

			Solution Rule		
MT	Model	Description	Min	Max	Comments


### Deployment/Management Node : 8348-21C

8348	21C	ServerConfig- S821LC	1	1	
	Solution ID	Solution Specify Code (for grouping only)	1	1	Optional FC -- used to specify Solution specific config .. Need econfig support
	Pod Type	Compute Server Type 2 Specify Code	1	1	Optional FC -- used to specify node type/ config .. Need econfig support
	Processor	EP0A 8W P8 3.325/3.857GHZ PROC 190W/247W (VENICE W/TURISMO)	2	2	
	Memory	EM5C 16GB 2-RANK DDR3 1.35V IS DIMMS 1600MHZ (1333MHZ max in system)	16	16	
	Bezel	n/a	1	1	12 LFF HDDs/SSDs Assembly
	Storage Adapter	Integrated Sata controller	1	1	Build-in HDDs : Integrate SATA controller + Optional SAS /RAID Controller
			0	1	Optional - External SAS adapter for Expansion SAS drawer
	Disks	ELD2 1TB 7200 RPM SATA HDD BARE DRIVE	1	1	OS Boot Disk (back side) +12 HDD/SSDs front side
			0		Optional HDDs/SSDs

### 8348-21C -- Required Inter-connect

	Network Adapter	EN0T QUAD E'NET (2X1 + 2X10 10Gb) PCIe Gen 2 X8/SHORT LP-Fiber	1	1	(Required) For High Speed Network
			0		Some adapter Max config 1/3/4.. See econfig rule
	Power	EKLJ (PS #6665) PWR CBL DRWR TO IBM PDU, 2.8m (9.2ft), 250V/10A,	2	2	Select Proper Line cord if not connected to IBM PDU
	Cables	CAT5E SWITCH CABLE, BLUE (2M)	1	1	(Required) For OS 1G Network (Recommended 2M length min)
		CAT5E SWITCH CABLE, GREEN (2M)	1	1	(Required) For IPMI 1G Network (Recommended 2M length min)
		EN02 3M- Active Twinax cable	2	2	(Required) For High Speed Network (Recommended 2M length min)
		No rack integration	1	1	
		Country specific FCs (keyboards, language groups) are selectable	1	1	User select
		Shipping and Handling	1	1	User select

			Solution Rule		
			Native MTM		
MT	Model	Description	Min	Max	Comments
Compute Node : 8335-GTB					
8335	GTB	S822LC (8335)	4	16	
	Solution ID	Solution Specify Code (for grouping only)	1	1	Optional FC -- used to specify Solution specific config .. Need econfig support
	Pod Type	Compute Server Type 2 Specify Code	1	1	Optional FC -- used to specify node type/ config .. Need econfig support
	Processor	EP05 10W P8' 2.860/3.492GHZ PROC 192/247W (DELLOVO)	2	2	
	Memory	EM58 128GB (4X32GB) IS RDIMMS (1.2V) 1600MHZ 4GBIT DDR4 DRAM	8	8	
	Disks	ES6A 2TB 7200 RPM 512E SATA HDD IN MODIFIED GEN3 CARRIER (SFF)	2	2	OS Boot Disk
	NVMe PCI		0	0	
	GPU	EC4F COMPUTE INTENSIVE ACCELERATOR, GPU, Slot C1/4/7/9	1	1	
S822C Server -- Required Inter-connect					
	Network Adapter	EN0V QUAD E'NET (2X1 + 2X10 10Gb) PCIe Gen 2 X8/SHORT LP-Twinax	1	1	(Required) For High Speed Network
			0		optional second type of Network adapter
	Power	6665 PWR CBL DRWR TO IBM PDU, 2.8m (9.2ft), 250V/10A, IEC320/C13,	2	2	Select Proper Line cord if not connected to IBM PDU
	Cables	CAT5E SWITCH CABLE, BLUE (2M)	1	1	(Required) For OS 1G Network (Recommended 2M length min)
		CAT5E SWITCH CABLE, GREEN (2M)	1	1	(Required) For IPMI 1G Network (Recommended 2M length min)
		EKC1 3M- Active Twinax cable	2	2	(Required) For High Speed Network (Recommended 2M length min)
		No rack integration	1	1	
		Country specific FCs (keyboards, language groups) are selectable	1	1	User select
		Shipping and Handling	1	1	User select

Comments					
<p>* Top and Bottom 1U of rack must always be open (FCs ER1T &amp; ER1B).</p> <p>* For optional switches, priority order starting as follows:</p> <ol style="list-style-type: none"> <li>1) 7120-64C 8828-E36</li> <li>2) 8831-S48 8831-NF2</li> <li>3) 8831-NF2 8831-F36</li> <li>4) 8831-F36 7120-64C</li> <li>5) 8828-E36 8831-S48</li> <li>6) 7120-48E</li> </ol> <p>* If no switches are ordered, leave these locations 41, 40, 39, &amp; 38 reserved in first rack (4851)</p> <p>* If 8831-NF2 or 8828-E36 are ordered, 1U above and 1U below cannot be occupied by anyone of the other four switches (F36, 64C, S48, 48E), and will need to be left open. 8831-NF2 or 8828-E36 can be placed next to another non-switch MTM. Examples: 2xE36, or 2xNF2, or 1xE36 + 1xNF2, or E36 + 5146-GSx, or NF2 + 8247-22L side by side is OK, but E36 + 48E is not allowed, need a gap between switches.</p>					
					
		Config #1	Per Rack		
FC	Description		Min	Max	Comments
	Lenovo G8052 1GbE Switch (48x 10GbE ports + 4x 10GbE ports)	1	1	1	* Qty 1 required per rack. An additional switch is needed, beyond the qty 1 per rack.
1118	CAT5E SWITCH CABLE, 3M, YELLOW	1	1	1	
6577	PWR CBL, DRWR TO IBM PDU, MFG SEL LENGTH, 200-240V/10A, IEC320/C13, IEC320/C14	2	2	2	
	Include all existing FCs; except FCs 0010, 0011, 0712, 0714, EGSx, EHKx, EHLA, 4649 (Rack Integration Services), and 0456 (Customer Specified Placement); do not include these FCs.				
	Lenovo G8264 ..10GB Switch (48x10G + 4x40G)	1	1*	1	
Solution ID	Solution Specify Code (for grouping only)	1	1	1	
Pod Type					
1118	CAT5E SWITCH CABLE, 3M, YELLOW	1	1	1	
EB28	IBM SFP+ SR TRANSCEIVER	1	1	1	
	Include all existing FCs; except FC 4649, FC 0456 (Customer Specified Placement) and ESC1 (Shipping & Handling), do not include these FCs	2	2	2	
<p>Depth Supplier IBM MTM Comments:</p> <ol style="list-style-type: none"> <li>1) 19.0" (D) --Lenovo G8264 7120-64C - 3rd greatest remaining depth; High Speed Eth</li> <li>2) 17.5" (D) --Lenovo G8052 7210-48E - 4th greatest remaining depth; Mgmt Network</li> </ol>					

Suggested Racking Rules

Leave U42 open for accessibility (FC ER1T).

Reserve U37-U41 for rack-to-rack network switches to enable multi-rack expansion. This will reduce the maximum number of data servers containable by the first rack.

Ensure that any component inserted above 32U are approved by your compliance team to prevent rack tipping.

Reserve U24-U26 for in-rack (leaf) network switches. Multiple switches enable ...

Reserved for TF4 Display if selected

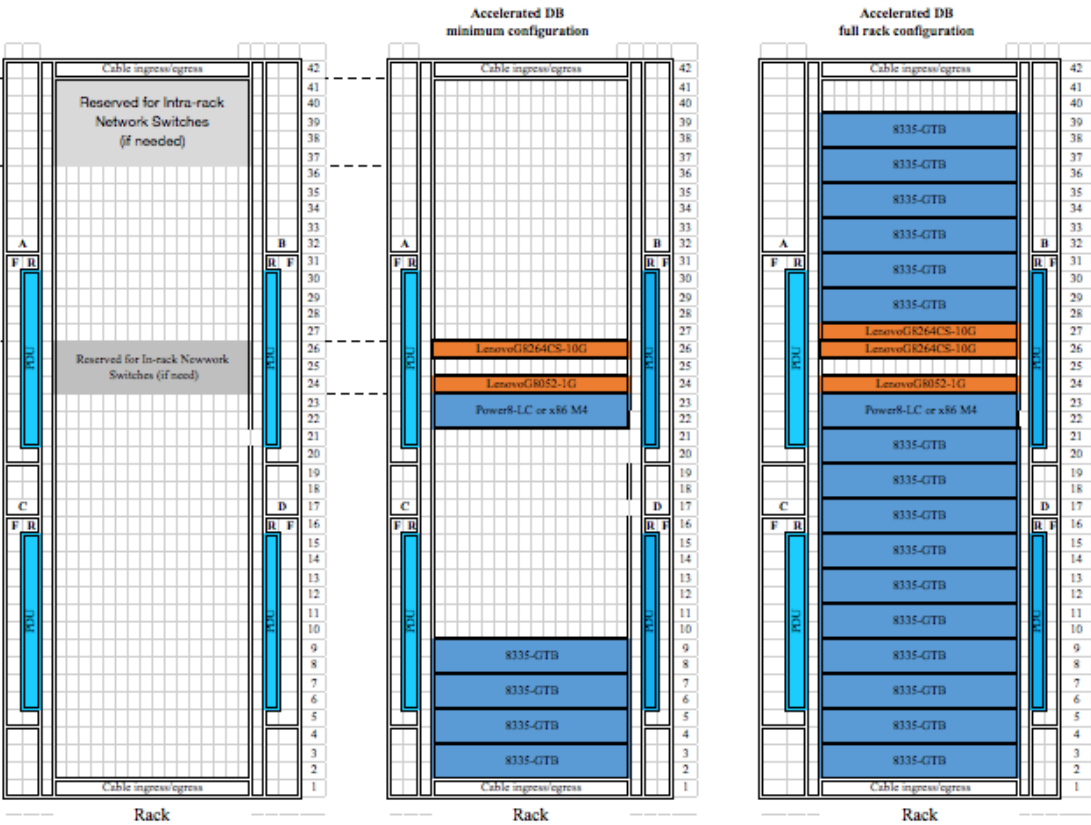
General rules:

- Place the 1st and heaviest components at U2 and work up.
- Keep common units (same MTMs, building blocks) together
- Follow native MTM unique racking requirement.

Solution-specific rules:

- Place seeding node / license node at U2
- Place and cable between 4-18 2U servers per rack

Leave U1 open for accessibility (FC ER1B)



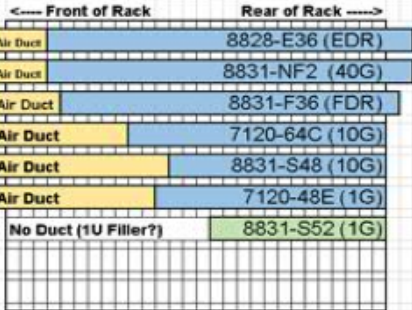
Solution Racking Specifics:

- i)
- ii)
- iii)

Reference

Switch Racking Profile Diagram (2016 09 20 - JTS)

Rack Side View



Switch Description	Depth
Mellanox SB7700	27"
Mellanox 1710	27"
Mellanox Sx8036	24.7"
Lenovo G8264	18"
Mellanox 1410	16.8"
Lenovo G8052	17.5"
Mellanox AS4610-54T	13.8"