Thank you for your purchase of EchoStreams OSS316-D5 Storage Server System!

1. Check the Content of the box. Please confirm that your package contains the following:
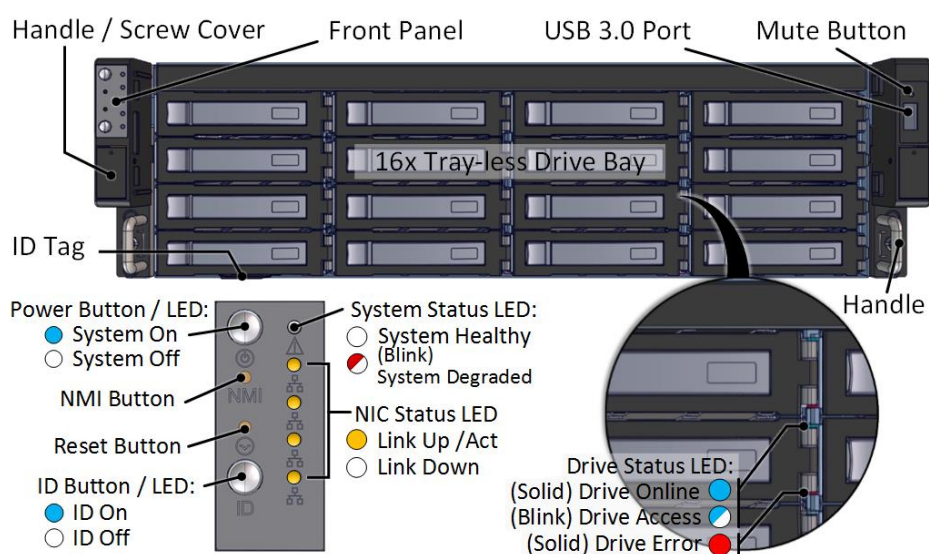
#	Description	Image / Description	Qty
1	OSS316S-D4 Enclosure		1
2	Motherboard	Tyan S7100GM2NR	1
3	CPU and memory	Intel Skylake and DDR4	Opt.
4	IO Cards		Opt.
5	Heatsink		2
6	2x 2.5" Drive Bay		Opt.
7	4x 2.5" Drive Bay		Opt.
8	Slide Rail Kit + Screws		1 set
9	Power Cable*		2
10	Serial Cable*		1

* Inside the accessories box. Box may consist of screw sets for rail kit or drives. If any items are missing, please contact your reseller or sales rep.
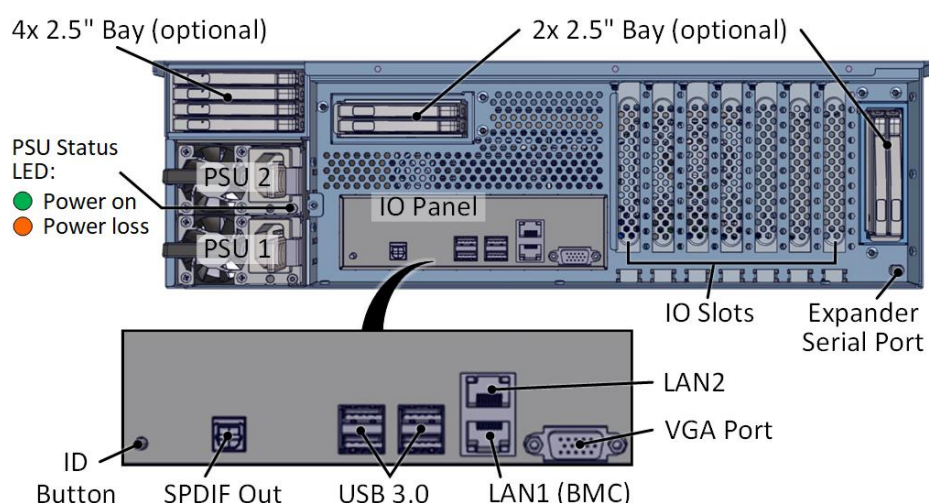
2. Get Familiar with the Unit.

OSS316-D5 is a storage server supporting dual Intel V5 processor and front tray-less 16x 3.5" HDDs, optional rear 2x and 4x 2.5" drive bays in a 3U space. Tyan S7100GM2NR motherboard, and internal cabling are preinstalled. IO cards, CPU, and memory can be preinstalled upon request.
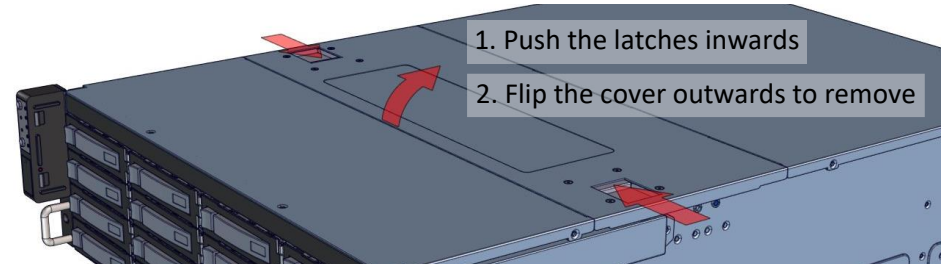
Front view of the unit

Handle / Screw Cover — Front Panel — USB 3.0 Port — Mute Button

16x Tray-less Drive Bay

ID Tag
Handle

Power Button / LED:
○ System On (blue)
○ System Off

NMI Button

Reset Button

ID Button / LED:
○ ID On (blue)
○ ID Off

System Status LED:
○ System Healthy (Blink)
● System Degraded (red)

NIC Status LED
○ Link Up /Act (yellow)
○ Link Down

Drive Status LED:
(Solid) Drive Online (blue)
(Blink) Drive Access (white)
(Solid) Drive Error (red)

Rear view of the unit

4x 2.5" Bay (optional)
2x 2.5" Bay (optional)

PSU Status LED:
● Power on (green)
● Power loss (orange)

PSU 2
PSU 1
IO Panel

IO Slots
Expander Serial Port

ID Button — SPDIF Out — USB 3.0 — LAN1 (BMC)
LAN2
VGA Port

3. Remove the Top Covers of the unit as follows:
First, remove the middle cover:

1. Push the latches inwards
2. Flip the cover outwards to remove
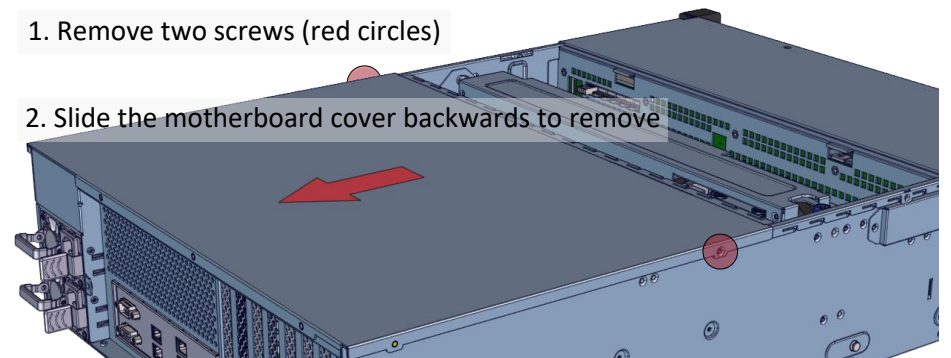
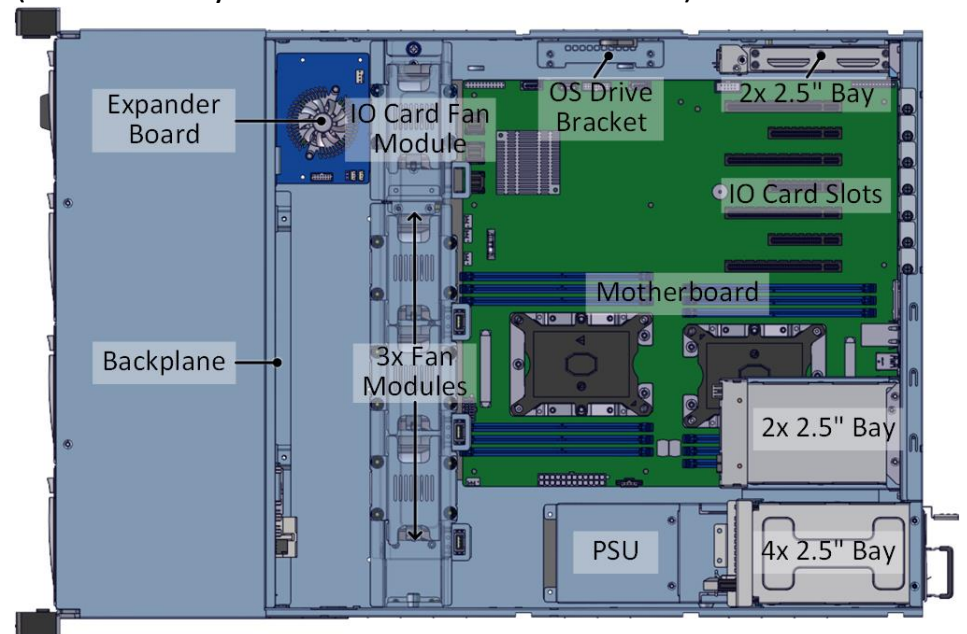Proceed to remove the motherboard cover:

1. Remove two screws (red circles)
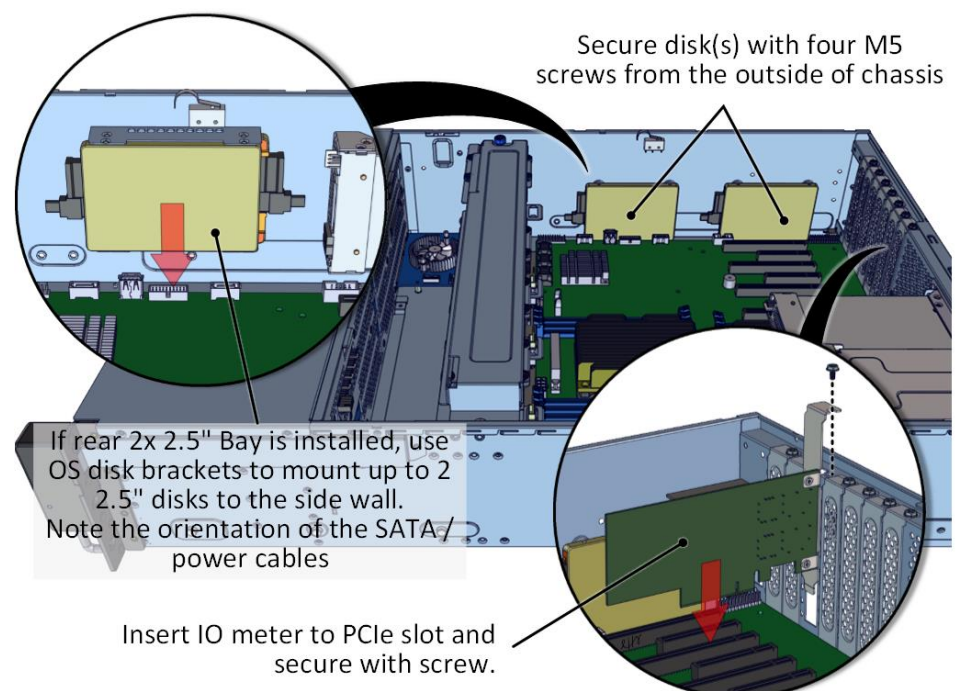2. Slide the motherboard cover backwards to remove

4. Inspect the Inside of the unit. Internal components comprise of a Tyan motherboard, an expander board, optional rear 2x and 4x 2.5" bays, 4x internal fan modules (electronically attached to the motherboard).

Expander Board
IO Card Fan Module
OS Drive Bracket
2x 2.5" Bay
IO Card Slots
Motherboard
Backplane
3x Fan Modules
2x 2.5" Bay
PSU
4x 2.5" Bay

To install OS disk(s), a space for 2 OS disks is available on the left inner wall of the chassis.

Secure disk(s) with four M5 screws from the outside of chassis

If rear 2x 2.5" Bay is installed, use OS disk brackets to mount up to 2 2.5" disks to the side wall. Note the orientation of the SATA / power cables

Insert IO meter to PCIe slot and secure with screw.

5. Install Motherboard Components (CPU, heatsink, memory) using the guidelines below. For further details, refer to the motherboard TPS.

- Support Intel Xeon Skylake Processor Family
- 2x LGA3647 Sockets
- Max up to 205W TDP
- Intel C621 PCH Chipset

- 6+6 DDR4 RDIMM/LRDIMM 2666
- Up to 384GB RDIMM / 768GB LRDIMM / 1536GB RDIMM 3DS
- 6 Channels per CPU, 1.2V
- Populate from A0 → F0

- PCIE1, PCE3 (Gen3x16), PCIE2 (Gen3x8) f/ CPU0
- PCIE5, PCE7 (Gen3x16), PCIE4, PCIE6 (Gen3x8) f/ CPU1
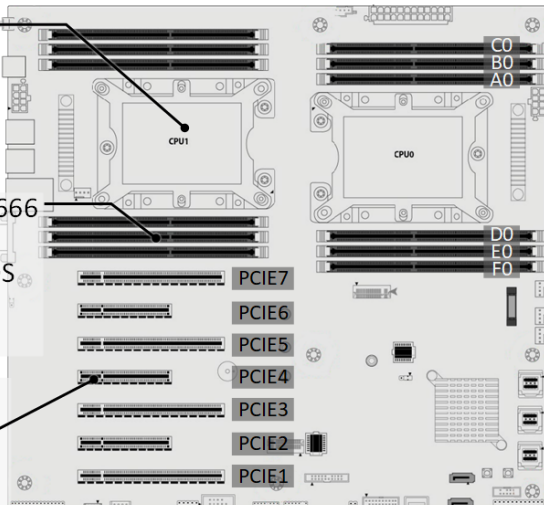
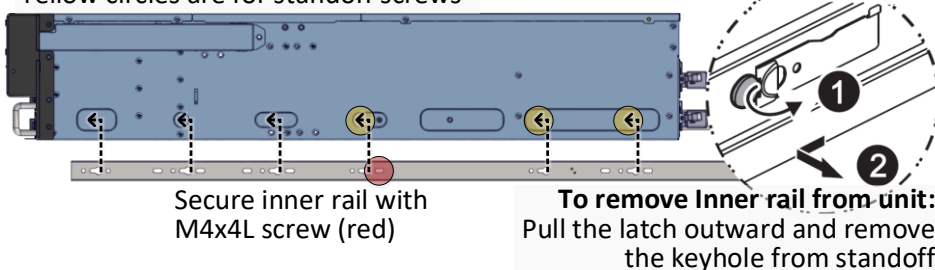## 6. Remove the Inner Rail from the slide rail.

❶–❷ Pull the inner rails out. Pull the blue release tab when it hits a stop.
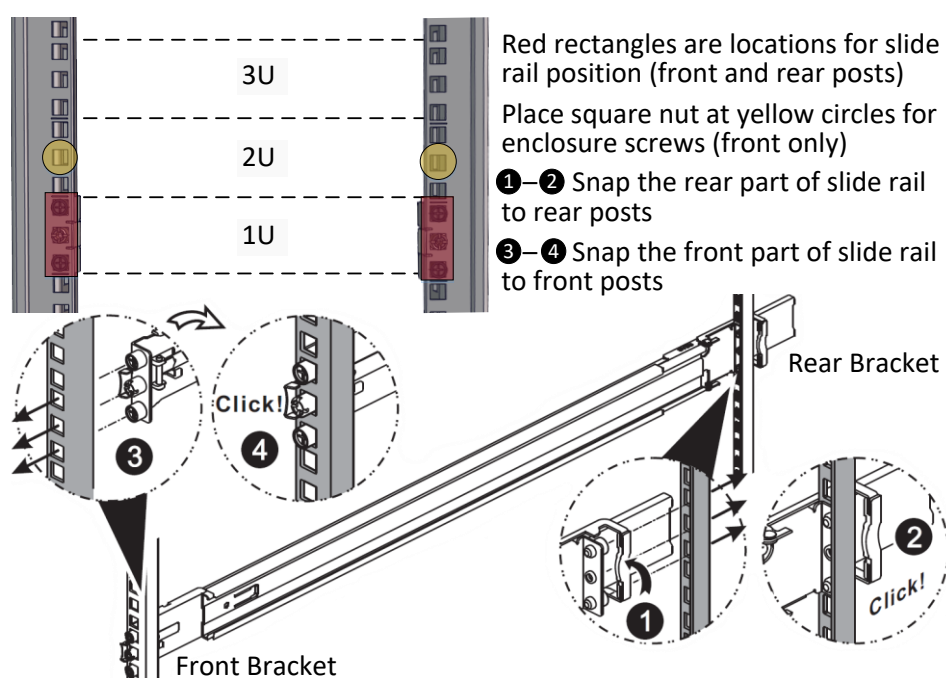❸–❹ Keep extending inner rail and pull the white detach tab when it hits the second stop
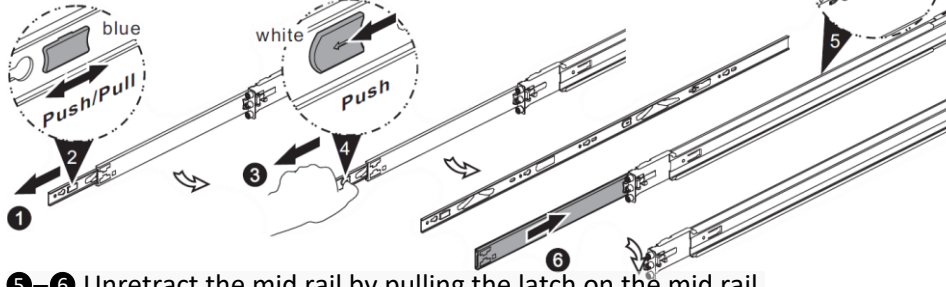
❺–❻ Unretract the mid rail by pulling the latch on the mid rail
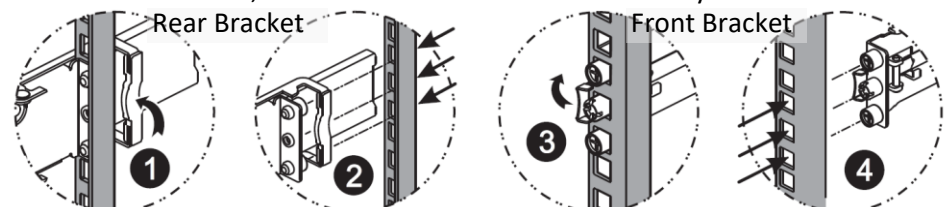
7. Install Inner Rails to the enclosure.
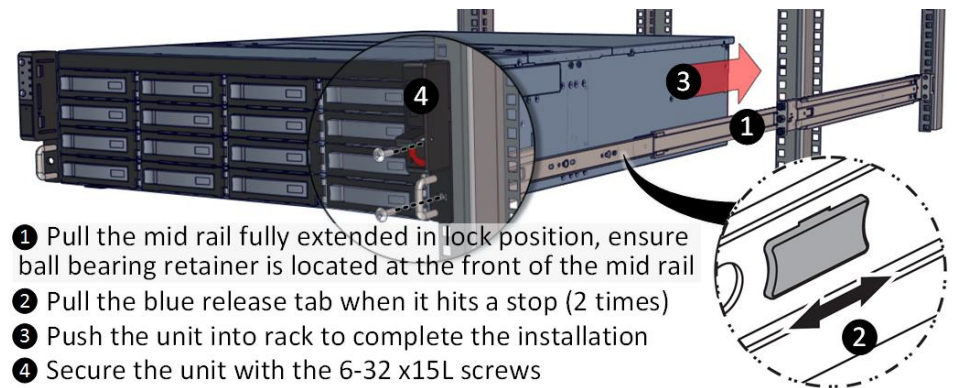
Yellow circles are for standoff screws

Secure inner rail with M4x4L screw (red)

To remove Inner rail from unit: Pull the latch outward and remove the keyhole from standoff

8. Install the Outer Rails to the Rack as follows:

3U
2U
1U

Red rectangles are locations for slide rail position (front and rear posts)

Place square nut at yellow circles for enclosure screws (front only)

❶–❷ Snap the rear part of slide rail to rear posts

❸–❹ Snap the front part of slide rail to front posts

Rear Bracket

Click!

Click!

Front Bracket

To remove slide rails, use the latches to undo the assembly as follows:

Rear Bracket   Front Bracket

9. Install the Unit to the Rack as follows:

❶ Pull the mid rail fully extended in lock position, ensure ball bearing retainer is located at the front of the mid rail
❷ Pull the blue release tab when it hits a stop (2 times)
❸ Push the unit into rack to complete the installation
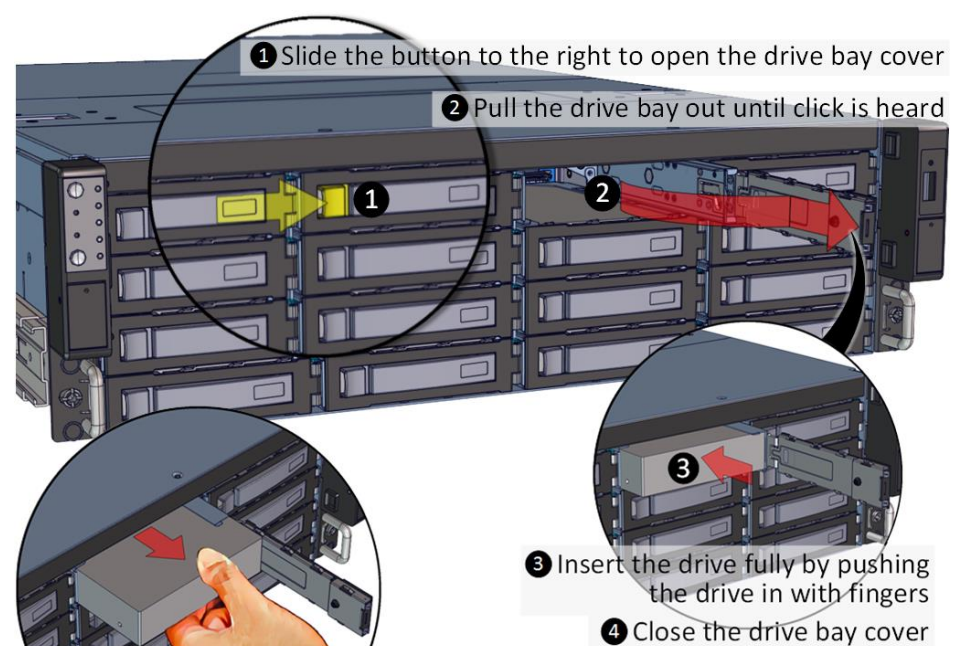❹ Secure the unit with the 6-32 x15L screws

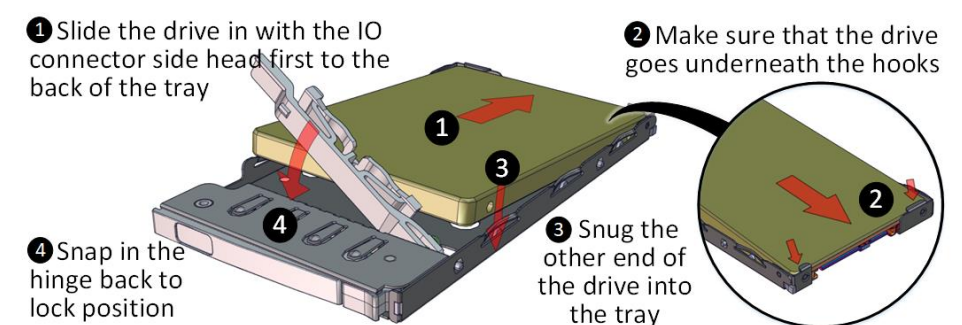For a complete instruction on how to install unit to the rack, please follow the Slide Rail Installation Guide.

At least two people are recommended for mounting process.

10. Install 3.5" Drives to the enclosure as illustrated:

❶ Slide the button to the right to open the drive bay cover
❷ Pull the drive bay out until click is heard
❸ Insert the drive fully by pushing the drive in with fingers
❹ Close the drive bay cover

To remove the disk, open the drive bay cover, pull the handle out so that disk slightly slide out, and pull out the disk with hand.

11. Install 2.5" Drives to the enclosure as illustrated:

❶ Slide the drive in with the IO connector side head first to the back of the tray
❷ Make sure that the drive goes underneath the hooks
❸ Snug the other end of the drive into the tray
❹ Snap in the hinge back to lock position

12. Plug in the Power Cords to the AC receptacles on the back of the unit.

13. Press the Power Button on the front of the unit and for the system to boot up.

14. Access the Serial Console (when necessary) by connecting a serial audio cable to the console ports. See picture for detail. Use a terminal console with baud set 115200, 8, N, 1, N. Type "help –a" for a list of commands.