Smart-1 150 Installing and Removing Memory

Important - We recommend that only experienced personnel install or remove hardware components. Installing or removing components incorrectly can permanently damage the appliance.

Preparing the Appliance

Before you start to install or remove memory DIMMs, make sure that:

- The appliance is in a clean environment and on a level surface.
- You can physically access and open the cover of the appliance.
- You can connect to the WebUI or CLI to shut down the appliance.
- You have the Check Point memory DIMM upgrade kit.

Important - To protect the appliance and the memory modules from electrostatic discharge damage, make sure that you are properly grounded before you touch these components. Read the Health and Safety Information in the Smart-1 50/150 Getting Started Guide before you start to prepare the appliance.

We recommend that you use the grounding wrist strap that is included in the upgrade kit. The grounding plug on the rear of the appliance provides a chassis grounding point.

Upgrade Kit Contents

- Installation guide - Smart-1 150 Installing and Removing Memory
- Memory DIMMs
- Screwdriver
- Upgrade kit sticker
- ESD grounding strap (anti-static)
To prepare the appliance:
1. From the WebUI or the CLI, shut down the appliance.
2. Use the power switch to turn off power to the appliance.
3. Remove the power cords from the appliance.
4. Remove the warranty sticker.
5. Loosen the two appliance cover screws.
6. Holding the appliance cover screws, remove the top cover from the appliance.

### Smart-1 150

![Smart-1 150 appliance](image)

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Appliance cover</td>
</tr>
<tr>
<td>2</td>
<td>Two appliance cover screws</td>
</tr>
</tbody>
</table>

### Installing Memory DIMMs

Upgrade the memory of the Smart-1 150.

- **Default 8 GB Configuration** - Four 2 GB DIMMs are installed.
- **16 GB Configuration** - Install four additional 2 GB DIMMs in the expansion memory sockets.
- **32 GB Configuration** - Remove the four 2 GB DIMMs and install eight 4 GB DIMMs in the memory sockets.
### Default Configuration

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Memory sockets with DIMM installed</td>
</tr>
<tr>
<td>2</td>
<td>Expansion memory sockets</td>
</tr>
<tr>
<td>3</td>
<td>CPU 0</td>
</tr>
<tr>
<td>4</td>
<td>CPU 1</td>
</tr>
</tbody>
</table>

### 16 and 32 GB Upgraded Configuration

**To install memory DIMMs in the appliance:**

1. Find the DIMM memory slots on the system board. The basic memory configuration of the appliance ships with four DIMMs installed.
2. For a 32 GB configuration, remove all the memory DIMMs from the appliance. For more information, see Removing Memory DIMMs (on page 6).
3. Press on the two white retaining clips outward.

4. Align the new DIMM above the socket.
   Only touch the rear corners of the DIMM. Pressing on the heat sink or other DIMM components can damage the hardware.

The top of the DIMM is smooth. The bottom edge has two different-length sets of contacts, which connect to the slots on the socket.

**Important** - Be careful, there are sharp metal parts in the appliance, like the heat sink fin and bracket, that can cause injury and damage the hardware.
5. Press the new DIMM into the socket until it clicks into the socket.

The retaining clips move into the lock position as you press the DIMM into position.

6. Do steps 3 -5 again for all the memory DIMMs.

   **Important** - Make sure that there are no leftover parts inside the appliance.

7. Make sure the memory DIMM(s) are installed correctly.
   
a) Replace the appliance cover without tightening the appliance cover screws.
   
b) Connect the power cords to the appliance.
   
c) Turn on the appliance using the power switch at the rear of the appliance.
   
d) Make sure that the LCD screen shows the appliance model.

8. Tighten the two appliance cover screws to secure the cover on the appliance.

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**Attaching the New Warranty Sticker**

After you install the new memory DIMM(s), attach the new warranty sticker on the appliance.

**Important** - Failing to attach the new warranty sticker correctly will void the warranty of the appliance.

**To attach the new warranty sticker:**

1. Make sure that the appliance operates correctly.
2. Clearly write this information on the sticker:
   
   • Date of upgrade.
   
   • Current RAM memory and LOM card configuration of the appliance.
3. Attach the new warranty sticker from the upgrade kit to the appliance.
   The warranty sticker covers the appliance body and cover.
Removing Memory DIMMs

Make sure that you prepare the appliance before you remove memory DIMMs. For more information, see Preparing the Appliance.

To remove memory DIMMs from the appliance:
1. Press the two retaining clips outward.

2. Carefully pull the DIMM up.
   Only touch the rear corners of the DIMM. Pressing on the heat sink or other DIMM components can damage the hardware.

   If necessary, pull one end of the DIMM, then the other, to gradually release it from the contact pins.

   **Important** - Make sure that there are no leftover parts inside the appliance.

3. Make sure the memory DIMM(s) are installed correctly.
   a) Replace the appliance cover without tightening the appliance cover screws.
   b) Connect the power cords to the appliance.
   c) Turn on the appliance using the power switch at the rear of the appliance.
   d) Make sure that the LCD screen shows the appliance model.

4. Tighten the two appliance cover screws to secure the cover on the appliance.