



DIGITAL Server Rackmount

Installation Guide Addendum

This addendum introduces the new 33 and 22 inch rackmount products. It also details the installation of the DIGITAL Server 5300R, and the new rackmount monitor shelf.

Use this booklet in conjunction with the Rackmount Installation Guide (ER-PCSRA-IA.E01).

This addendum contains new information about the following products:

- Hardware information on the 22 and 33U DIGITAL Server Rackmount.
- Installation instructions for the DIGITAL Server 5300R.
- Installation instructions for the new rackmount monitor shelf.



DIGITAL Server Rackmount Installation Guide Addendum

The following material supersedes material on page 1-2 of the Installation Guide.

There are four rackmount models available:

- 42U 800mm
 - Includes 4 - Heavy duty shelves
- 42U 900mm
 - Includes 12 - 14U mounting rails
- 33U 900mm
 - Includes 12 - 11U mounting rails
- 22U 900mm
 - Includes 8 - 11U mounting rails

DIGITAL Server Rackmount Installation Guide Addendum

The following material supersedes material on page 2-1 of the Installation Guide.

Change existing note to read:



NOTE: All measurements in the following sections are in units of “U”. “U” is an empirical measurement equal to 1.75 inches (44.45mm). When configuring your rackmount, the total number of installed components (servers, shelves, etc.) cannot exceed the total height of the rackmount (42U, 33U, or 22U).

DIGITAL Server Rackmount Installation Guide Addendum

Add the following information to the table on page 2-2 of the Installation Guide.

Component	“U” Measurement
DIGITAL Rackmount 22U	22
DIGITAL Rackmount 33U	33
DIGITAL Server 5300R	12
Raid 450	21
DIGITAL Monitor Shelf Assembly	1.5

DIGITAL Server Rackmount Installation Guide Addendum

The following material supersedes current material on page 2-9 of the Installation Guide.

Replace existing table with the following:

Server Type	“U” Measurement	Without monitor, keyboard and console	With monitor, keyboard and console
Maximum Server Configuration for 42U Rackmount			
DIGITAL Server 3100/3200	14	4	4
DIGITAL Server 3100R/3200R	5	8	6
DIGITAL Server 3300R	5	8	6
DIGITAL Server 5100/5200	8.5	4	3
DIGITAL Server 5300R	12	2	1
DIGITAL Server 7100	8.5	4	3
DIGITAL Server 7100R	7	4	3
DIGITAL Prioris XL Server	4.5	7	5
DIGITAL Prioris LX Server	4	8	5
Maximum Server Configuration for the 33U Rackmount			
DIGITAL Server 3100/3200	14	2	1
DIGITAL Server 3100R/3200R	5	5	3
DIGITAL Server 3300R	5	5	3
DIGITAL Server 5100/5200	8.5	3	2
DIGITAL Server 5300R	12	1	--
DIGITAL Server 7100	8.5	3	2
DIGITAL Server 7100R	7	4	2
DIGITAL XL Server	4.5	6	4

DIGITAL Server Rackmount Installation Guide Addendum

Server Type	“U” Measurement	Without monitor, keyboard and console	With monitor, keyboard and console
DIGITAL LX Server	4	7	4
Maximum Server Configuration for the 22U Rackmount			
DIGITAL Server 3100/3200	14	1	0
DIGITAL Server 3100R/3200R	5	3	1
DIGITAL Server 3300R	5	3	1
DIGITAL Server 5100/5200	8.5	2	0
DIGITAL Server 5300R	12	1	0
DIGITAL Server 7100	8.5	2	1
DIGITAL Server 7100R	7	2	1
DIGITAL XL Server	4.5	4	1
DIGITAL LX Server	4	4	1

DIGITAL Server Rackmount Installation Guide Addendum

The following material supersedes current material on page 2-16 of the Installation Guide.

Figure Legend	Component	Dimension
A	DIGITAL Server Rackmount 900mm	42U
B	15-inch monitor	9.5U
C	Universal shelves (2)	1U
D	Split Shelf	1U
E	DIGITAL Server 3100/3200 (4)	14U
F	DIGITAL Server keyboard and console	1.5U

DIGITAL Server Rackmount Installation Guide Addendum

Insert the following at the end of Chapter 4 of the Installation Guide.

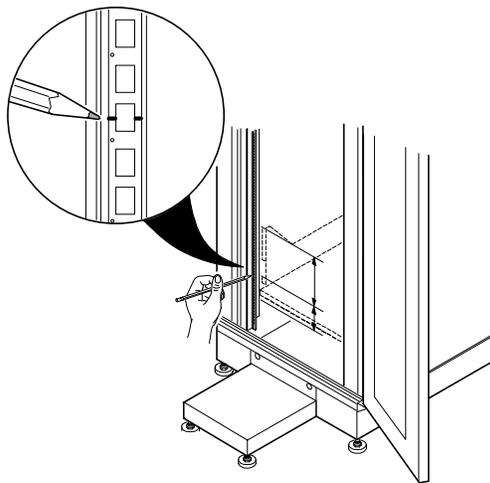
Installing the DIGITAL Server 5300R into a DIGITAL Server Rackmount

The following details how to install the DIGITAL Server 5300R into the DIGITAL Server Rackmount.

1. Open the front and rear doors of the rackmount.
2. Mark the installation area on the rackmount (Figure 1).
3. The side mounting rails are marked with a dimple at each 1 U increment. Mark an area 12U tall on the rackmount to hold the server. Remember to mark both the front and rear of the rackmount to ensure the server is level.



NOTE: You must allow 12U for the server and bracket assembly. DIGITAL recommends you allow 2 U from the bottom of the rackmount for assembly comfort.



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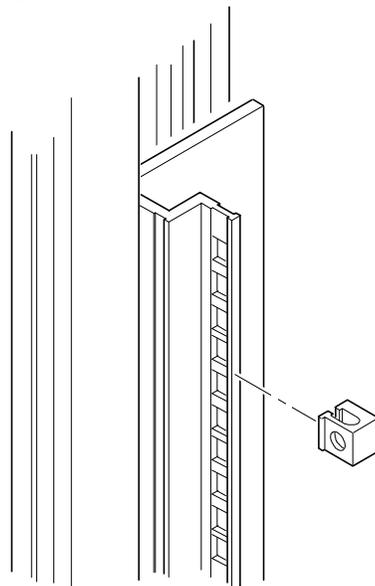
Figure 1: Marking the Installation Location

DIGITAL Server Rackmount Installation Guide Addendum



CAUTION: Due to the weight of the system, DIGITAL recommends you mount this system in the bottom of the rackmount.

4. Insert the u-nuts onto the system rails at the U hole alignments previously marked (Figure 2). Placement may require a rubber mallet. Use a level or similar device to ensure the nuts are level with each other.



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Figure 2: Installing the U-Nuts

5. Turn the server box on its side. Remove the 12 screws holding the two feet from the bottom of the server. Save the screws.

DIGITAL Server Rackmount Installation Guide Addendum

6. Using the two brackets (Part Number 74-52946-01) included in the mounting kit assembly, align the screw holes in the mounting bracket with the holes on the system (Figure 3). Tighten the screws. The mounting brackets will overlap on either side of the system.

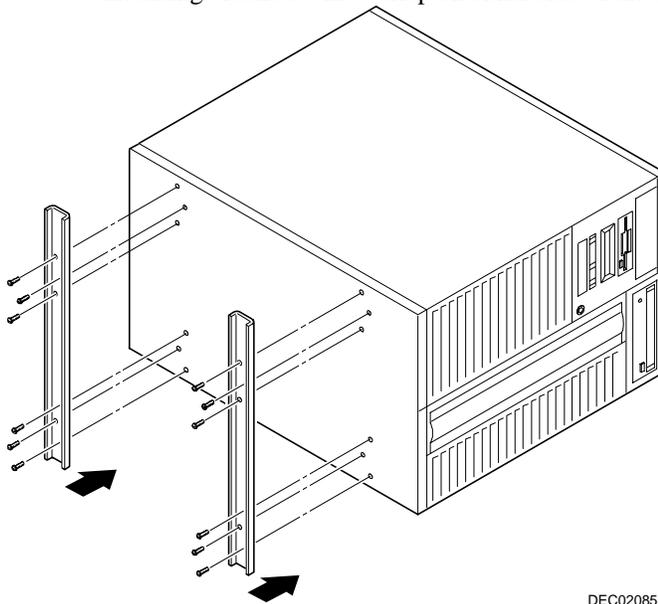
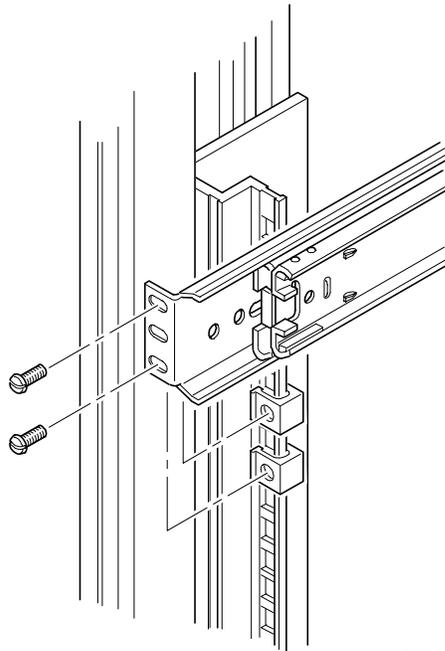


Figure 3: Installing the Server Mounting Brackets

7. Attach the two slides to the mounting angles:
 - a. Locate the position for the slides at the front and rear mounting angles. Make sure when opened, the slide extends forward to the front of the rackmount.
 - b. Insert two screws through the mounting rail, and then through each end of the slide bracket.
 - c. Tighten the two screws (Figure 4).
 - d. Repeat the previous steps to attach both slides. Make sure they are level with one another.

DIGITAL Server Rackmount Installation Guide Addendum



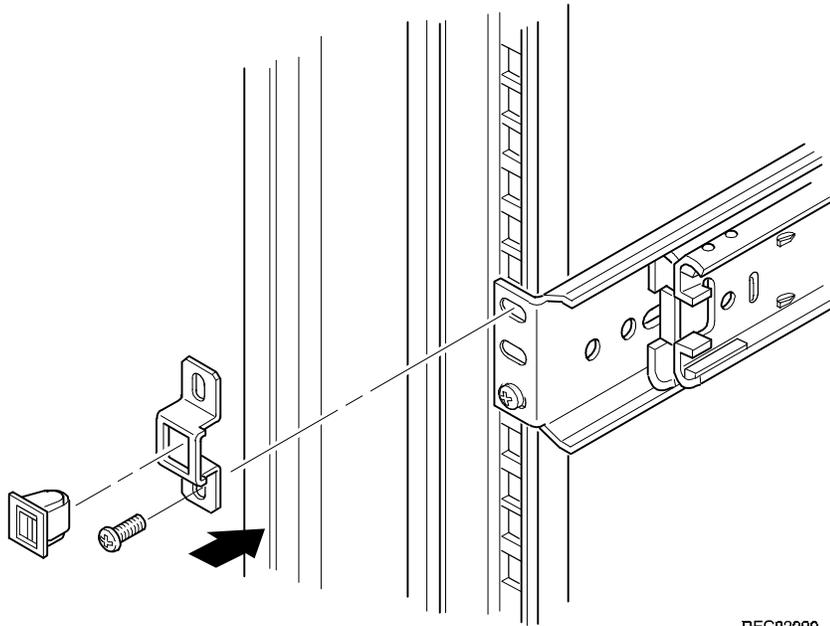
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Figure 4: Adding Slides to Rackmount Rails

8. Attach the Bezel mounting hardware to the rackmount.
 - a. Assemble the bezel bracket mount. Insert the black and white square clips into the each of the four brackets (Part Number 74-50925-01). Use a rubber mallet to insert the clips if necessary.

DIGITAL Server Rackmount Installation Guide Addendum

- b. Using the slide mount as a guide, mount the first set of brackets with the bottom hole using the same hole and screw as the top of the slide assembly for the DIGITAL Server 5300R shelf (Figure 5).
- c. Using the front bezel as a guide, add the two brackets.



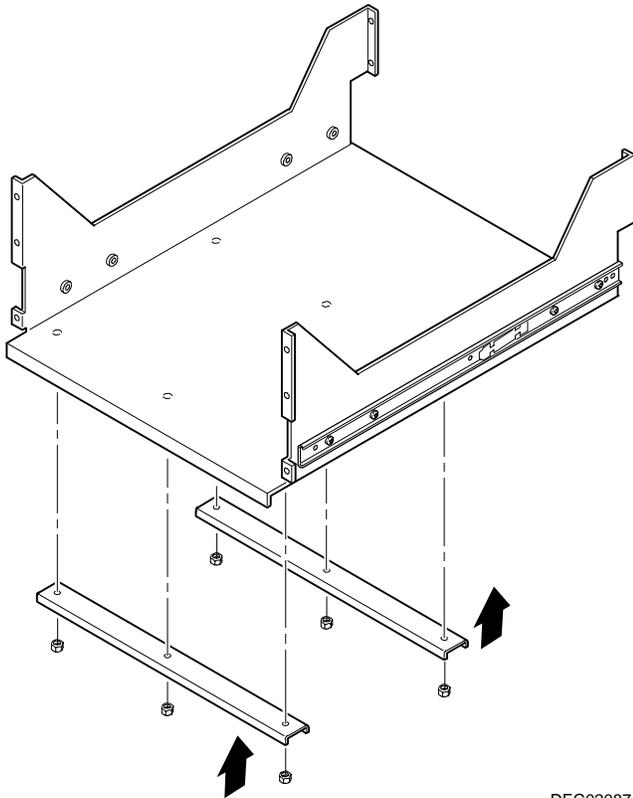
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Figure 5: Installing Bezel Mounting Hardware

9. Assemble the mounting shelf by completing the following steps:
 - a. Install the slide mounting brackets to the sides of the shelf. Use four 8-32 philips head to secure each of the brackets to the sides of the shelf. These brackets may come pre-mounted.

DIGITAL Server Rackmount Installation Guide Addendum

- b. Install the stiffeners to the underside of the shelf. The stiffeners are placed at the front and mid section of the mounting shelf. Align the holes in the brackets with the three screws and use three kep-nuts to secure the bracket to the shelf (Figure 6). Tighten the screws.



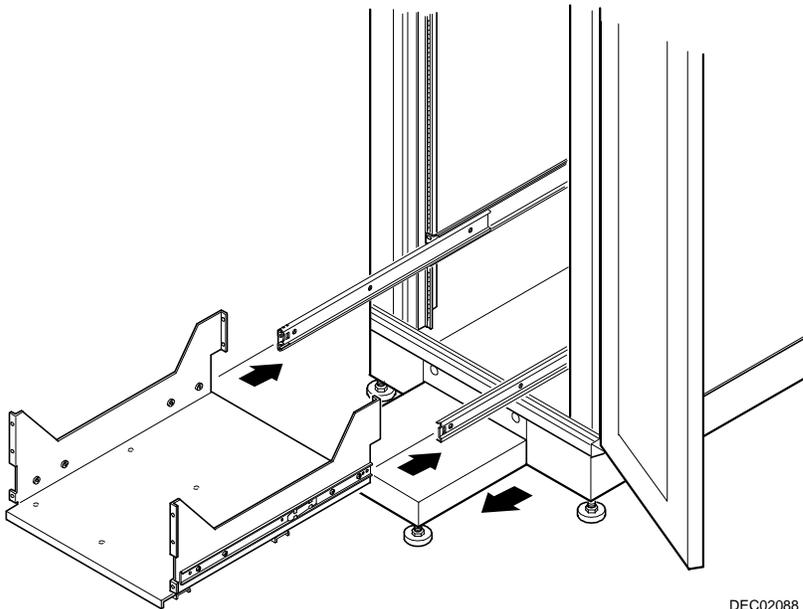
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Figure 6: Adding Stiffeners to the Shelf

10. Pull out the rackmount stabilizer.
11. Extend the slides to their forward position.

DIGITAL Server Rackmount Installation Guide Addendum

12. Attach the shelf to the slides by guiding the extended shelves into the shelf bracket (Figure 7).



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Figure 7: Inserting Shelf into Slide Rails

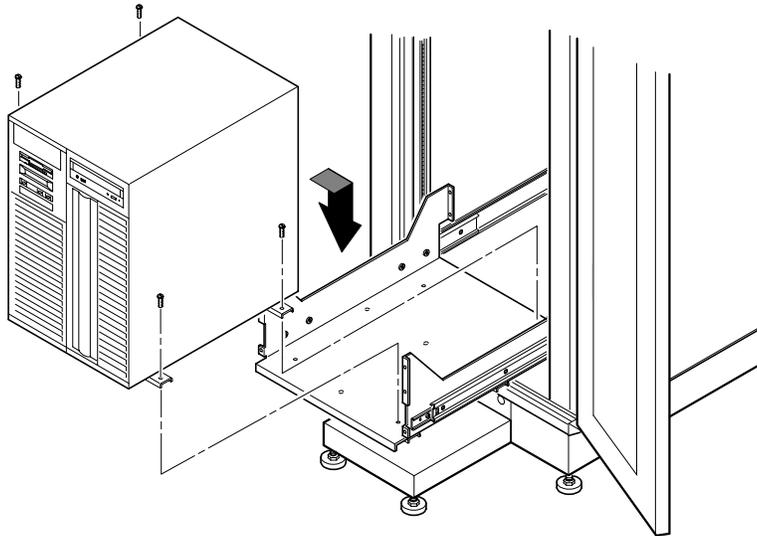
13. Press the locking mechanism found on each side of the extended shelves to completely retract the shelf with the slides back into the rackmount. Slide the shelf system back out, but do not fully extend the slides.

DIGITAL Server Rackmount Installation Guide Addendum

14. Set the server on the shelf (Figure 8).



WARNING: Use extreme care when lifting the server. Due to its weight (The DIGITAL Server 5300R weighs in excess of 110lbs (50 kilos), two people are required to lift it. Failure to use at least two people may result in severe personal injury as well as violate certain safety regulations. This could also result in equipment damage.



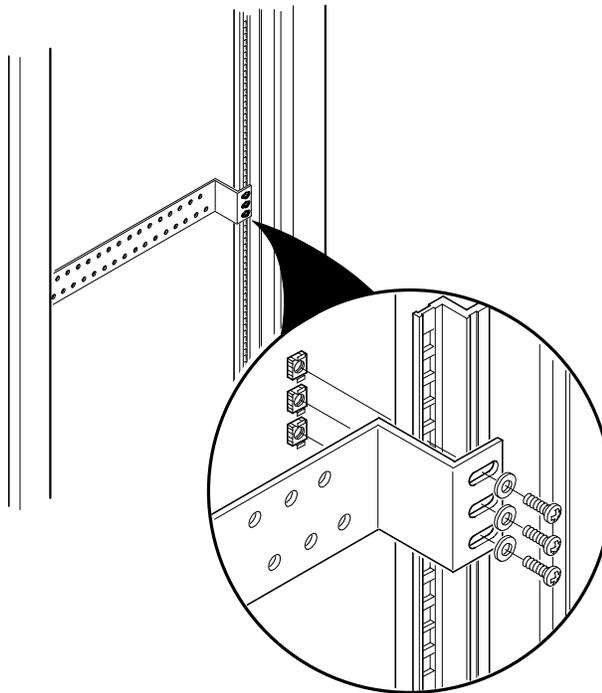
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Figure 8: Installing the Server on the Shelf

15. Using four 8-32 screws, tighten the server mounting brackets to the shelf in the slots on the bottom of the shelf. Check to see that the server is sitting square to the rackmount.
16. Push the server into the rackmount until the slide mechanism is in place.

DIGITAL Server Rackmount Installation Guide Addendum

17. Add the cable management bracket (Figure 9),
 - a. Attach the cable arm bracket to the inside of the chassis using three flat-head screws on each side.
 - b. Mount the bracket with the feet facing out from the inside of the rack.
 - c. Insert the screws from the outside of the rackmount to the inside.



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Figure 9: Installing Cable Management Bracket

Mounting Monitor Shelf in a DIGITAL Server Rackmount

The following steps are required to install a Monitor Shelf in the DIGITAL Server Rackmount.

1. Remove the left and right side panels by turning each of the six lock screws on each door counterclockwise. Begin with the top locks of the rackmount and move down.
2. Open the front door of the rackmount.
3. Review the rackmount for space requirements to hold the monitor shelf. Allow 1.5U for the monitor shelf. 1U is equal to 1.75 inches (44.45mm). The inside of the rackmount rail is pre-marked with dimples at 1U intervals.
4. If not already attached, add the four 19-inch mounting angles to each corner of the rackmount (Figure 11).

DIGITAL Server Rackmount Installation Guide Addendum

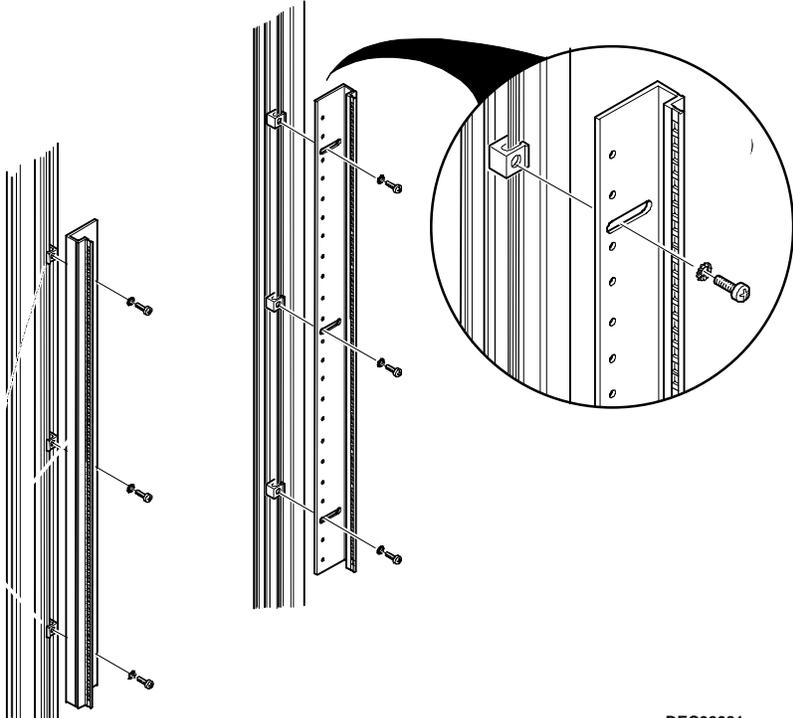
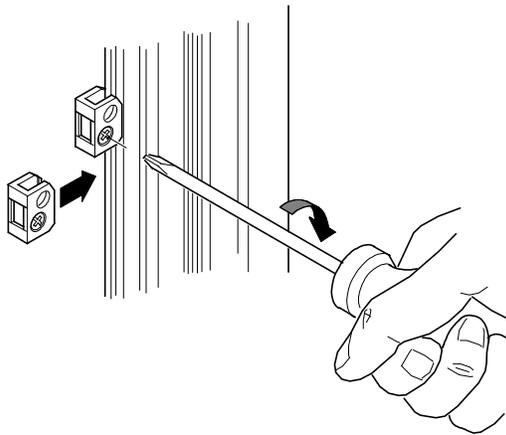


Figure 11: Installing Rails as Required

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DIGITAL Server Rackmount Installation Guide Addendum

5. Remove the monitor shelf and mounting brackets from the shipping container. The assembly includes hardware for both the 900mm rackmount and the 800mm rackmount. Make sure you are using the proper length bracket for your rackmount.
6. Loosen the chassis support rails in the front of the unit.
7. Slide the rails to the front of the unit inward. They will be moved back to their original position after the installation is complete.
8. Measure 40 inches (101.6 mm) up from inside bottom of the rackmount.
9. To attach the bracket, use two of the pre-screwed clips on each side of the assembly, eight clips total for the rackmount. Take care when lining up these mounting clips. The clips are off-set, not equal in size. (Figure 12)



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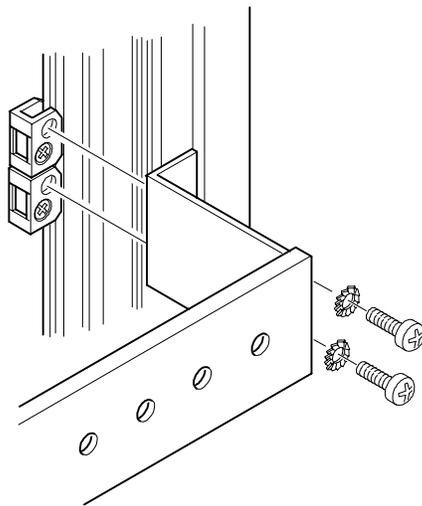
Figure 12: Install Mounting Clips



NOTE: If adding to an already loaded rackmount, review the available mounting area to ensure clearance for the re-addition of the side panel doors. If the shelf brackets are placed too close to the side panel assembly mechanism, the panels latching mechanism could fail to secure properly.

DIGITAL Server Rackmount Installation Guide Addendum

10. Use the center of the bottom hole of the bottom clip assembly when measuring to ensure the shelf bracket clips are level prior to continuing to assemble the shelf (Figure 13).
11. Gently slide the clips up or down to ensure even placement. Lightly tighten the clip, and review the alignment before tightening down.

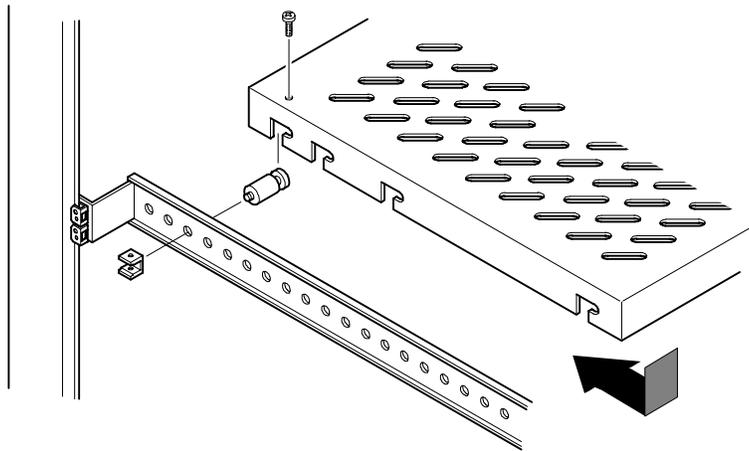


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Figure 13: Align Bracket Assembly with Clips

DIGITAL Server Rackmount Installation Guide Addendum

12. Insert the monitor shelf bracket facing into the rackmount, onto the clip assembly, using eight slotted screws. The bracket will attach to the bottom clip (hole) on one side and the top on the other. Tighten the assembly (Figure 14).
13. Facing the front of the rackmount, count three holes on the shelf mounting bracket from front to back. Insert the mounting pin bar into the hole from the inside of the assembly. Use the u-shaped threaded hardware to tighten down the bar. Hold the mounting pin bar tightly as you turn the thread assembly.



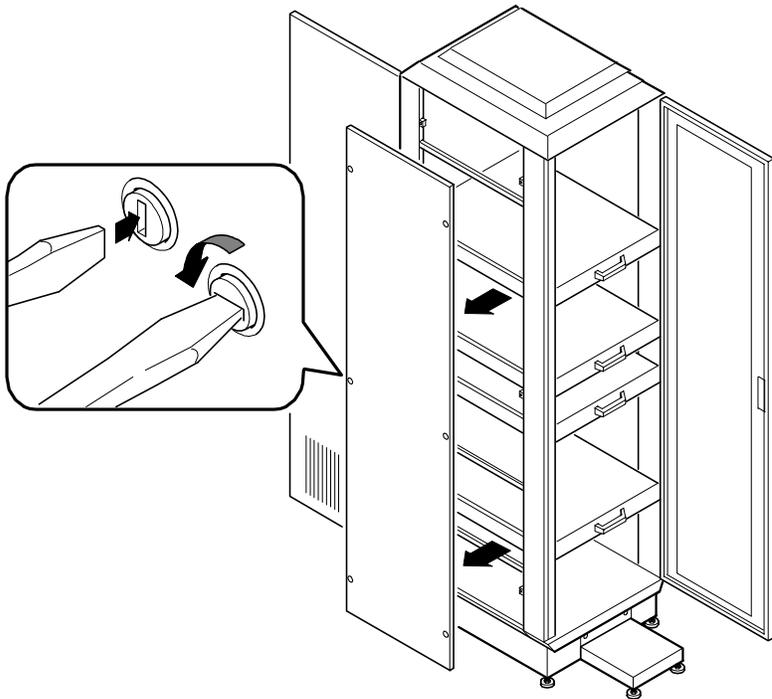
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Figure 14. Installing the Monitor Shelf and Hardware

14. Install the second mounting pin bar at the rear of the bracket, 19 holes from the front (three holes from the rear in the 900mm rackmount).
15. Repeat on the opposite side until all four bars are in place.
16. Slide the rackmount shelf onto the pins and slide forward to snap into place.
17. Use four phillips head screws to lock the shelf into place.

DIGITAL Server Rackmount Installation Guide Addendum

18. Place the monitor on the shelf and attach it to the systems.
19. Re-install the side panels (Figure 15).



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Figure 15: Reinstall the Side Panels

DIGITAL Server Rackmount Installation Guide Addendum

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