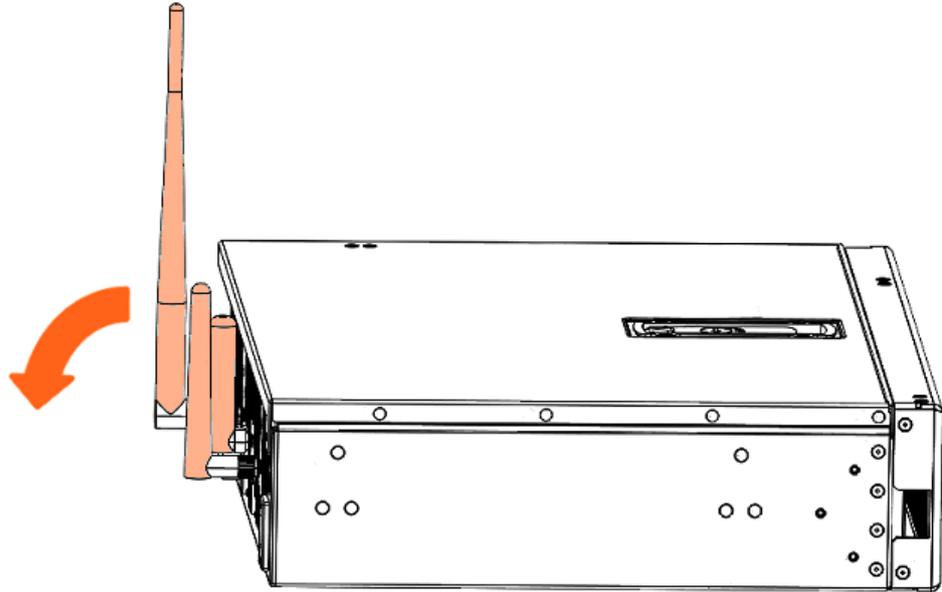
**See** [Appendix A Servicing the top aesthetic cover](#)

---

## 5. Remove the cover

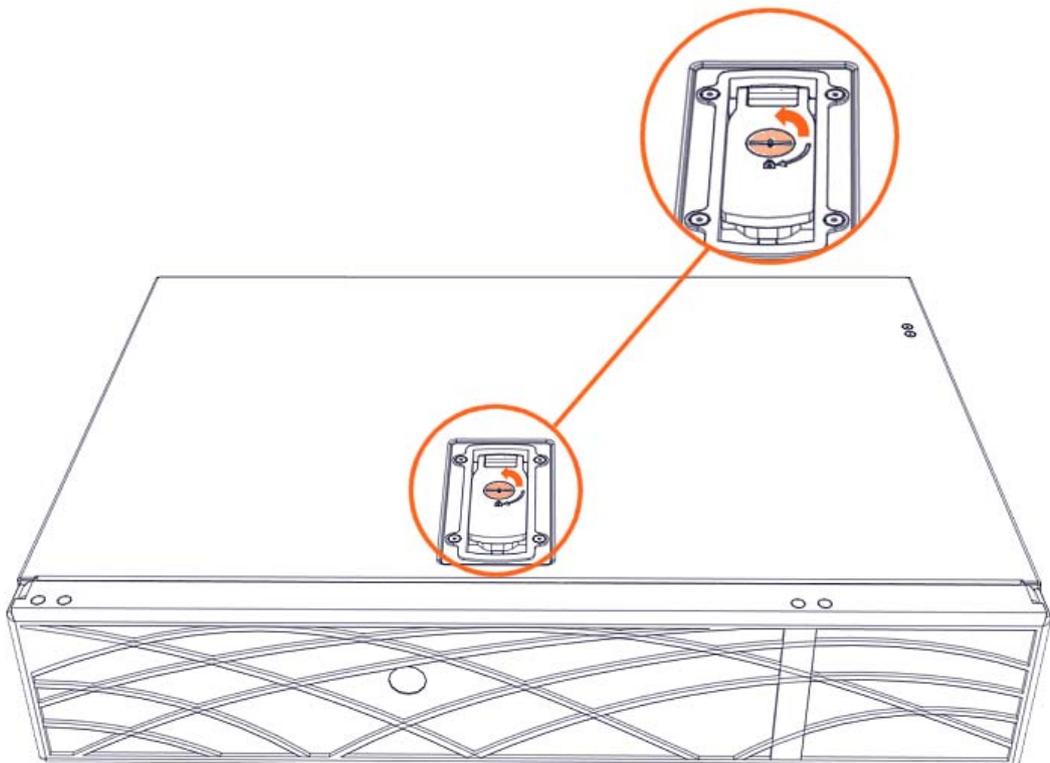
1. Rotate the external antennas to the horizontal position.

 **Side view**



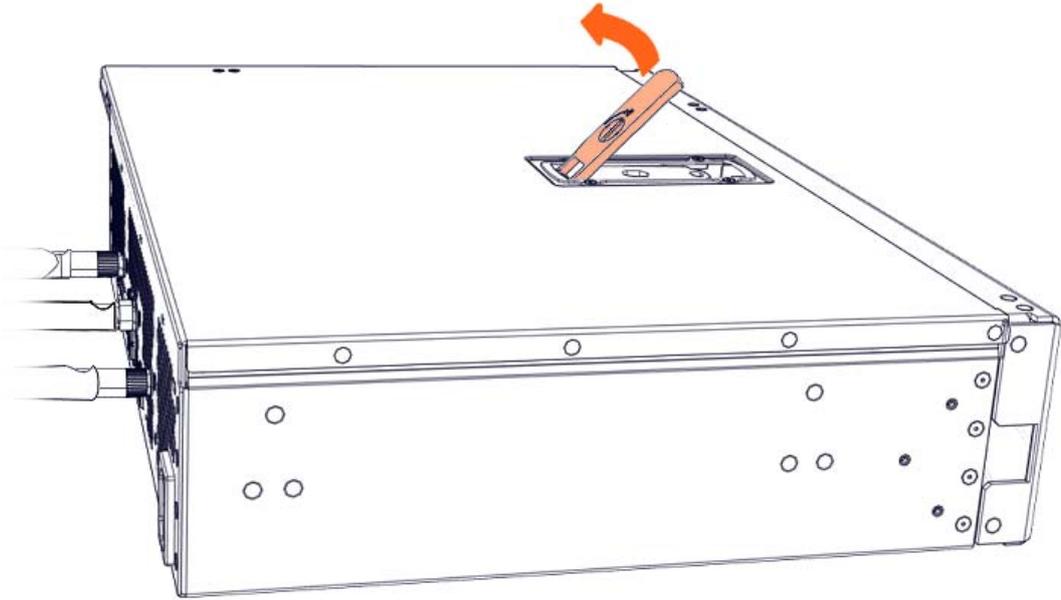
2. Unlock the cover latch.

 **Front view**



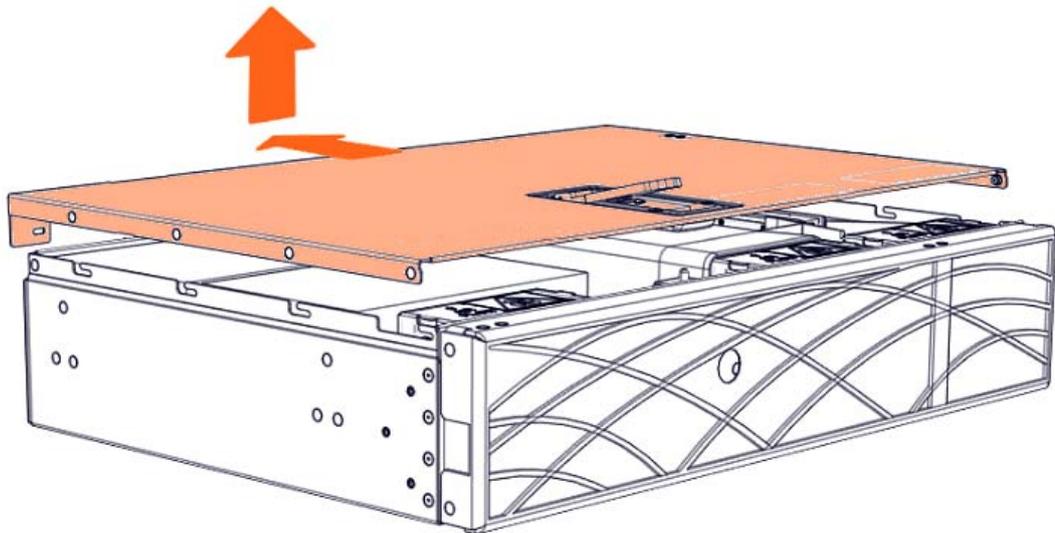
3. Pull the latch up.

 **Side view**



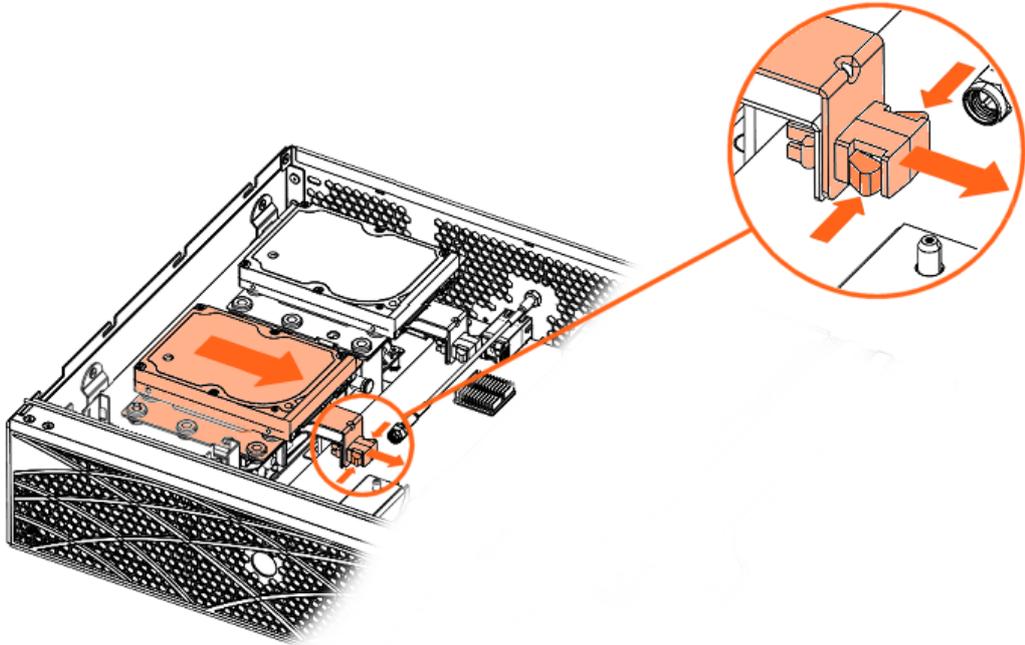
4. Remove the cover.

 **Front view**

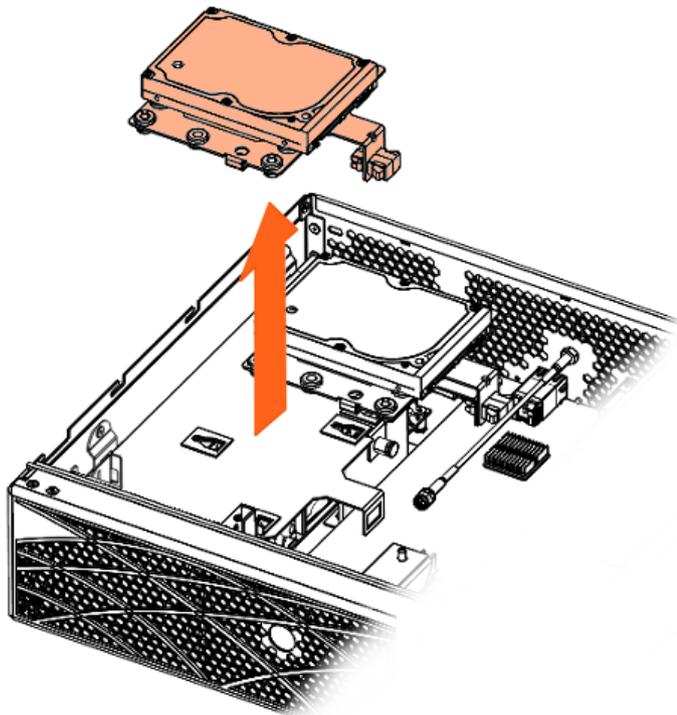


## 6. Remove the disk cage assembly

1. Disconnect the power and signal cables from the disk.
2. Push in the latches on either side of the disk cage assembly lock.
3. Pull on the lock and disk cage assembly to unlock the assembly.

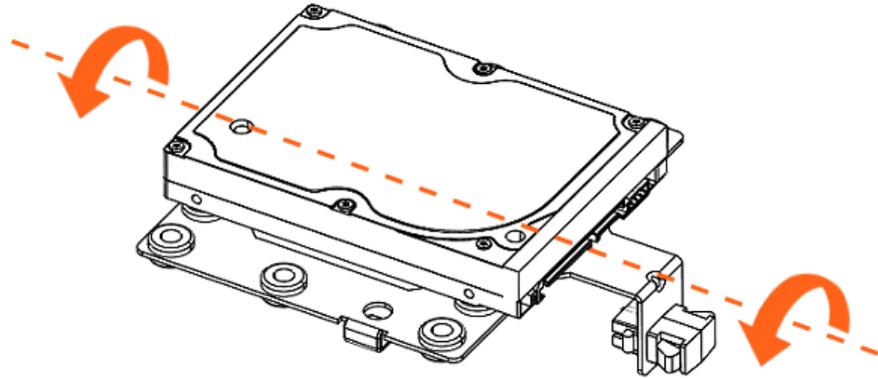


4. Pull the disk cage assembly out.

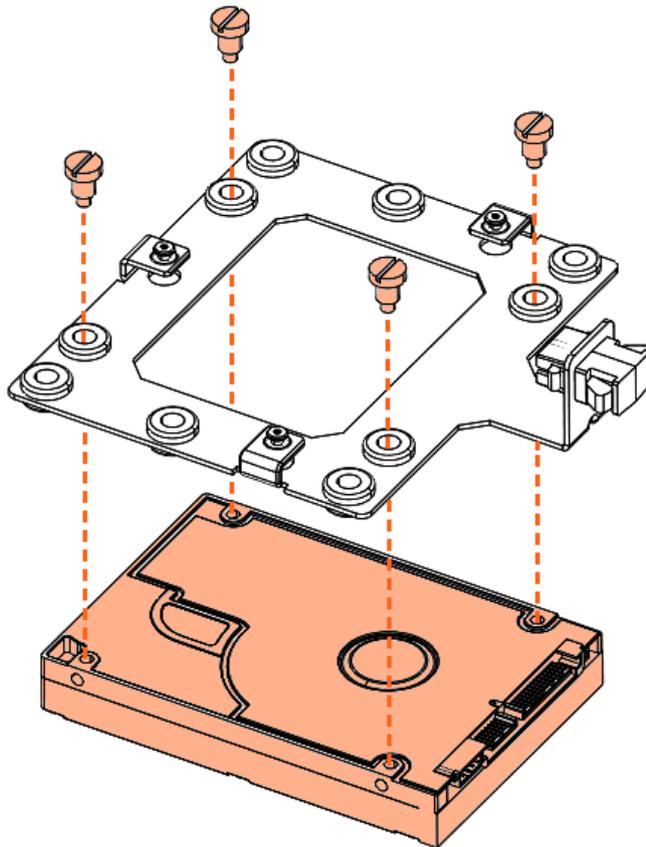


## 7. Remove the disk

1. Turn the disk cage assembly over.



2. Remove the screws.
3. Remove the disk.



## 6.2. Installing a 2.5" disk

### Required Tools

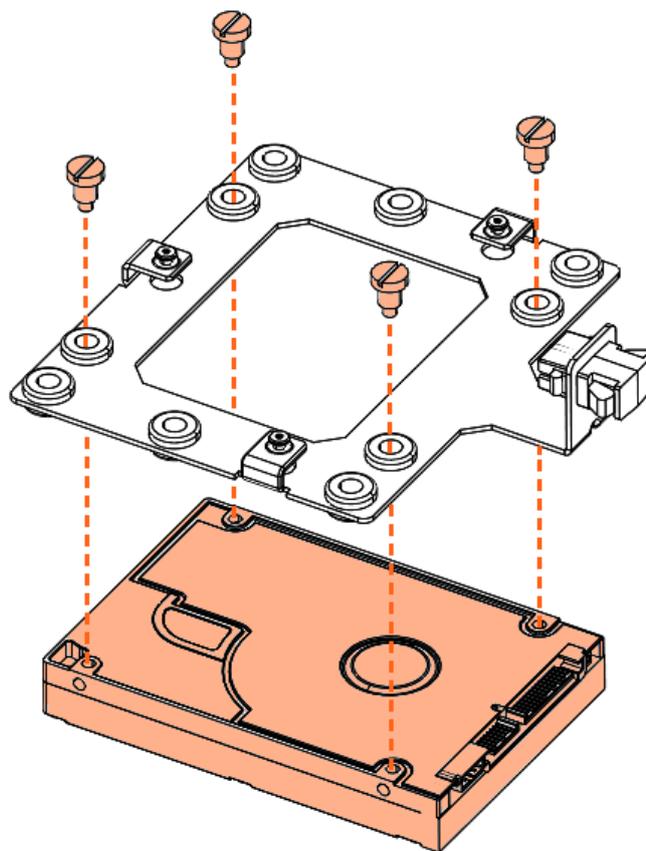
Flat screwdriver

### Procedure

#### 1. Take hold of the new component

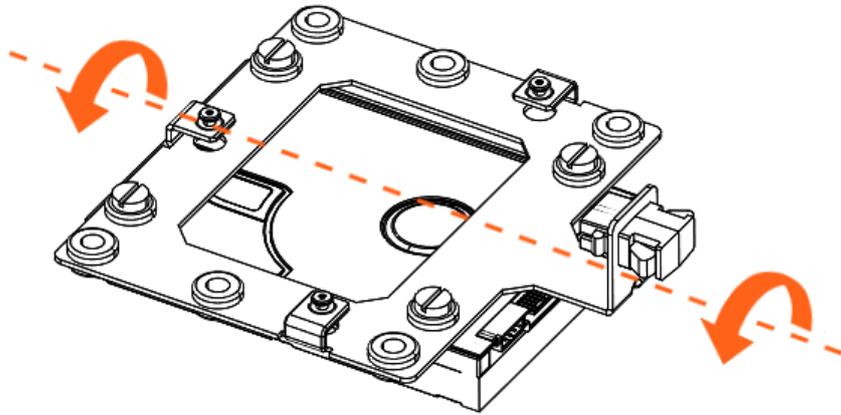
#### 2. Install the disk

1. Position the disk cage on top of the disk.
2. Tighten the screws.

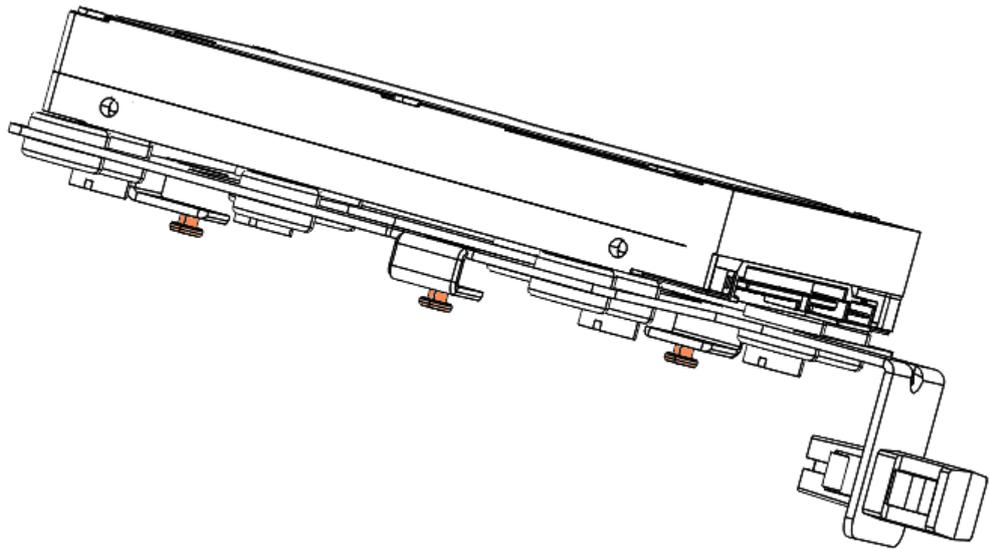


### 3. Install the disk cage assembly

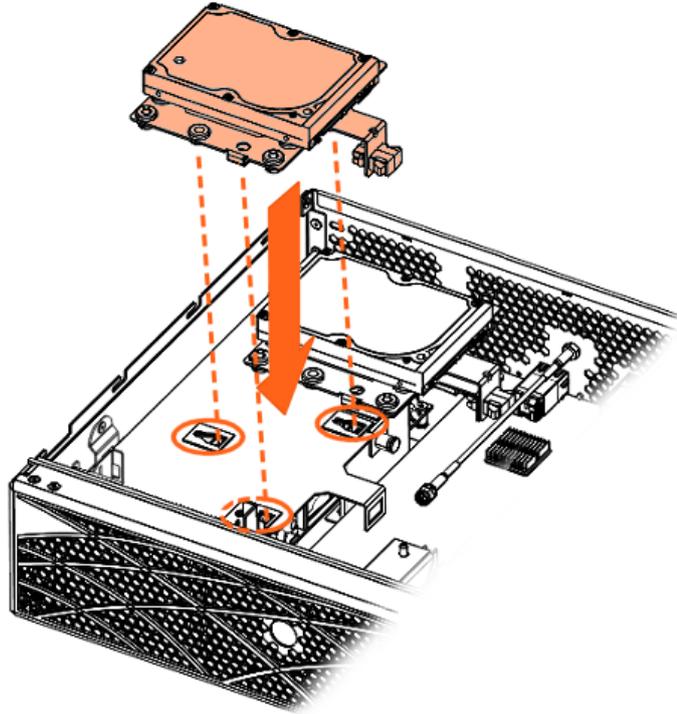
1. Turn the disk cage assembly over



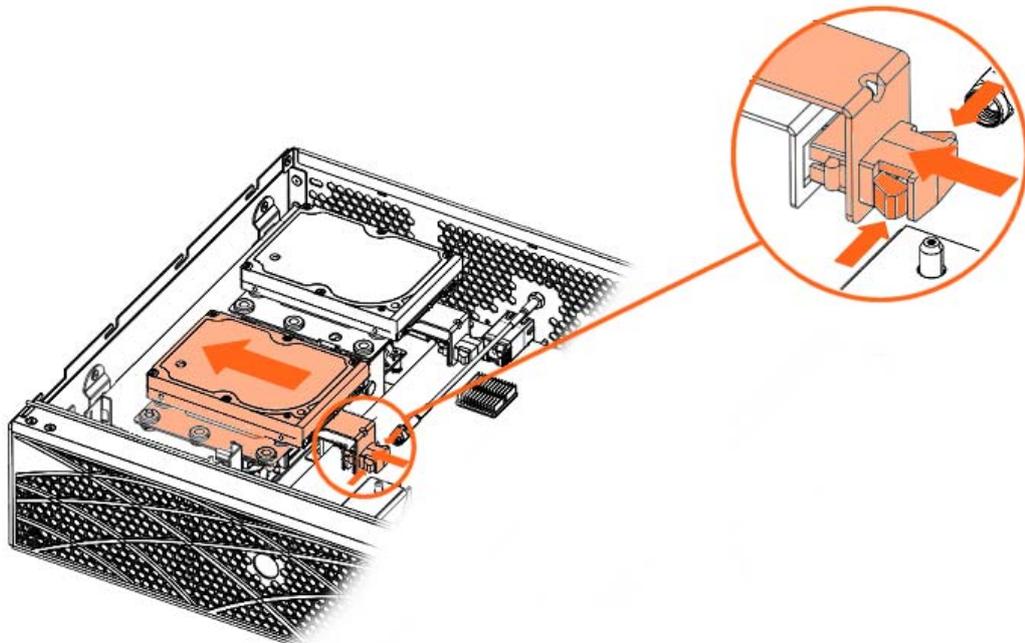
2. Locate the three guide pins



3. Put the disk cage assembly into place



4. Push in the latches on either side of the disk cage assembly lock.
5. Push the lock and disk cage assembly to secure the assembly into place.

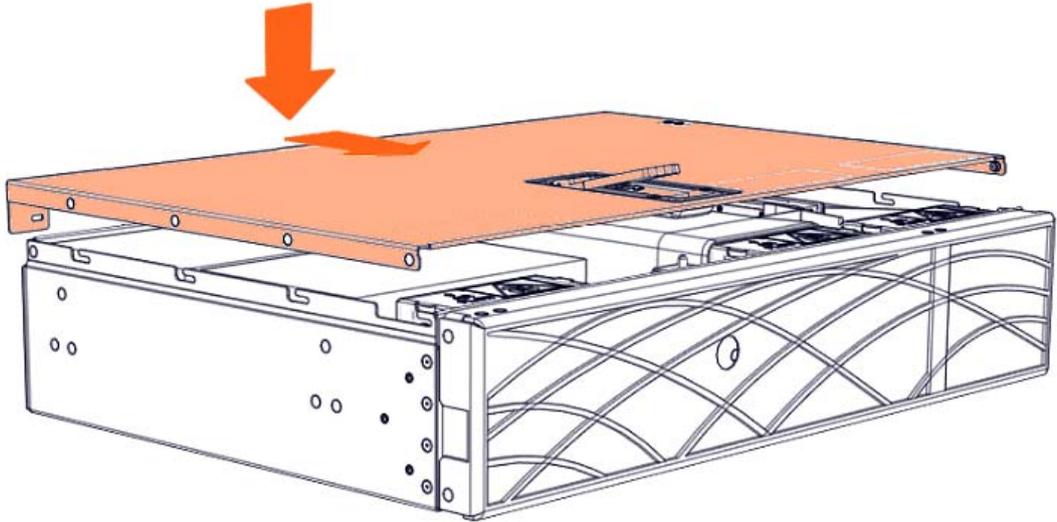


6. Connect the power and signal cables to the disk.

#### 4. Install the cover

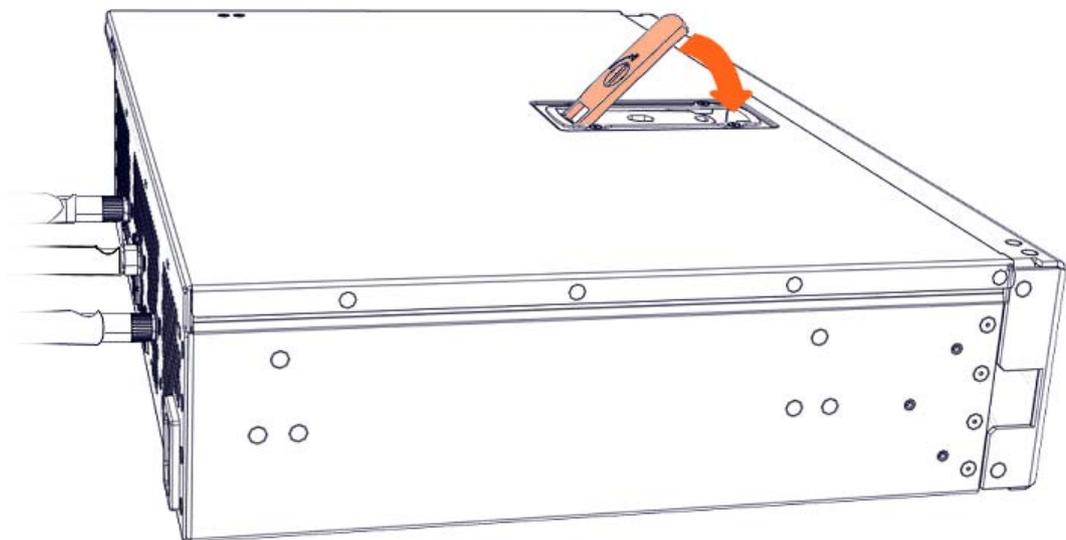
1. Put the cover into place.

 **Front view**



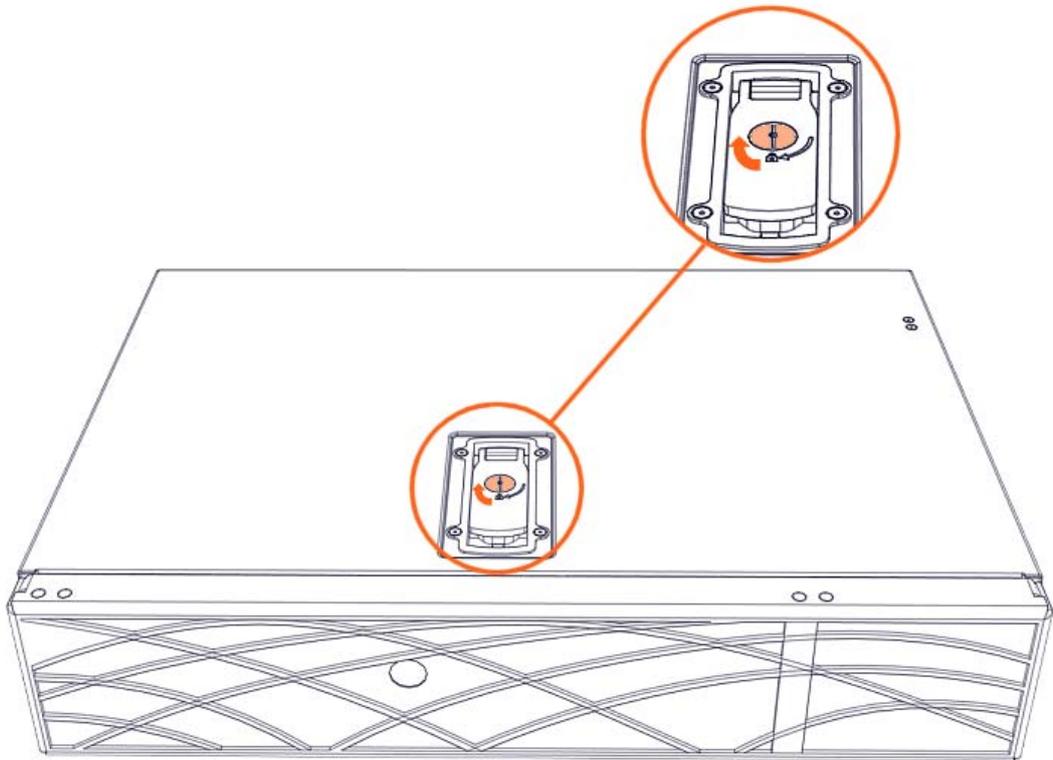
2. Close the latch.

 **Side view**



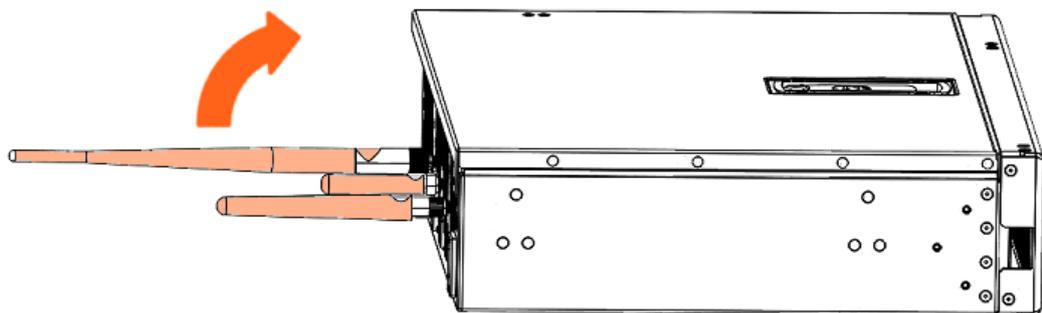
3. Lock the latch to secure the cover in place.

 **Front view**



4. Rotate the external antennas to the vertical position.

 **Side view**



**5. Install the top aesthetic cover if aesthetic covers are present**

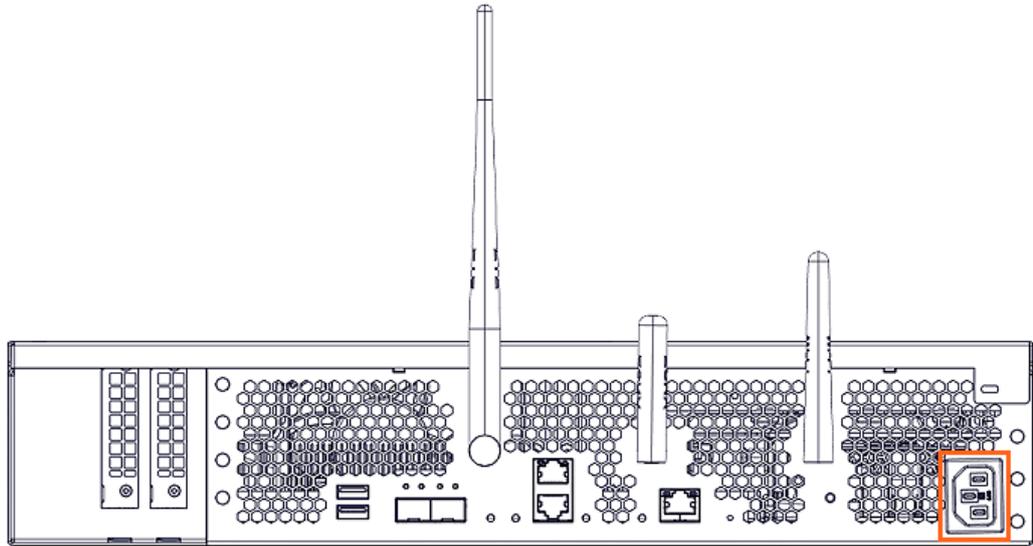
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**See** [Appendix A Servicing the top aesthetic cover](#)

---

## 6. Connect the power supply cable

 Rear view



## 7. Power on the server

---

## Chapter 7. Servicing a 3.5" disk

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**Important ATTENTION:** Please read carefully the safety instructions before you perform the procedures described in this manual.

*Multilingual Safety Notices Guide*

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**C004**  **CAUTION**

**C004:**

**Static electricity can damage the server and other electronic devices. To avoid damage, keep static-sensitive devices in their static-protective packages until you are ready to install them.**

**To reduce the possibility of damage from electrostatic discharge, observe the following precautions:**

**Limit your movement. Movement can cause static electricity to build up around you.**

**Wear an electrostatic-discharge wrist strap.**

**Handle the device carefully, holding it by its edges or its frame.**

**Do not touch solder joints, pins, or exposed circuitry.**

**Do not leave the device where others can handle and damage it.**

**While the device is still in its static-protective package, touch it to an unpainted metal surface on the outside of the server for at least 2 seconds. This drains static electricity from the package and from your body.**

**Remove the device from its package and install it directly into the server without setting down the device. If it is necessary to set down the device, put it back into its static-protective package. Do not place the device on the server cover or on a metal surface.**

**Take additional care when you handle devices during cold weather.**

**Heating reduces indoor humidity and increases static electricity.**

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**See** BullSequana Edge Description Guide, 86 A1 65FR to locate the disk.

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## 7.1. Removing a 3.5" disk

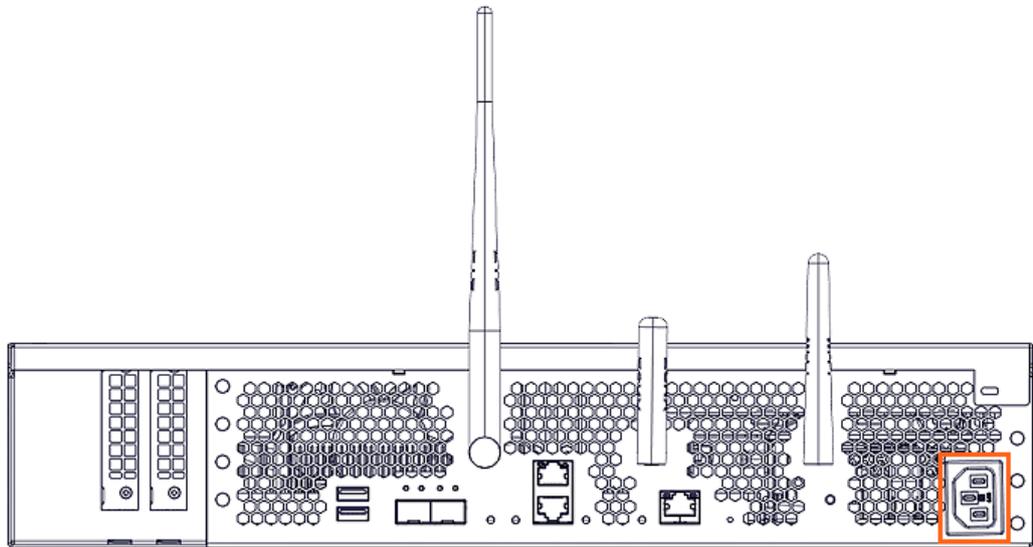
### Required Tools

Phillips screwdriver

### Procedure

1. **Unpack the new component on a clean ESD-protected work surface**
2. **Power off the server**
3. **Disconnect the power supply cable**

 **Rear view**



4. **Remove the top aesthetic cover if aesthetic covers are present**

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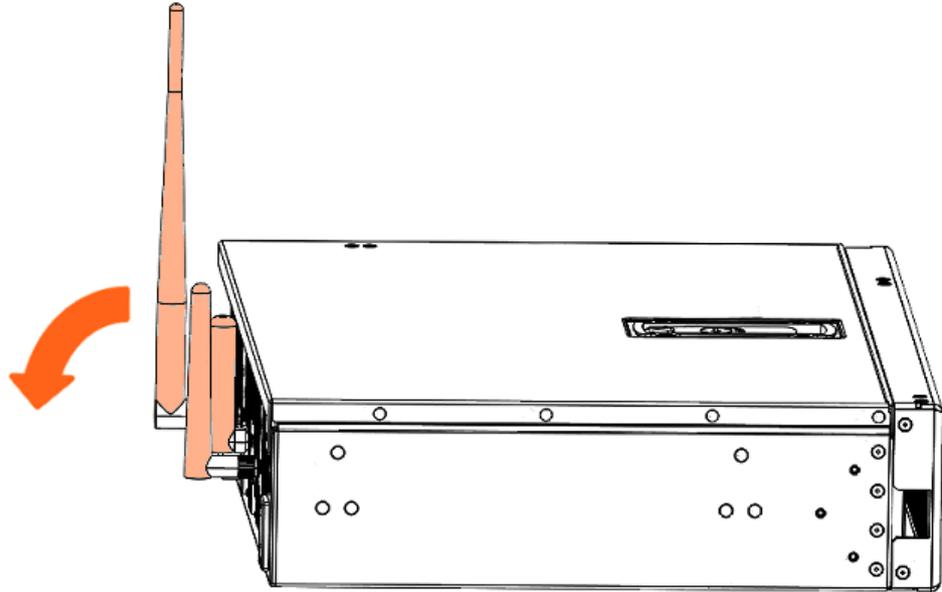
**See** [Appendix A Servicing the top aesthetic cover](#)

---

## 5. Remove the cover

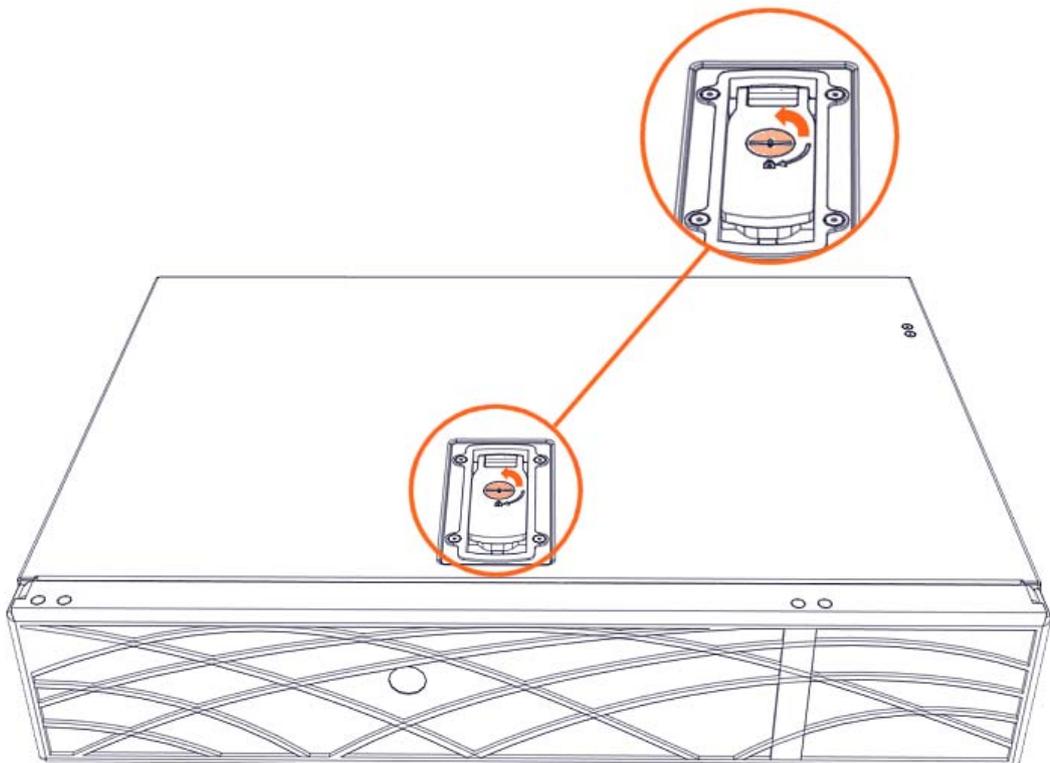
1. Rotate the external antennas to the horizontal position.

 **Side view**



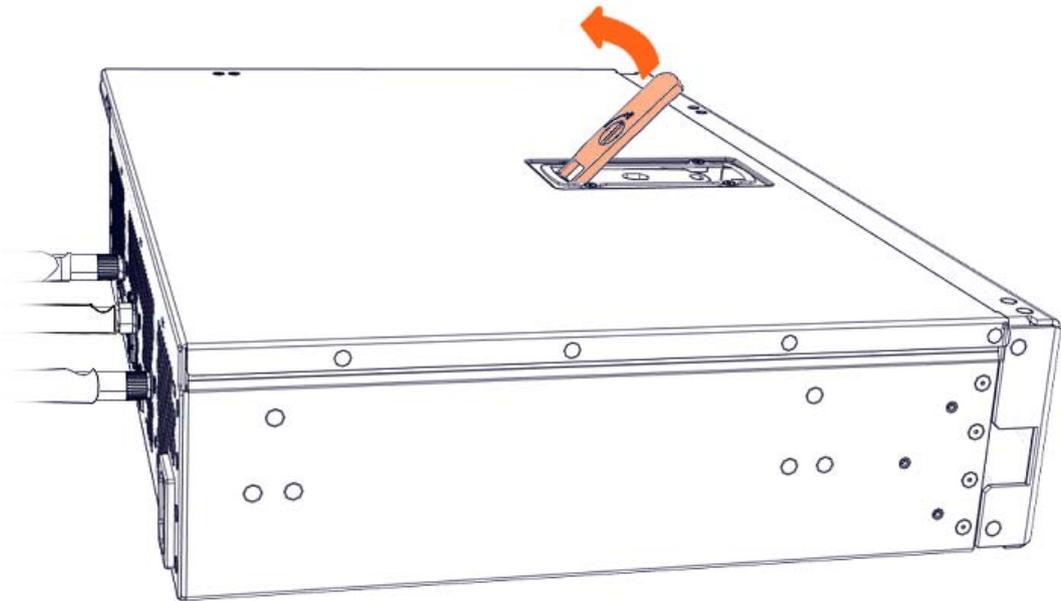
2. Unlock the cover latch.

 **Front view**



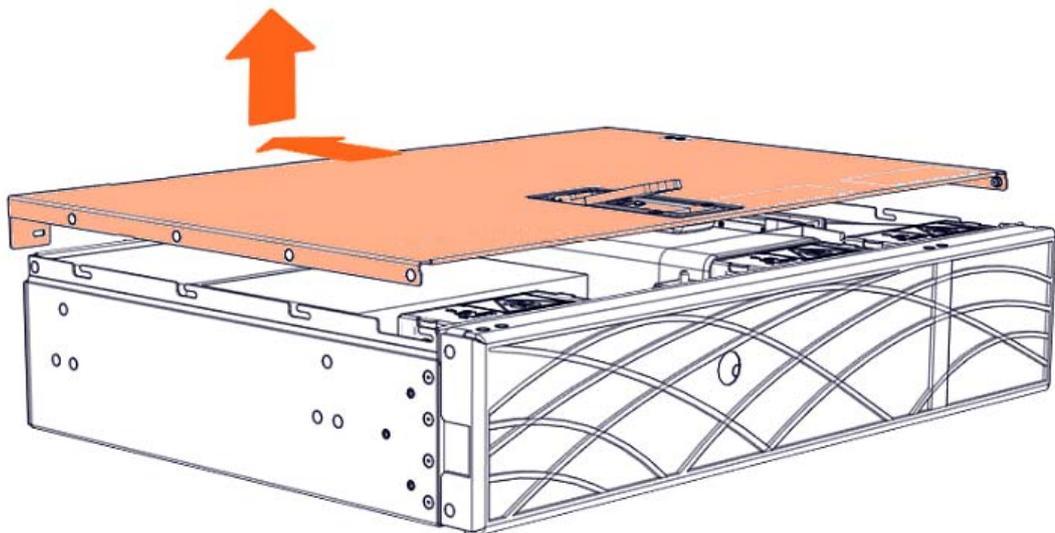
3. Pull the latch up.

 **Side view**



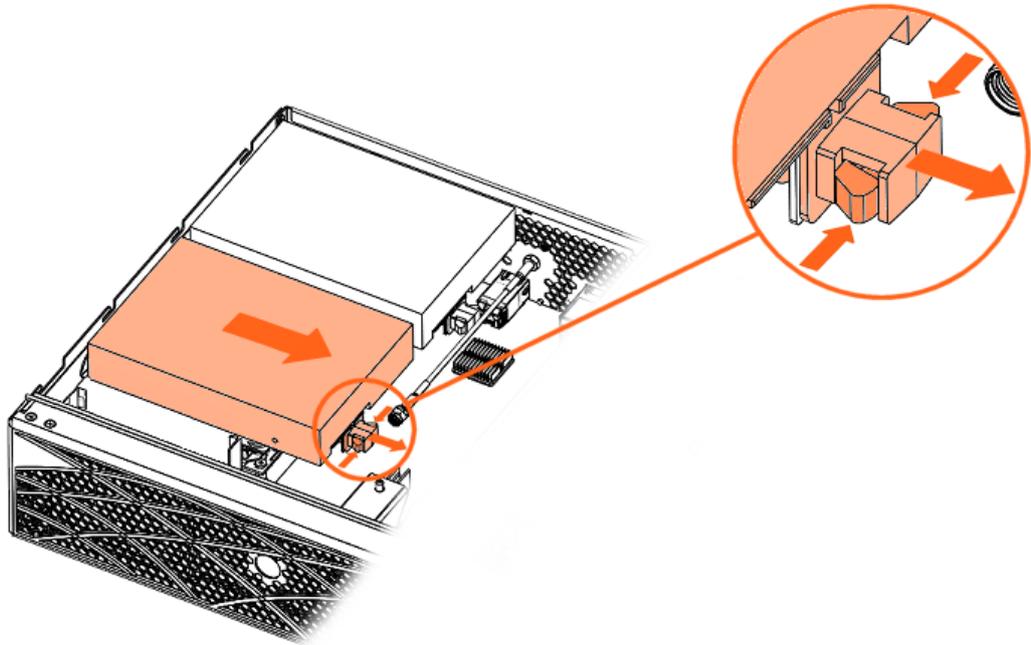
4. Remove the cover.

 **Front view**

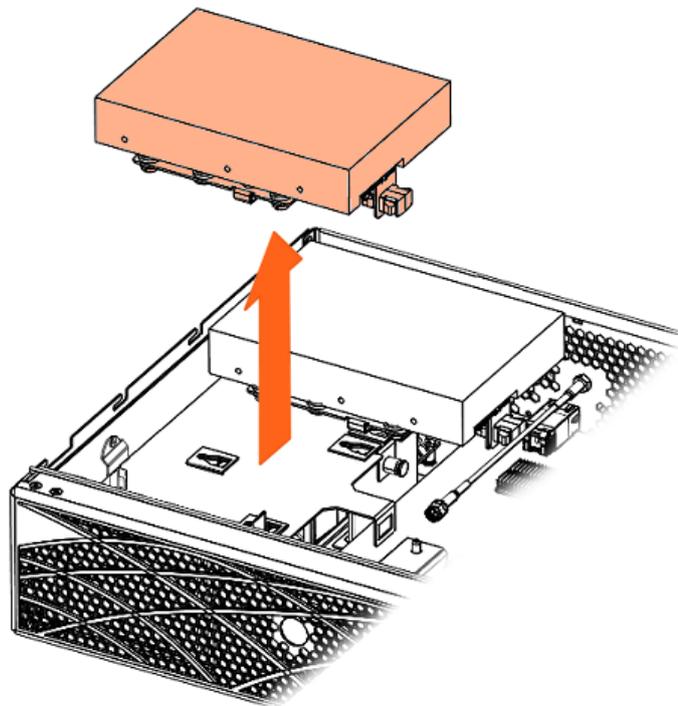


## 6. Remove the disk cage assembly

1. Disconnect the power and signal cables from the disk.
2. Push in the latches on either side of the disk cage assembly lock.
3. Pull on the lock and disk cage assembly to unlock the assembly.

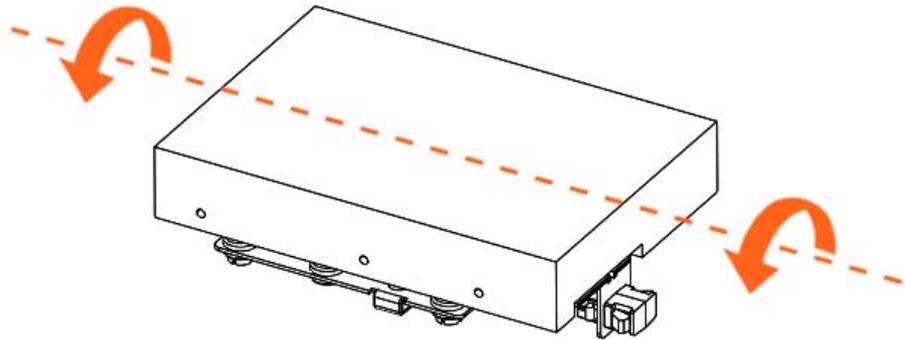


4. Pull the disk cage assembly out.

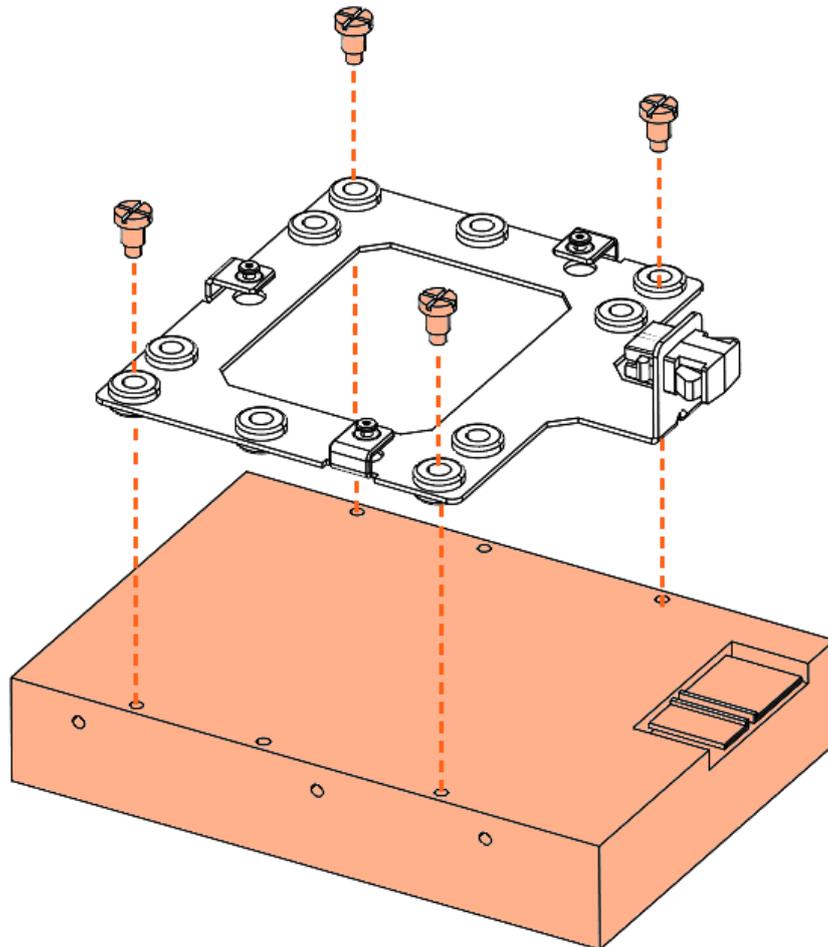


## 7. Remove the disk

1. Turn the disk cage assembly over.



2. Remove the screws.
3. Remove the disk.



## 7.2. Installing a 3.5" disk

### Required Tools

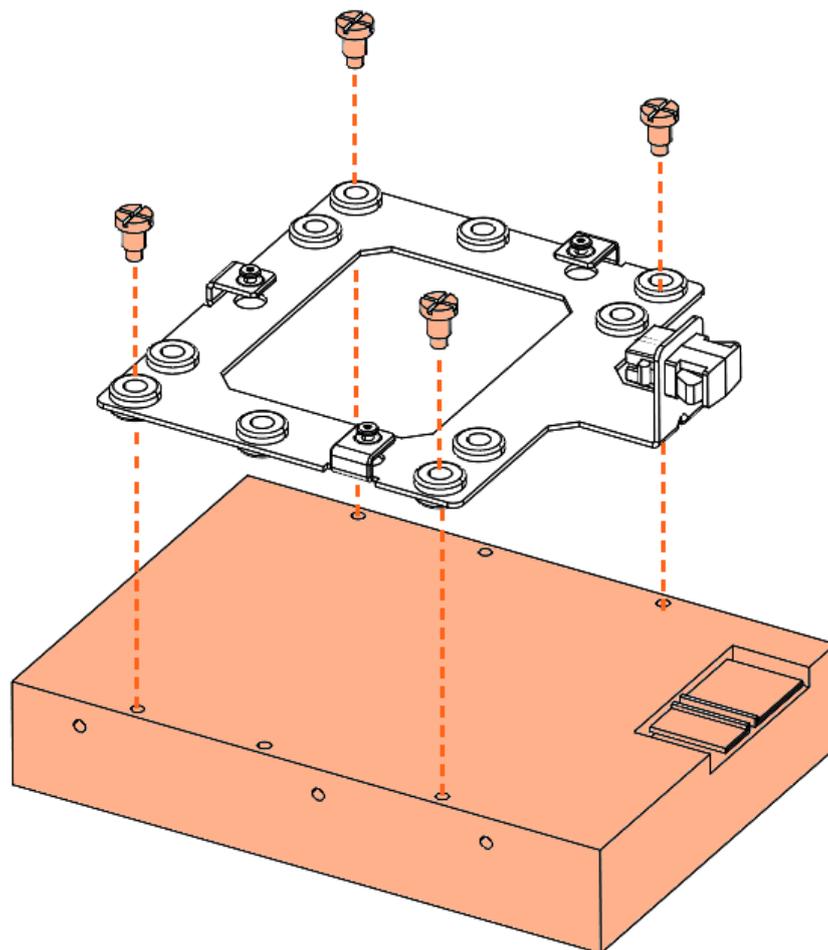
Phillips screwdriver

### Procedure

#### 1. Take hold of the new component

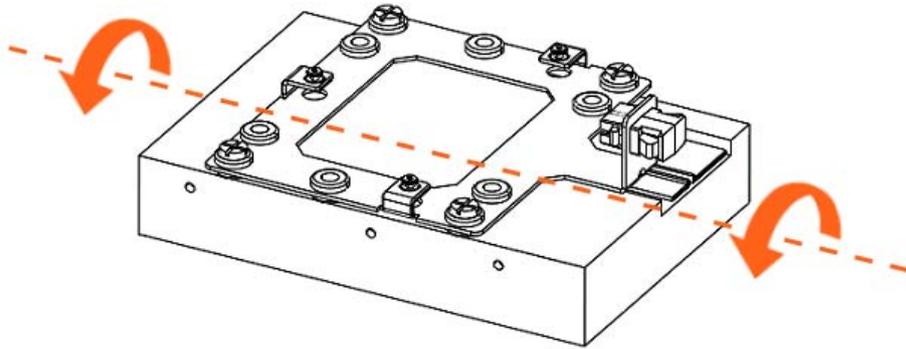
#### 2. Install the disk

1. Position the disk cage on top of the disk.
2. Tighten the screws.

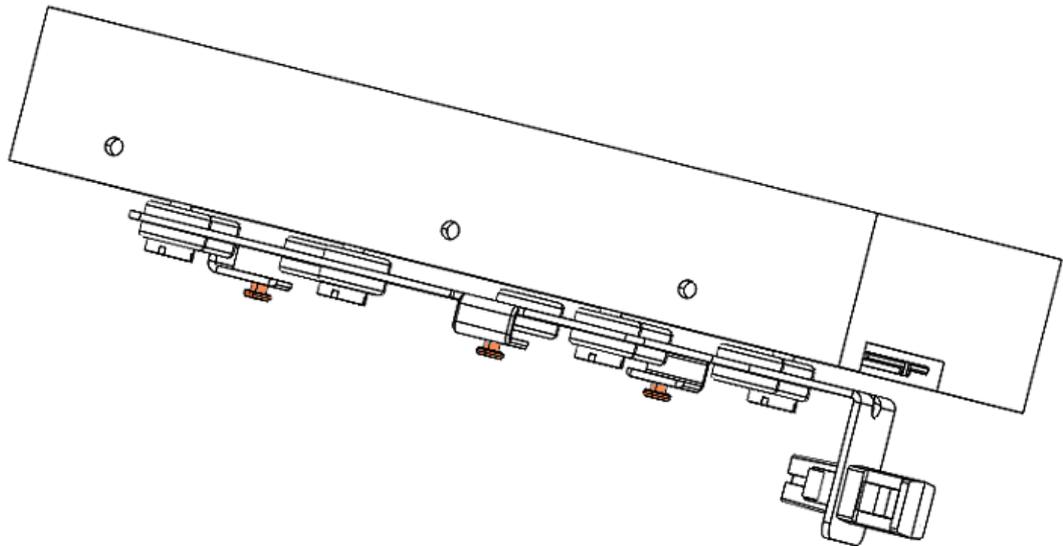


### 3. Install the disk cage assembly

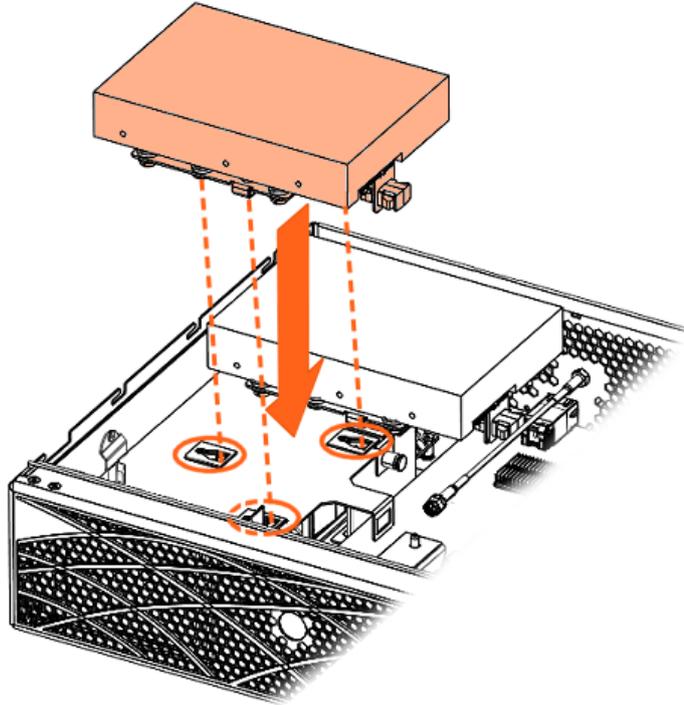
1. Turn the disk cage assembly over



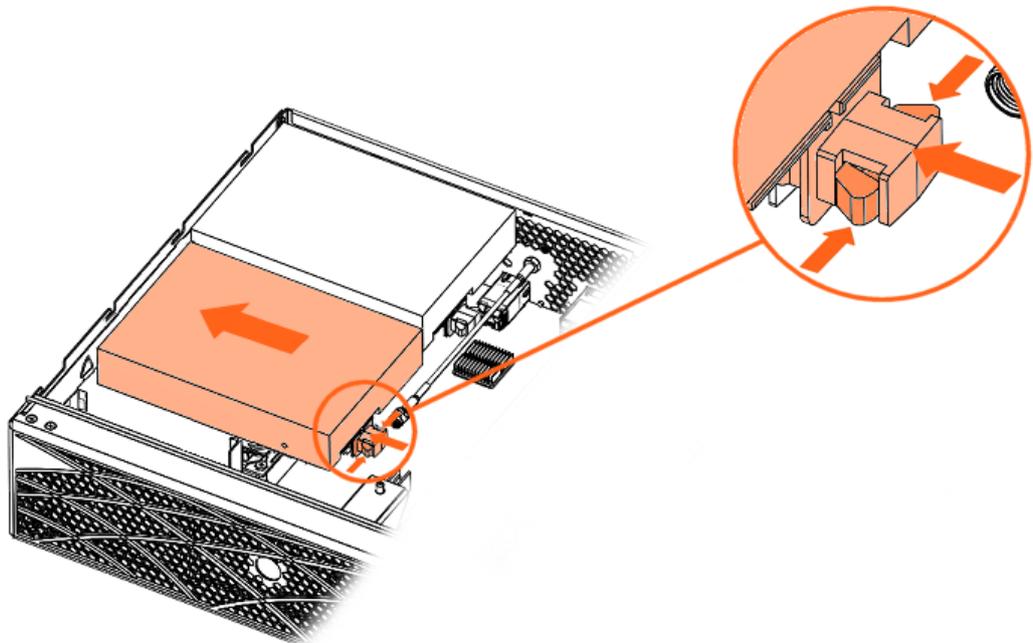
2. Locate the three guide pins



3. Put the disk cage assembly into place



4. Push in the latches on either side of the disk cage assembly lock.
5. Push the lock and disk cage assembly to secure the assembly into place.

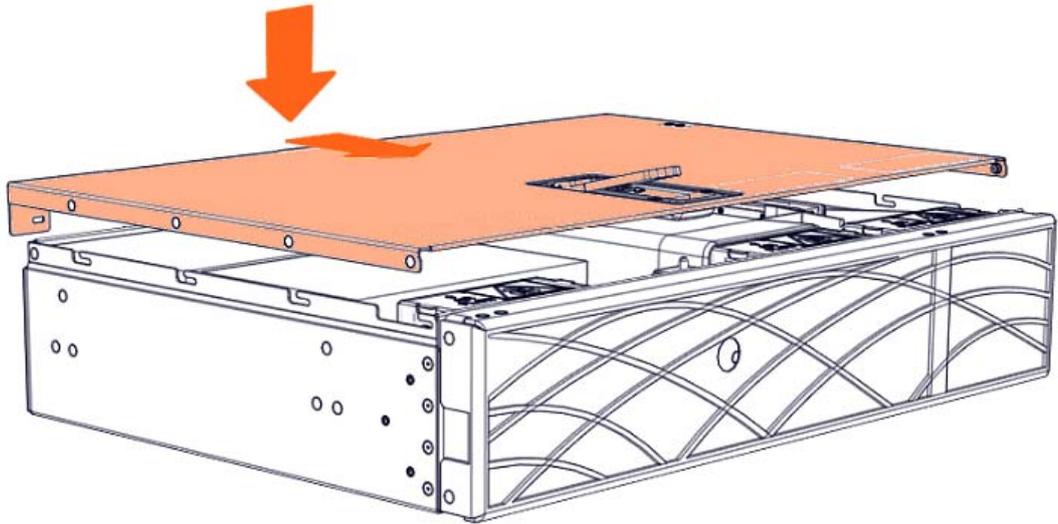


6. Connect the power and signal cables to the disk.

#### 4. Install the cover

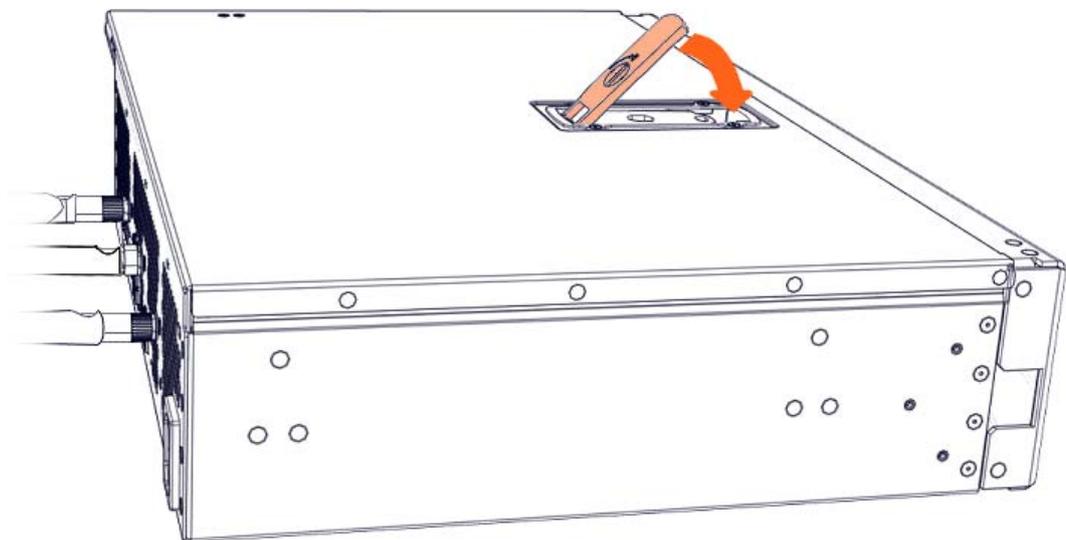
1. Put the cover into place.

 **Front view**



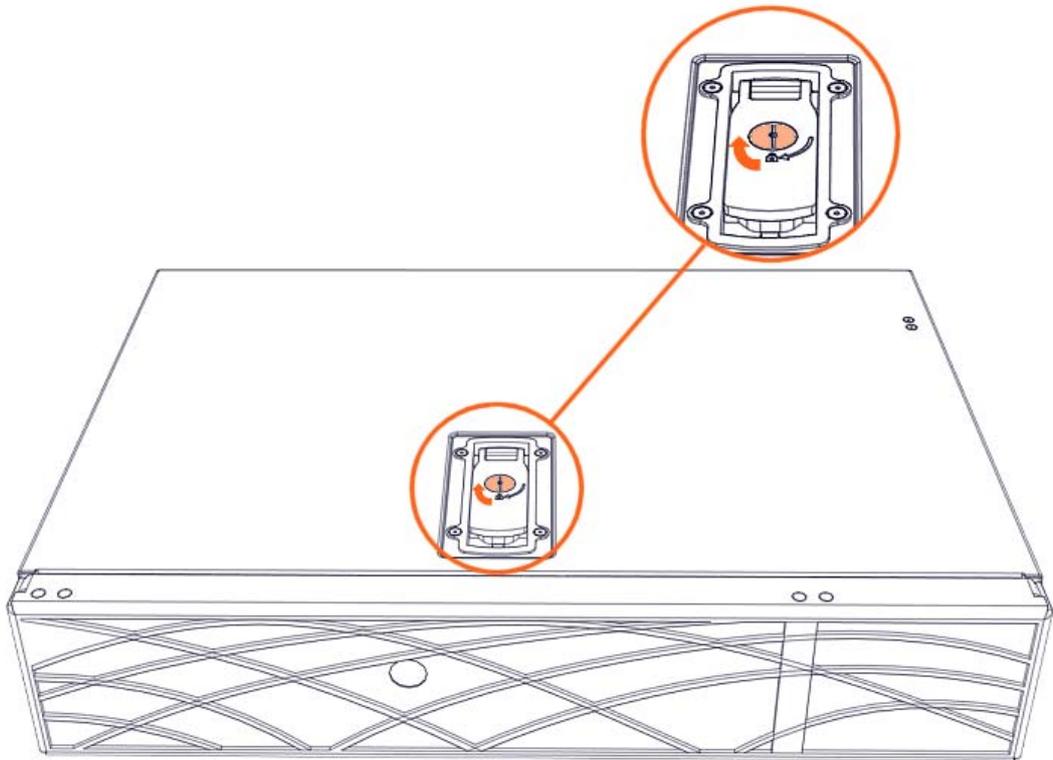
2. Close the latch.

 **Side view**



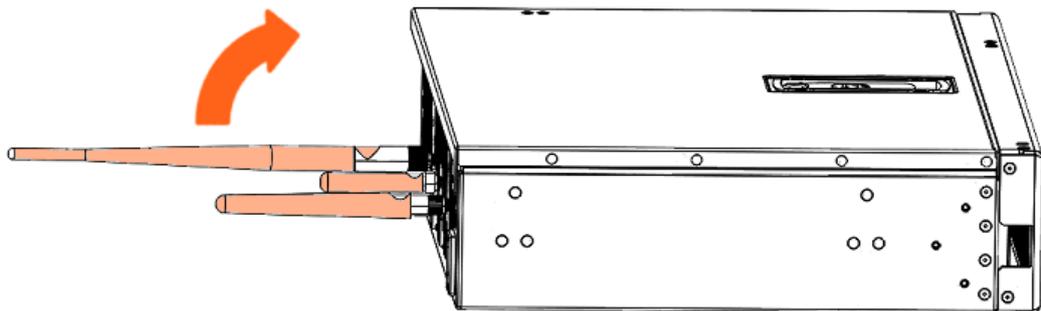
3. Lock the latch to secure the cover in place.

 **Front view**



4. Rotate the external antennas to the vertical position.

 **Side view**



**5. Install the top aesthetic cover if aesthetic covers are present**

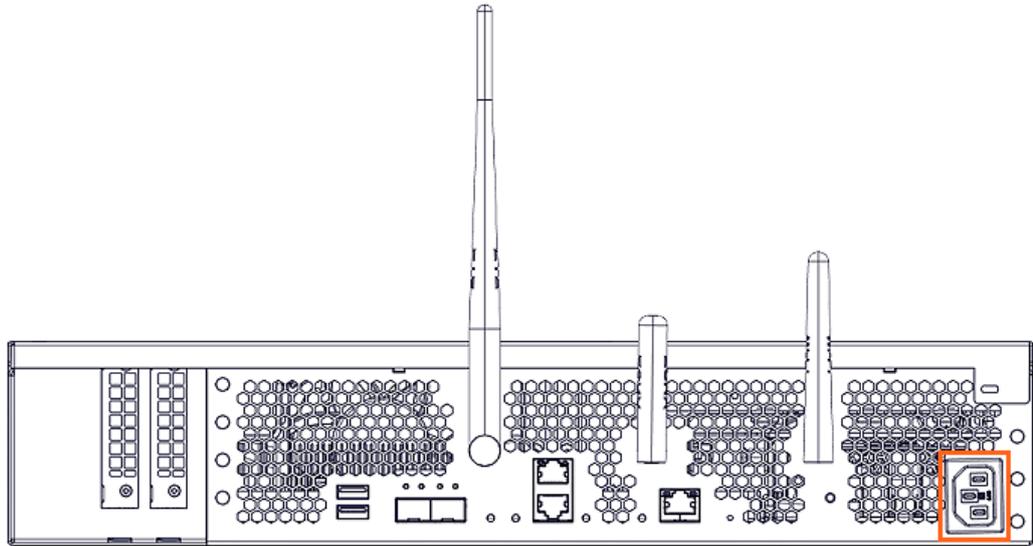
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**See** [Appendix A Servicing the top aesthetic cover](#)

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**6. Connect the power supply cable**

 **Rear view**



**7. Power on the server**

---

## Chapter 8. Servicing an intrusion detection switch

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**Important** **ATTENTION:** Please read carefully the safety instructions before you perform the procedures described in this manual.

*Multilingual Safety Notices Guide*

---

**C004**  **CAUTION**

**C004:**

**Static electricity can damage the server and other electronic devices. To avoid damage, keep static-sensitive devices in their static-protective packages until you are ready to install them.**

**To reduce the possibility of damage from electrostatic discharge, observe the following precautions:**

**Limit your movement. Movement can cause static electricity to build up around you.**

**Wear an electrostatic-discharge wrist strap.**

**Handle the device carefully, holding it by its edges or its frame.**

**Do not touch solder joints, pins, or exposed circuitry.**

**Do not leave the device where others can handle and damage it.**

**While the device is still in its static-protective package, touch it to an unpainted metal surface on the outside of the server for at least 2 seconds. This drains static electricity from the package and from your body.**

**Remove the device from its package and install it directly into the server without setting down the device. If it is necessary to set down the device, put it back into its static-protective package. Do not place the device on the server cover or on a metal surface.**

**Take additional care when you handle devices during cold weather.**

**Heating reduces indoor humidity and increases static electricity.**

---

**See** BullSequana Edge Description Guide, 86 A1 65FR to locate the intrusion detection switch.

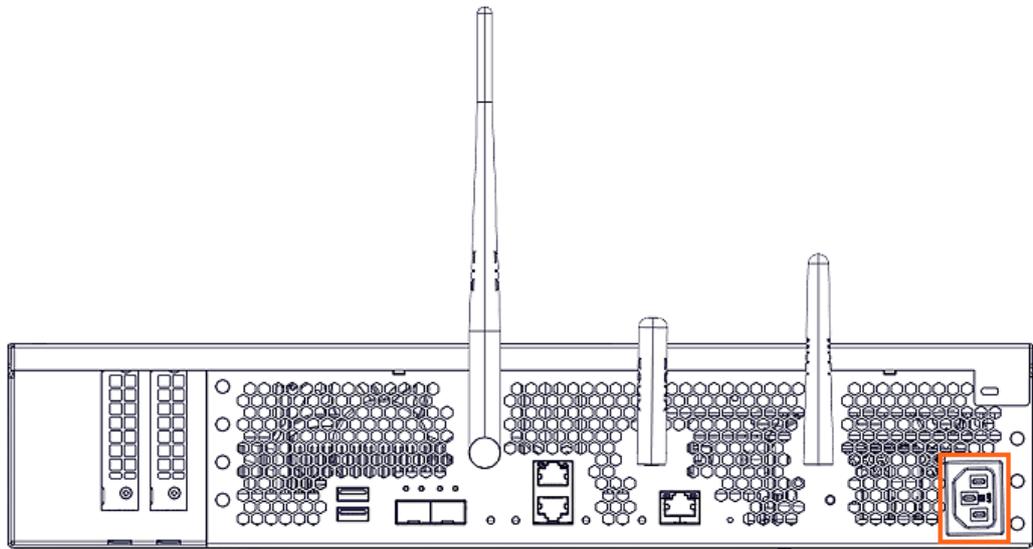
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## 8.1. Removing an intrusion detection switch

### Procedure

1. **Unpack the new component on a clean ESD-protected work surface**
2. **Power off the server**
3. **Disconnect the power supply cable**

 **Rear view**



4. **Remove the top aesthetic cover if aesthetic covers are present**

---

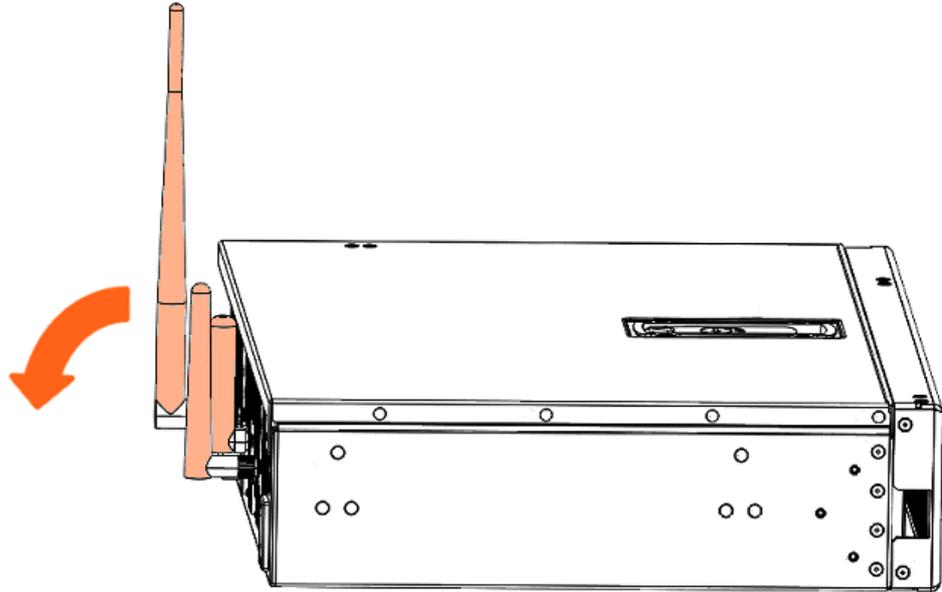
**See** [Appendix A Servicing the top aesthetic cover](#)

---

## 5. Remove the cover

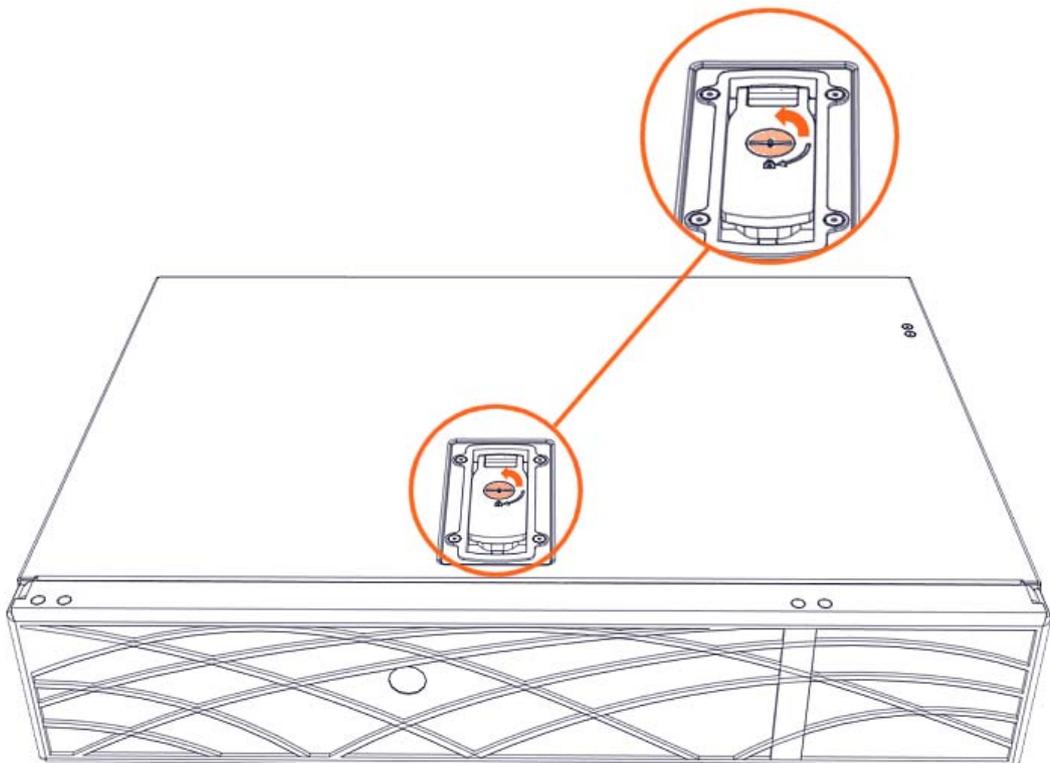
1. Rotate the external antennas to the horizontal position.

 **Side view**



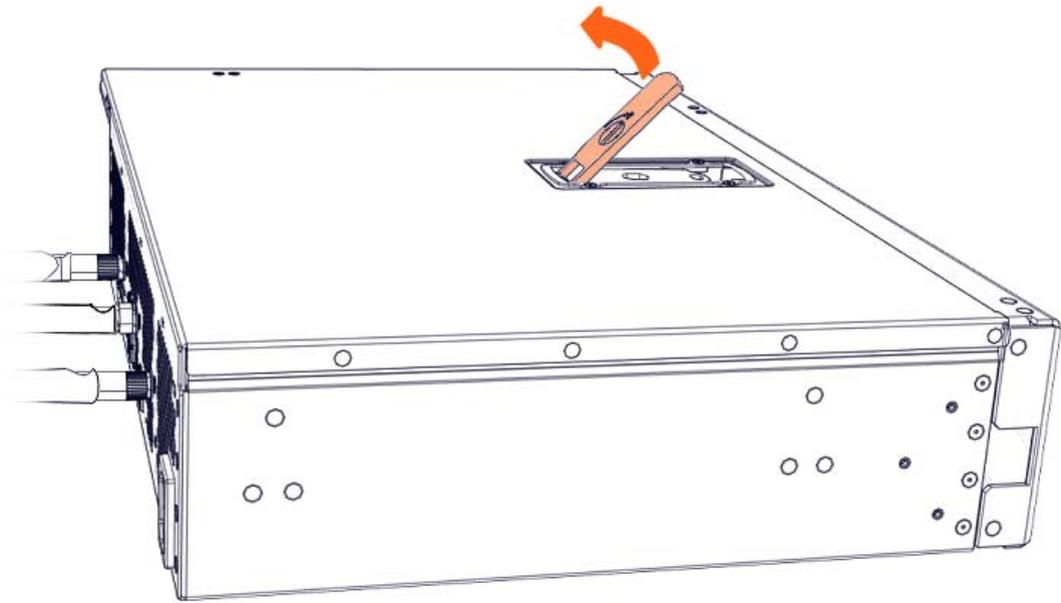
2. Unlock the cover latch.

 **Front view**



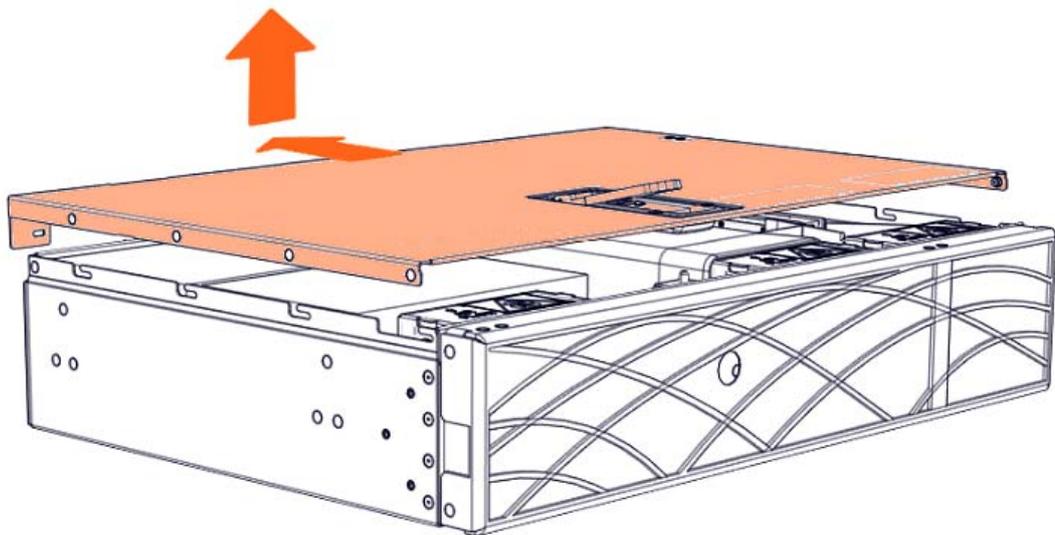
3. Pull the latch up.

 **Side view**



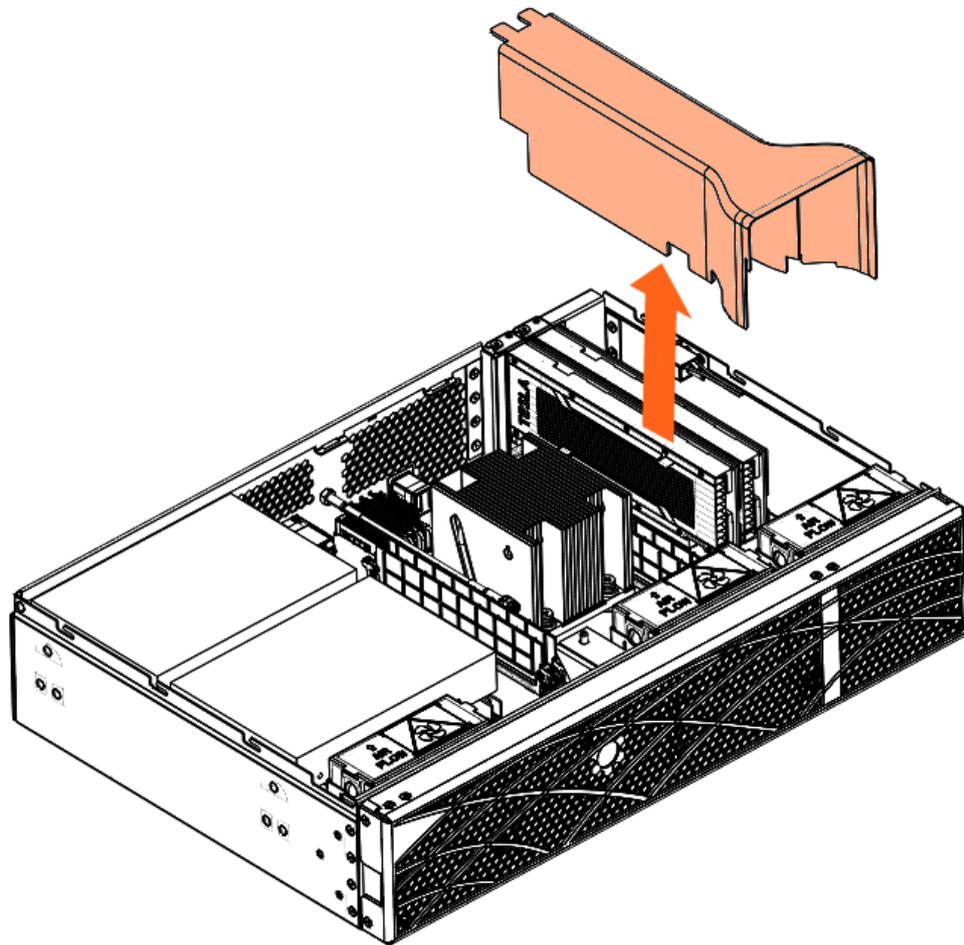
4. Remove the cover.

 **Front view**



**6. Remove the accelerator air duct if present**

 **Front view**

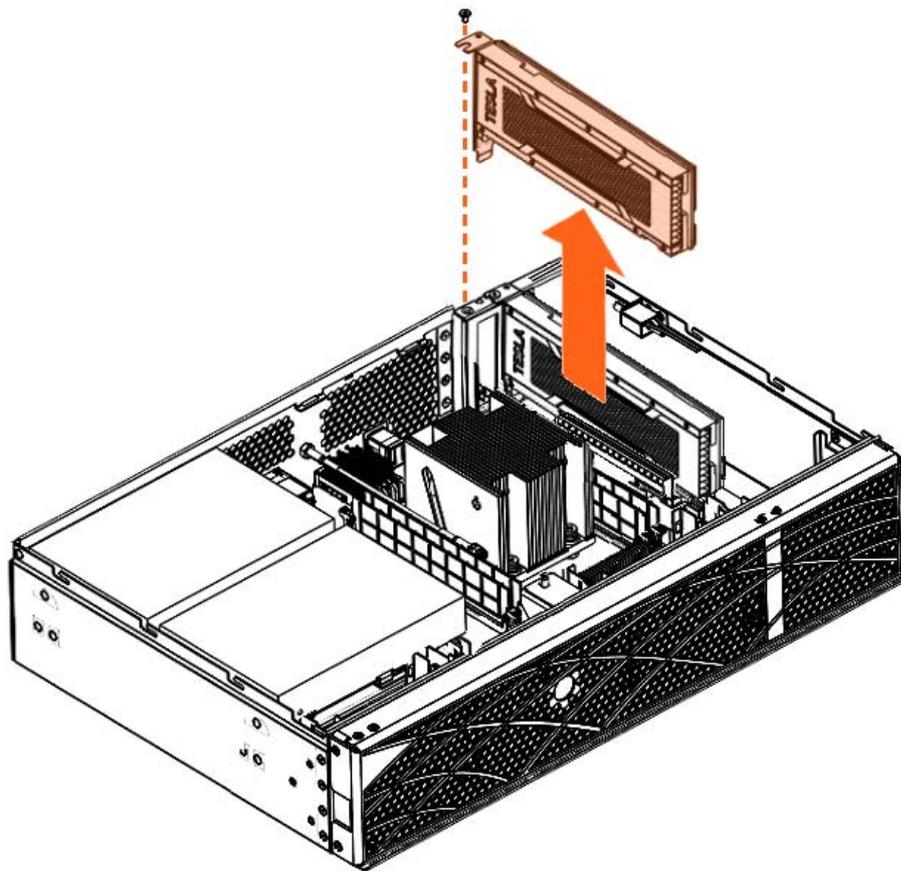


## 7. Remove the accelerators

For each accelerator, perform the following steps:

1. Remove the screw.
2. Pull the accelerator out.

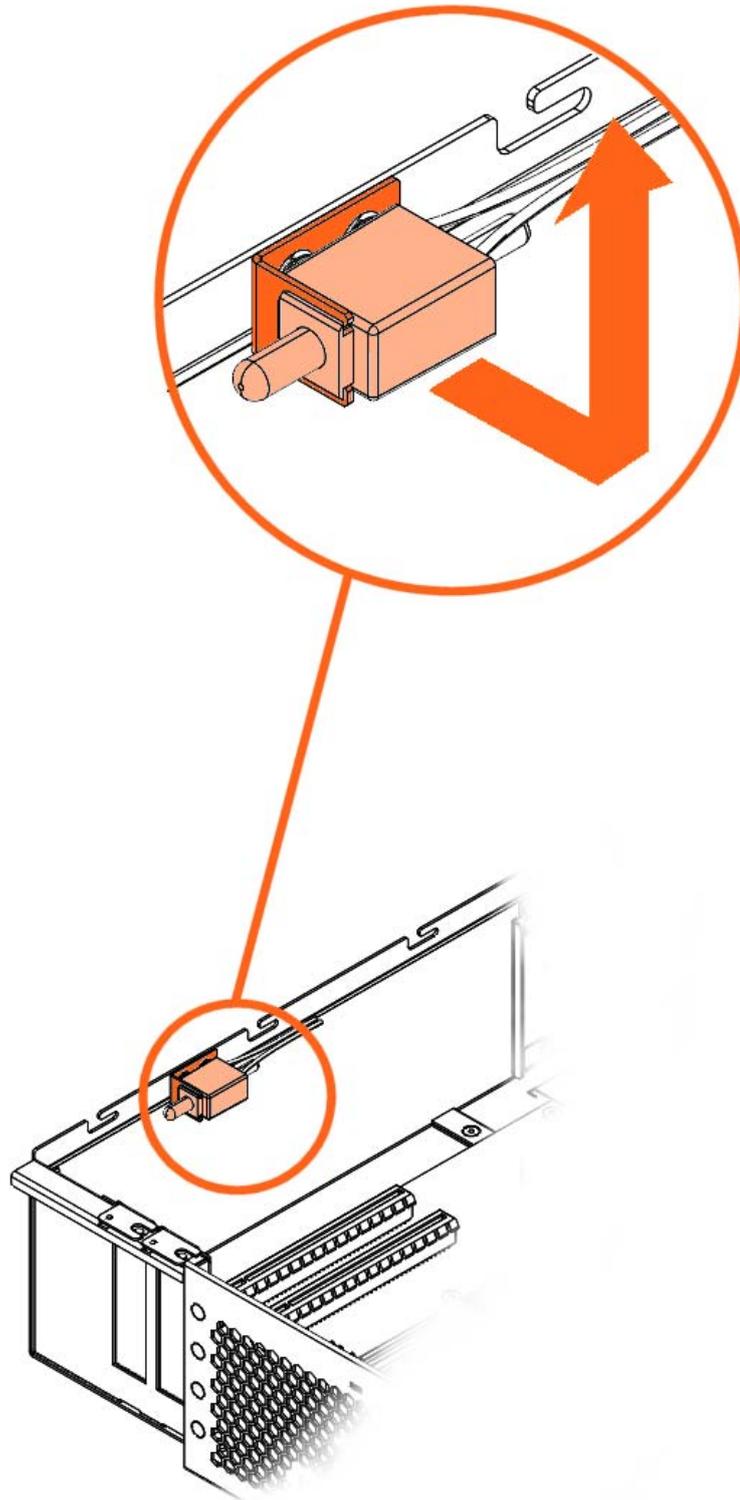
 **Front view**



## 8. Remove the intrusion detection switch and cable

1. Disconnect the intrusion detection switch cable from the motherboard.
2. Unclip the intrusion detection switch from the bracket and move out and up.

 **Rear view**

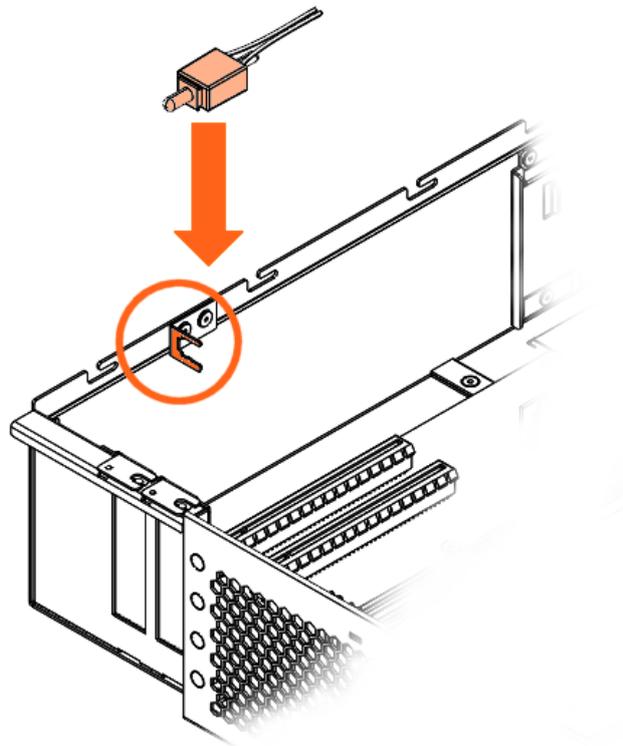


## 8.2. Installing an intrusion detection switch

### Procedure

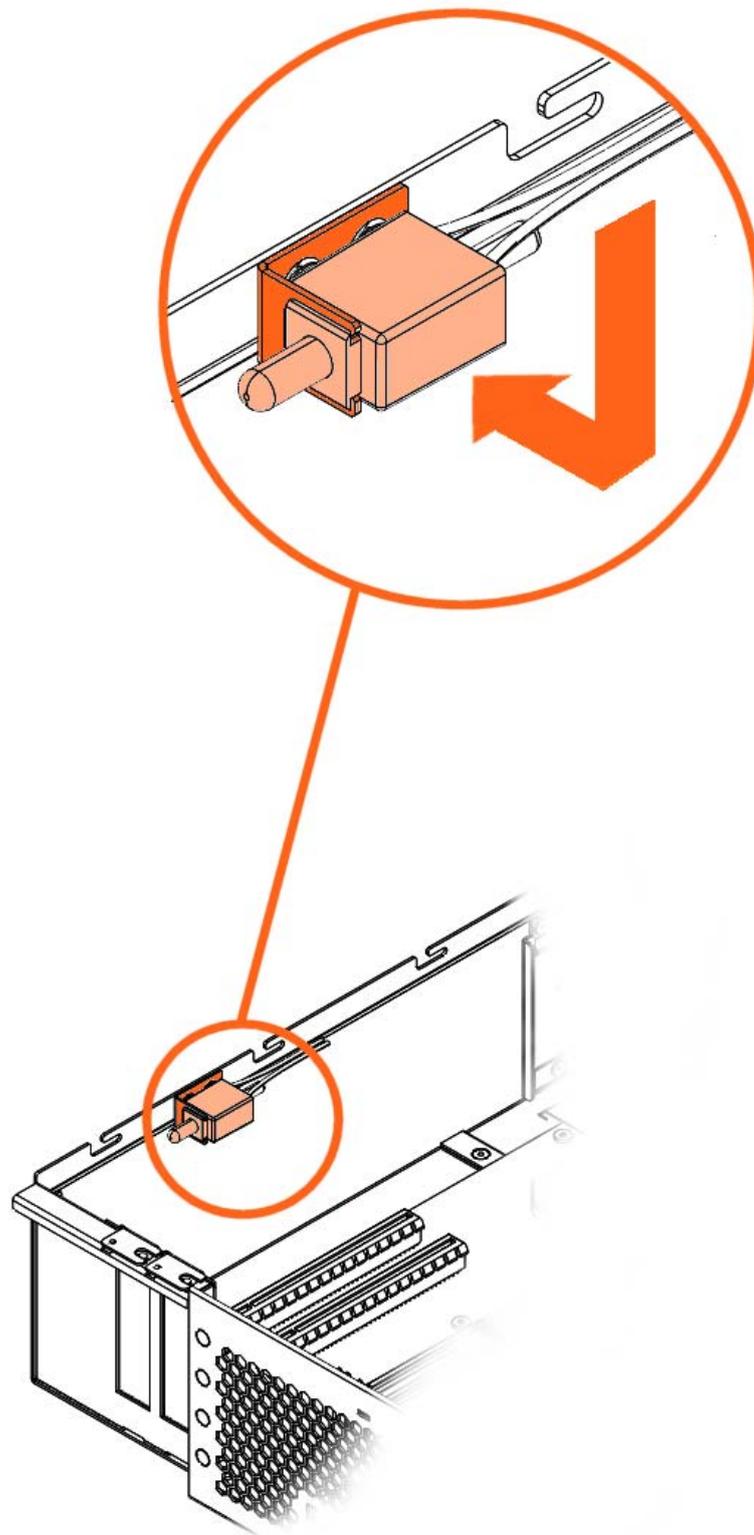
1. Take hold of the new component
2. Install the intrusion detection switch and cable
  1. Move the intrusion detection switch down to the bracket

 Rear view



2. Clip the intrusion detection switch into the bracket.

 **Rear view**



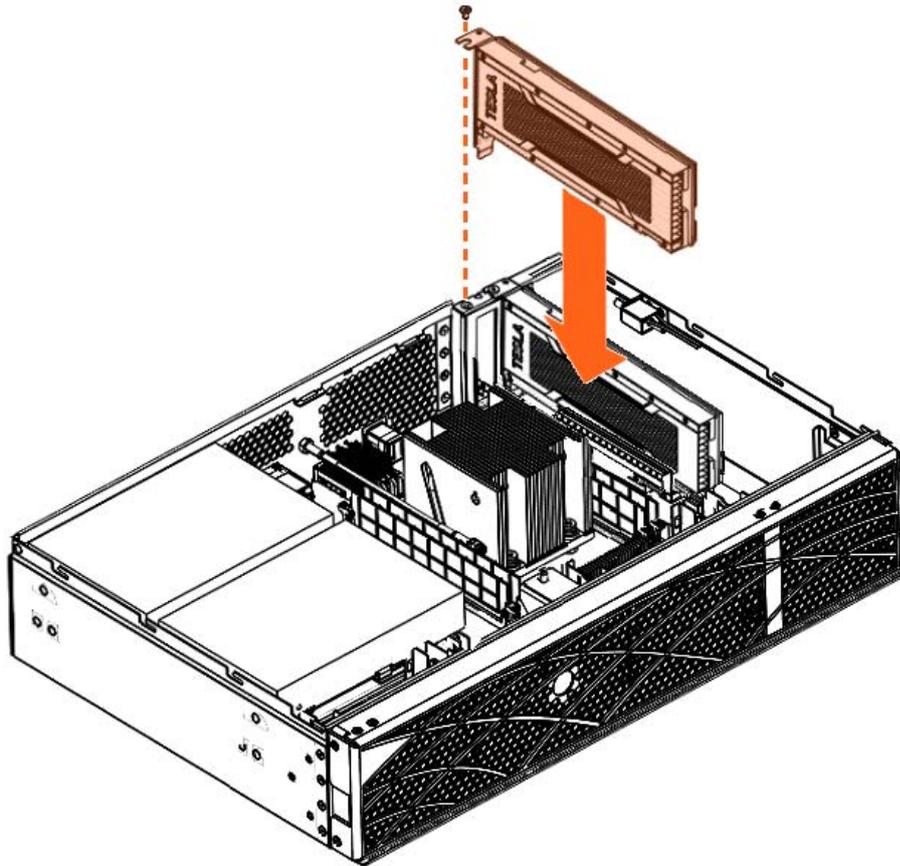
3. Connect the intrusion detection switch cable to the motherboard.

### 3. Install the accelerators

For each accelerator, perform the following steps:

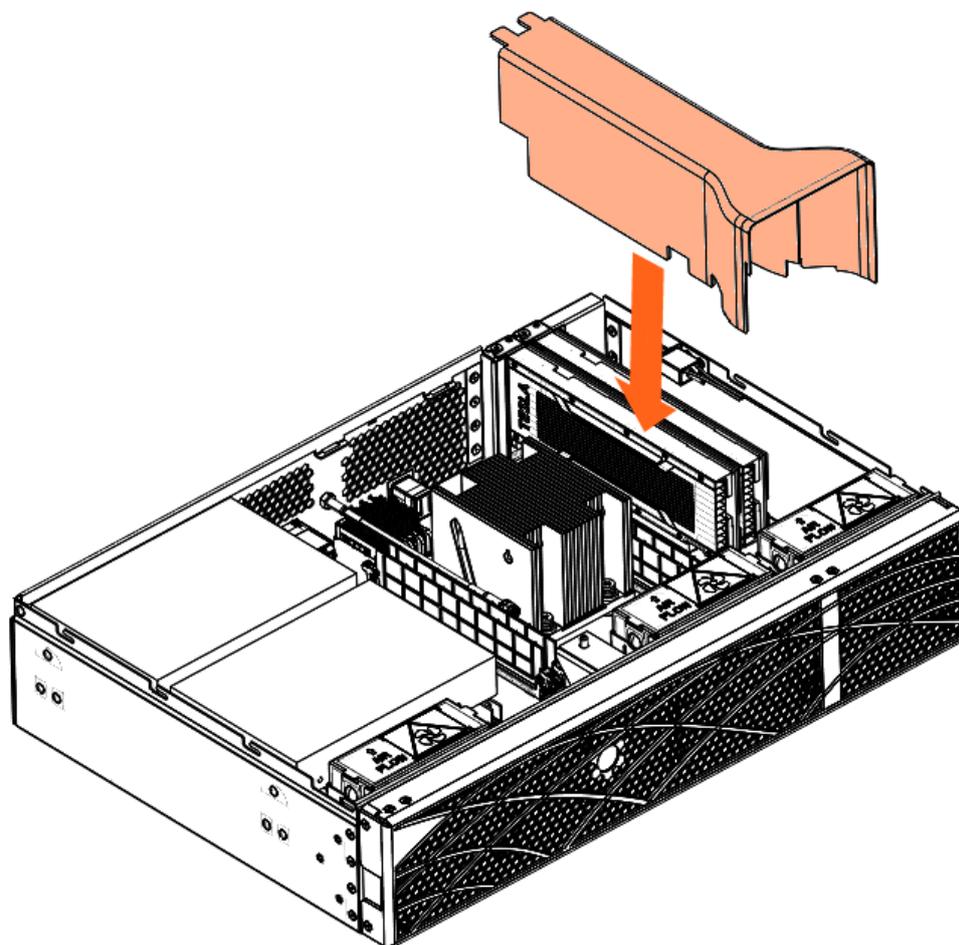
1. Position the accelerator.
2. Tighten the screw.

 **Top view**



**4. Install the accelerator air duct if present**

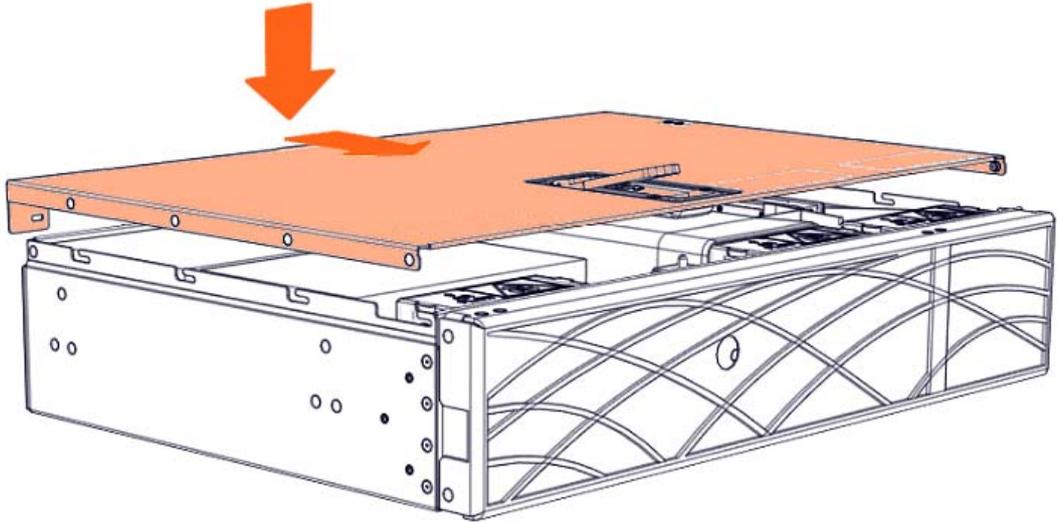
 **Front view**



## 5. Install the cover

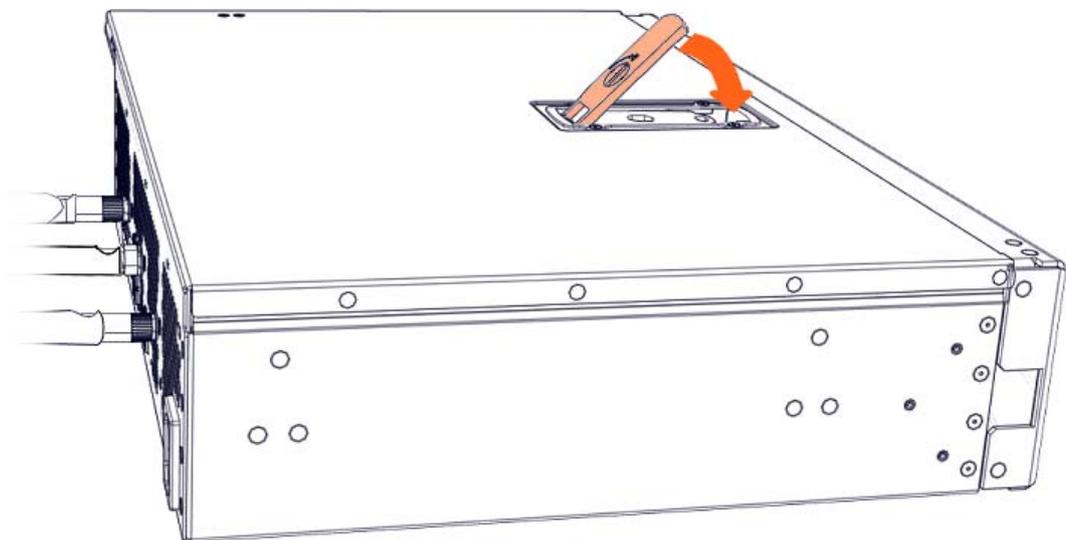
1. Put the cover into place.

 **Front view**



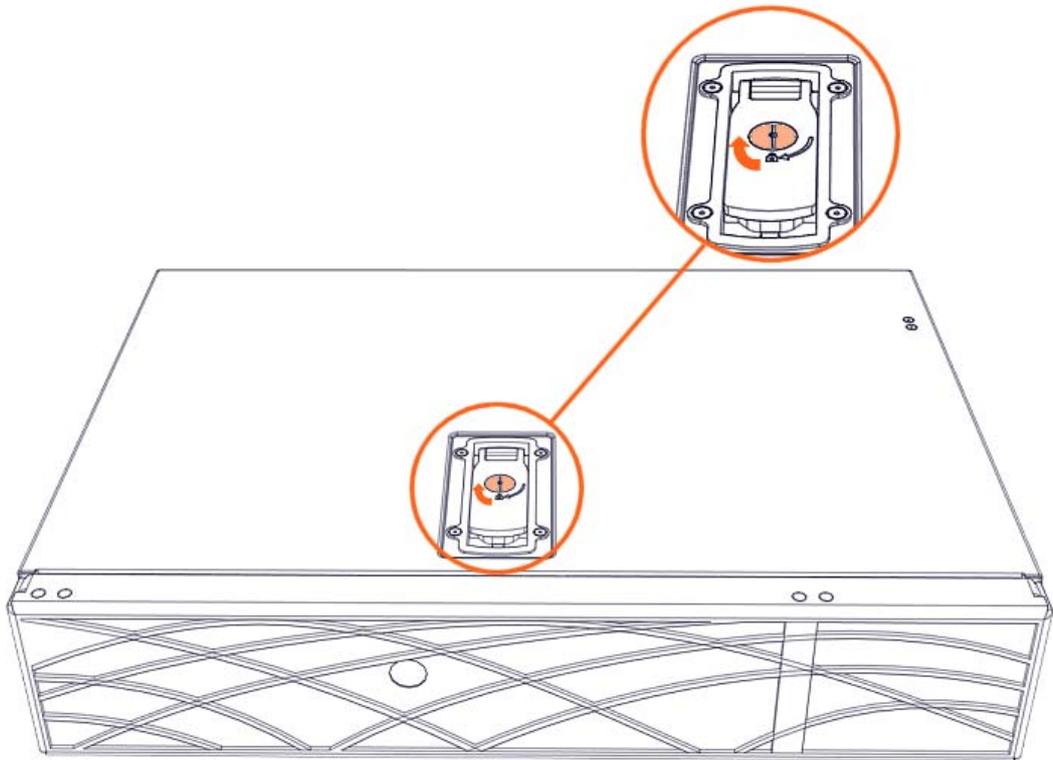
2. Close the latch.

 **Side view**



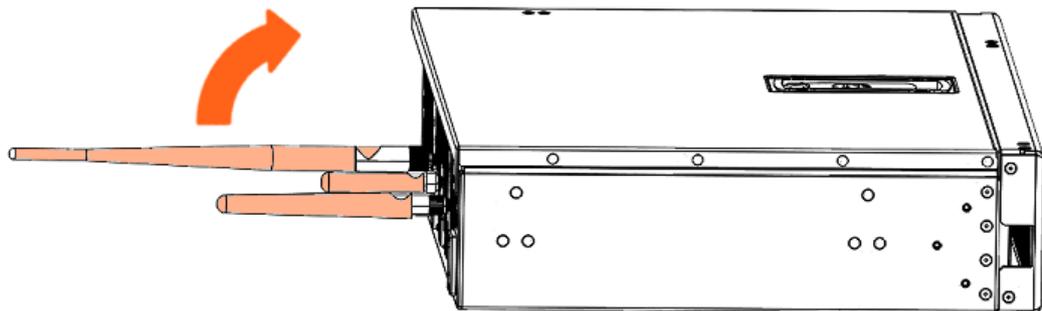
3. Lock the latch to secure the cover in place.

 **Front view**



4. Rotate the external antennas to the vertical position.

 **Side view**



**6. Install the top aesthetic cover if aesthetic covers are present**

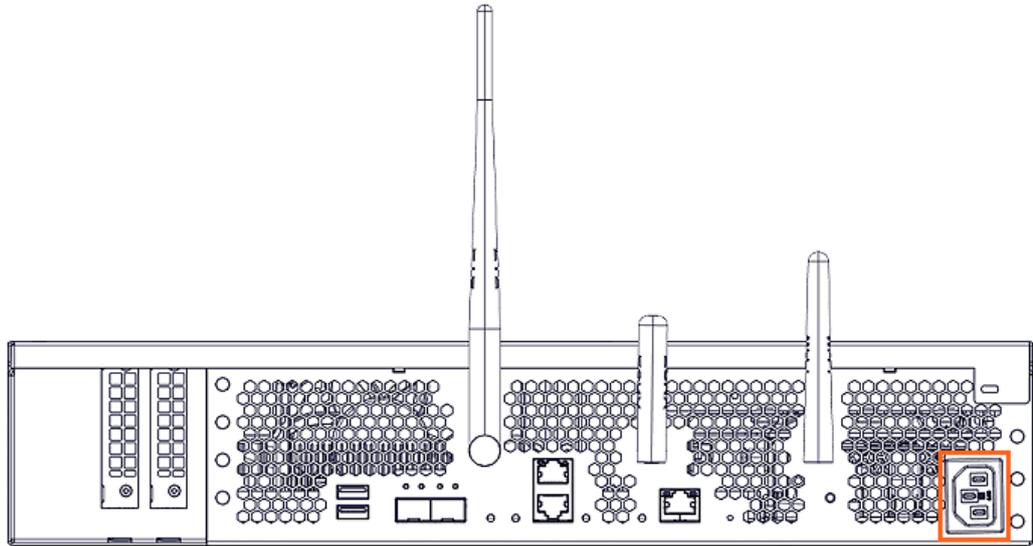
---

**See** [Appendix A Servicing the top aesthetic cover](#)

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## 7. Connect the power supply cable

 Rear view



## 8. Power on the server

---

## Chapter 9. Other maintenance tasks

### 9.1. Resetting the Baseboard Management Controller (BMC)

---

**Important** **ATTENTION:** Please read carefully the safety instructions before you perform the procedures described in this manual.

*Multilingual Safety Notices Guide*

---

**C004**  **CAUTION**

**C004:**

**Static electricity can damage the server and other electronic devices. To avoid damage, keep static-sensitive devices in their static-protective packages until you are ready to install them.**

**To reduce the possibility of damage from electrostatic discharge, observe the following precautions:**

**Limit your movement. Movement can cause static electricity to build up around you.**

**Wear an electrostatic-discharge wrist strap.**

**Handle the device carefully, holding it by its edges or its frame.**

**Do not touch solder joints, pins, or exposed circuitry.**

**Do not leave the device where others can handle and damage it.**

**While the device is still in its static-protective package, touch it to an unpainted metal surface on the outside of the server for at least 2 seconds. This drains static electricity from the package and from your body.**

**Remove the device from its package and install it directly into the server without setting down the device. If it is necessary to set down the device, put it back into its static-protective package. Do not place the device on the server cover or on a metal surface.**

**Take additional care when you handle devices during cold weather.**

**Heating reduces indoor humidity and increases static electricity.**

## 9.1.1. Restarting the BMC

The following procedures explain how to perform a simple reset of the BMC.

### 9.1.1.1. Using the Server Hardware Console (SHC)

---

**See** SHC Reference Guide for more information.

---

#### Prerequisites

A laptop computer with the Chrome or Firefox browser installed

A laptop is connected to the BullSequana Edge BMC port

The server BMC has an IP address allocated

#### Procedure

1. Connect to the SHC.
2. From the **Server control** tab, click **Reboot BMC**. The **Reboot BMC** page opens.

### Reboot BMC

**Current BMC boot status**

BMC last reboot at Jul 25, 2019 08:45:23 UTC+2

---

When you reboot the BMC, your web browser loses contact with the BMC for several minutes. When the BMC is back online, you must log in again. If the Log In button is not available when the BMC is brought back online, close your web browser. Then, reopen the web browser and enter your BMC IP address.

---

 Reboot BMC

3. Click the **Reboot BMC** button.

---

**Note** When the BMC is rebooted the browser loses contact with the BMC for several minutes. The log in procedure must be performed when the BMC is back online. If the log in button is not available, close the browser, reopen it and enter the BMC IP address.

---

4. Stop the SHC.  
Click the **Logout** button.

### 9.1.1.2. Using the Machine Intelligence System Management (MISM) console

---

**See** Management Console User's Guide for more information.

---

#### Prerequisites

The laptop is connected to the server BMC port

The server BMC has an IP address allocated

The server is in standby power mode

The MISM console is launched

#### Procedure

1. Launch the **Reboot bmc** job.
2. Check that the job status is **Successful**.  
If the job status is **Failed**, check the output of the job in the text window.
3. Launch the **Check BMC alive** job.
4. Check that the job status is **Successful**.  
If the job status is **Failed**, check the output of the job in the text window.

## 9.1.2. Resetting the BMC to default factory settings

The following procedure explains how to reset the BMC to its default factory settings.

### Consequences of the reset

Resetting the BMC to default factory settings results in the loss of all customized parameters. This includes the following:

- Deletion of all BMC user accounts except the admin default account
- Reset of the password of the admin default account to its default value
- Loss of the network configuration including both connection IP addresses (with gateway)
- Loss of IPV4 custom route configuration
- Reset of the name of the server to its default value
- Reset of the time and date and loss of the time servers
- Loss of the rsyslog configuration
- Deletion of all events
- Deletion of all BMC logs and dumps previously collected

### Prerequisites

The server BMC has an IP address allocated

A laptop connected to the BullSequana Edge server

### Procedure

1. Connect to the server via **SSH**.
2. Export the BMC credentials:

```
export bmc=<user>:<pwd>@<BMC IP>
```

**Note** Any BMC user account with administrator rights may be used.

3. Reset the BMC to the default factory settings:

```
curl -b cjar -k -H 'Content-Type: application/json' -X POST -d '{"data":[]}'  
https://${bmc}/xyz/openbmc_project/software/action/Reset
```

**Note** After the BMC reset to the factory settings, only the admin default user account with its default password can be used to connect to the BMC.

4. Connect to the SHC.

5. From the **Server control** tab, click **Reboot BMC**. The **Reboot BMC** page opens.

## Reboot BMC

### Current BMC boot status

BMC last reboot at Jul 25, 2019 08:45:23 UTC+2

When you reboot the BMC, your web browser loses contact with the BMC for several minutes. When the BMC is back online, you must log in again. If the Log In button is not available when the BMC is brought back online, close your web browser. Then, reopen the web browser and enter your BMC IP address.

 Reboot BMC

6. Click the **Reboot BMC** button.

---

**Note** When the BMC is rebooted the browser loses contact with the BMC for several minutes. The log in procedure must be performed when the BMC is back online. If the log in button is not available, close the browser, reopen it and enter the BMC IP address.

---

## 9.2. Recovering firmware

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**Important** **ATTENTION:** Please read carefully the safety instructions before you perform the procedures described in this manual.

*Multilingual Safety Notices Guide*

---

**C004**  **CAUTION**

**C004:**

**Static electricity can damage the server and other electronic devices. To avoid damage, keep static-sensitive devices in their static-protective packages until you are ready to install them.**

**To reduce the possibility of damage from electrostatic discharge, observe the following precautions:**

**Limit your movement. Movement can cause static electricity to build up around you.**

**Wear an electrostatic-discharge wrist strap.**

**Handle the device carefully, holding it by its edges or its frame.**

**Do not touch solder joints, pins, or exposed circuitry.**

**Do not leave the device where others can handle and damage it.**

**While the device is still in its static-protective package, touch it to an unpainted metal surface on the outside of the server for at least 2 seconds. This drains static electricity from the package and from your body.**

**Remove the device from its package and install it directly into the server without setting down the device. If it is necessary to set down the device, put it back into its static-protective package. Do not place the device on the server cover or on a metal surface.**

**Take additional care when you handle devices during cold weather.**

**Heating reduces indoor humidity and increases static electricity.**

## 9.2.1. Recovering BMC firmware

This sections details the operations to perform to recover the BMC main image.

---

**See** SHC Reference Guide for more information.

---

### Prerequisites

A laptop computer with the Chrome or Firefox browser installed

A laptop is connected to the BullSequana Edge BMC port

The server BMC has an IP address allocated

The BullSequana Edge server is in the standby power mode

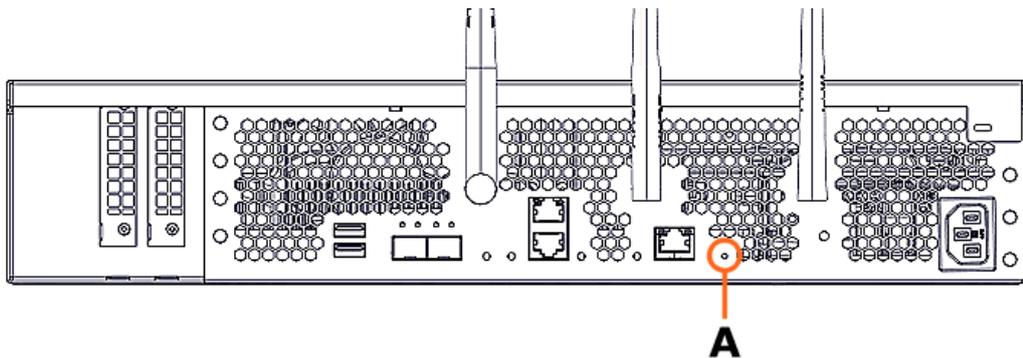
### Procedure

#### 1. Check the server power status

Check that the server is in the standby power mode.

#### 2. Push in the firmware recovery button (A) using a pointed object

 Rear view



#### 3. Connect to the SHC

#### 4. Upgrade the firmware

1. From the **Server configuration** tab, click **Firmware**. The **Firmware** page opens.
2. Specify the new firmware file location.
  - a. Either click **Upload firmware** to upload an image file from a workstation.
  - b. Or click **Download firmware** to download an image file from a TFTP server.

## 5. Activate the new BMC image

1. Click **Activate** for the new BMC image.
2. Confirm the activation with a BMC reboot. Click **Continue**.

- 
- Notes**
- When the BMC is rebooted the browser loses contact with the BMC for several minutes. The normal log in procedure must be performed when the BMC is back online. If the log in button is not available, close the browser, reopen it and enter the BMC IP address.
  - Earlier firmware versions disappear from the BMC image list once a new version has been activated.
-

## 9.2.2. Recovering BIOS and CPLD firmware

This sections details the operations to perform to recover the BIOS and the CPLD main images.

---

**Important** Check that the latest BMC firmware version is installed. If not, the BMC firmware must be updated before the BIOS and CPLD firmware.

---

**See** SHC Reference Guide for more information.

---

### Prerequisites

A laptop computer with the Chrome or Firefox browser installed

A laptop is connected to the BullSequana Edge BMC port

The server BMC has an IP address allocated

The BullSequana Edge server is in the standby power mode

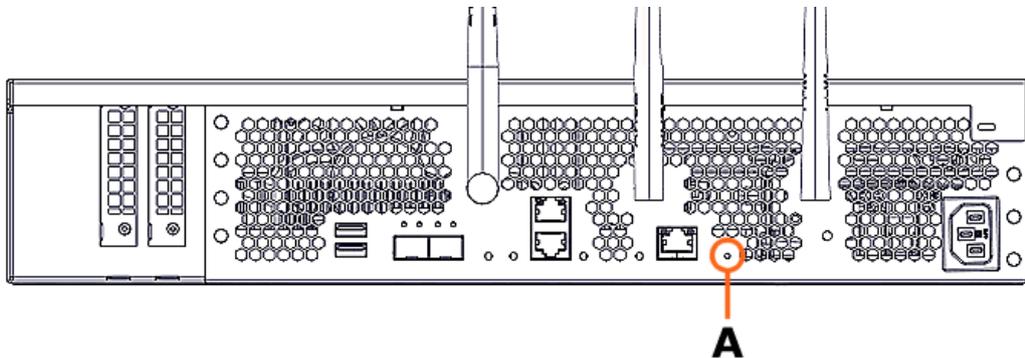
### Procedure

#### 1. Check the server power status

Check that the server is in the standby power mode.

#### 2. Push in the firmware recovery button (A) using a pointed object

 Rear view



#### 3. Connect to the SHC

#### 4. Upgrade the firmware

1. From the **Server configuration** tab, click **Firmware**. The **Firmware** page opens.
2. Specify the new firmware file location.
  - a. Either click **Upload firmware** to upload an image file from a workstation.
  - b. Or click **Download firmware** to download an image file from a TFTP server.

#### 5. Perform an AC Off/AC On cycle of the server to allow normal boot



---

## Appendix A. Servicing the top aesthetic cover

### A.1. Removing the top aesthetic cover

#### Required Tools

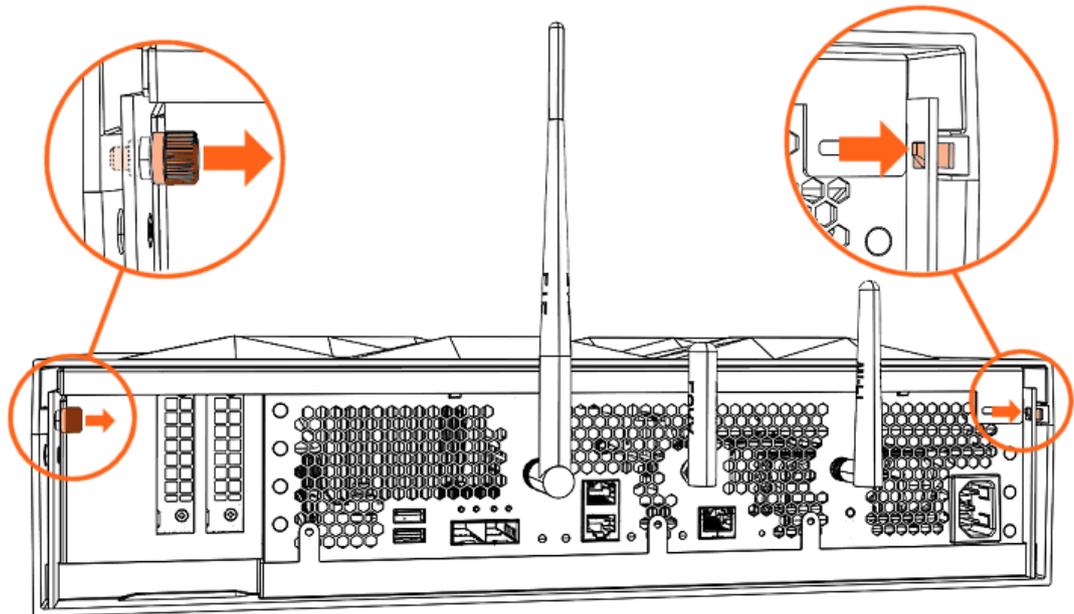
None

#### Procedure

##### 1. Unlock the top aesthetic cover

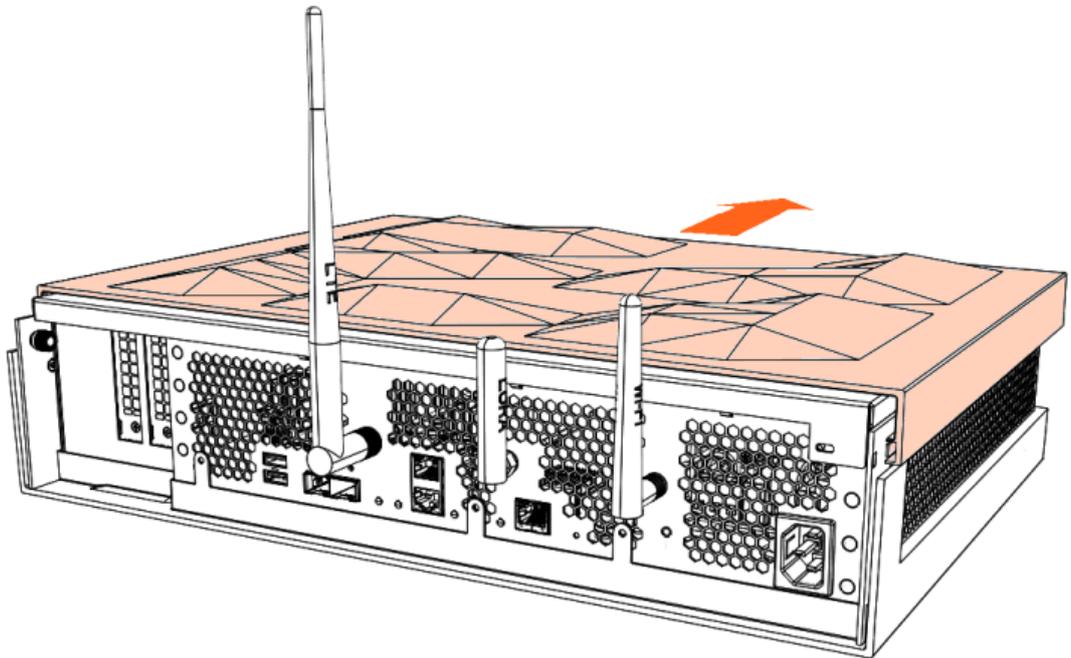
Pull the plunger on the left and push the latch on the right using both your hands.

 **Rear view**



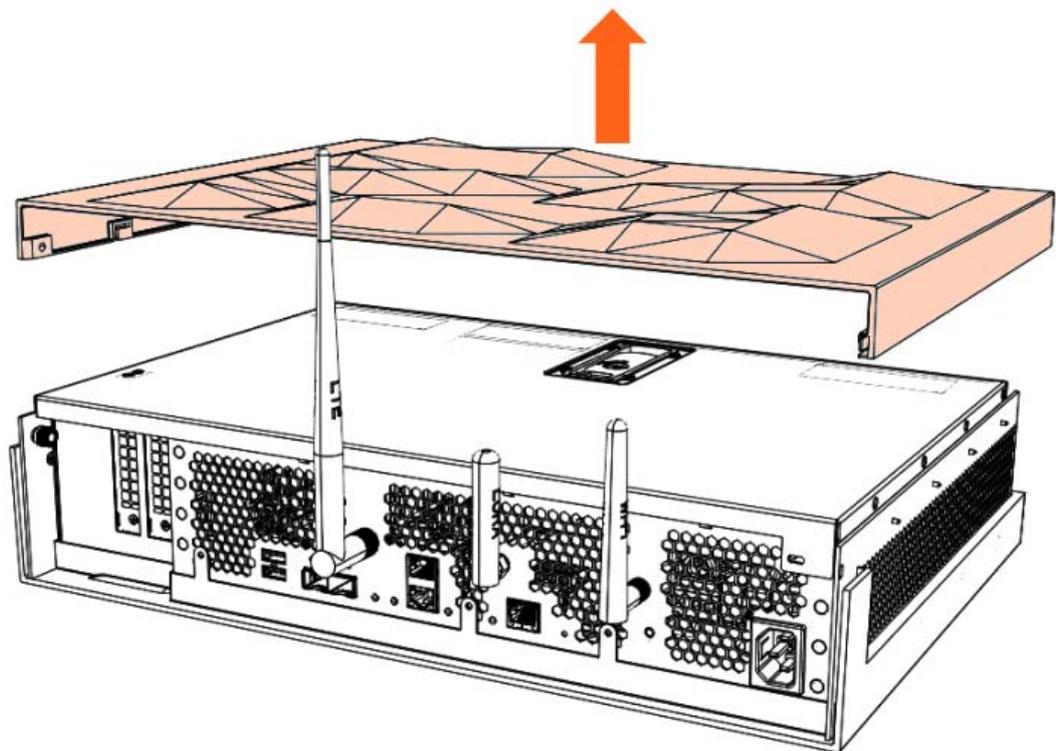
**2. Slide the top aesthetic cover**

 **Rear view**



**3. Remove the top aesthetic cover**

 **Rear view**



## A.2. Installing the top aesthetic cover

### Required Tools

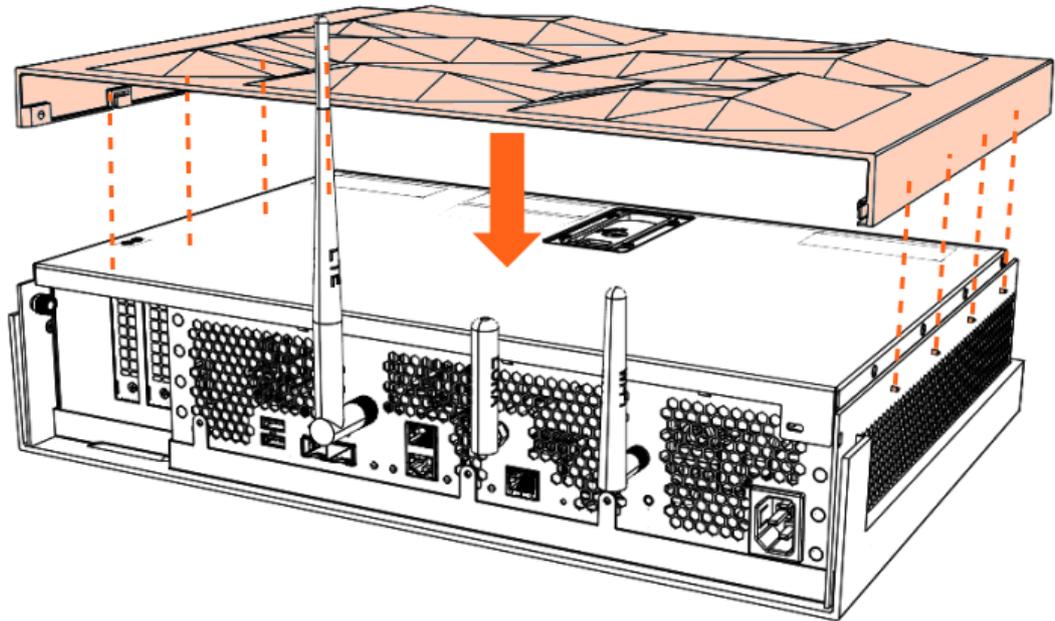
None

### Procedure

#### 1. Install the top aesthetic cover

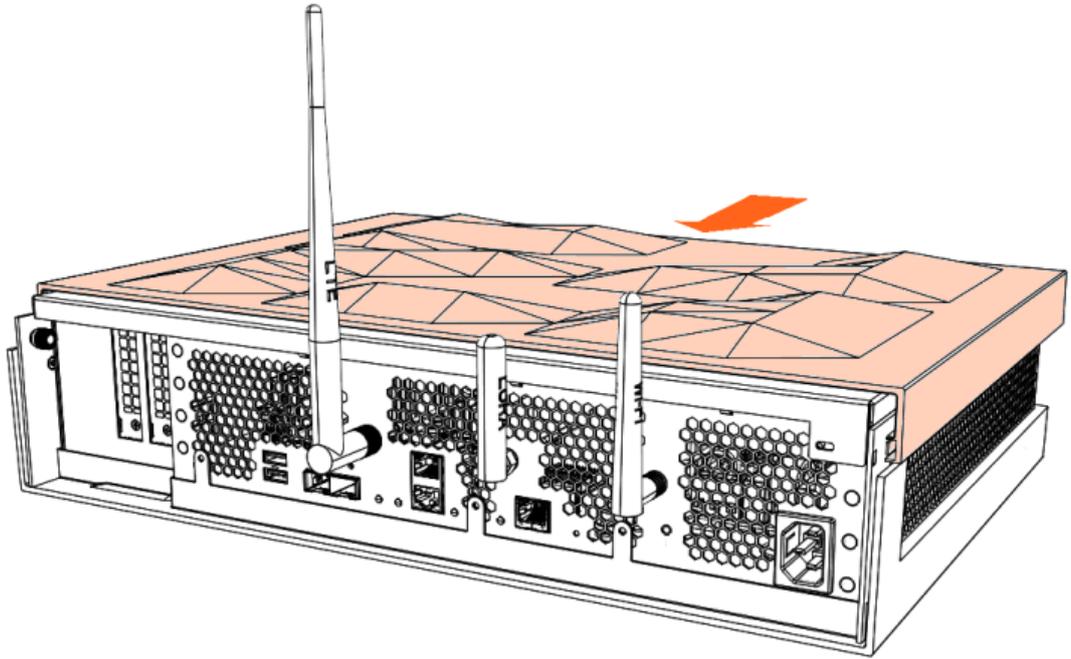
Put the top aesthetic cover into place using the fool-proofers.

 Rear view



2. Slide the top aesthetic cover until it is locked into place

 Rear view





**Bull Cedoc**  
**357 avenue Patton**  
**BP 20845**  
**49008 Angers Cedex 01**  
**FRANCE**