Computing

1. OMegha Cumulus Server

* OMegha Cumulus Option-A (Quarter Rack)
* The total cloud capacity required for 75 VMs (4vCPUs, 8GB RAM & 80GB HDD Configuration)



|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **HW Components** | **Physical CPU Cores** | **Logical CPU**  **Cores (HT)** | **MEM (GB)** | **DISK (GB)** | **NICs** | **TP per NIC**  **(Gbps)** |
| Compute profile | 2 x 8 Cores = 16 | 32 | 256 | 3096 | 2 | 10 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Flavor Definitions** | **Number of VMs**  **of this flavor** | **vCPU**  **per VM** | **V MEM**  **per VM (GB)** | **V DISK**  **per VM (GB)** | **TP per**  **VM(Gbps)** |
| Small | 0 | 1 | 2 | 20 | 1 |
| Medium | 0 | 2 | 4 | 40 | 1 |
| **Large** | **75** | **4** | **8** | **60** | **1** |
| compute-intensive | 0 | 8 | 16 | 100 | 1 |
| **Raw Flavor Totals** |  | **300** | **600** | **4500** | **75** |
| **Flavor Totals with**  **oversubscription applied** |  | **37.5** | **400** | **4500** | **7.5** |
| **Flavor Totals /**  **Compute Profile (Adjusted)** | **#Compute Hosts**  **(actual)** | **vCPU** | **V MEM**  **(GB)** | **V DISK (GB)** | **TP (Gbps)** |
|  | **2** | **2** | **2** | **1** |
| **Resource utilization at**  **a single compute node** |  | 100.00% | 100.00% | 100.00% | 50.00% |

**Lab Wise Entry**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **S.No.** | **LAB** | **Quantity** | **Specification** | |
| 1 | FOSS Research Lab | 24 | **Model** | HP Pro 3090 Microtower PC |
| **Processor** | Intel(R) Core (TM)2 Duo CPU E7500 @ 2.93GHz |
| **O.S.** | Windows XP Professional (5.1, Build 2600) Service Pack 3 |
| **RAM** | 6GB RAM |
| **Hard Disk** | 360HDD |
| **Screen** | HP v 185e 18.5” |
| 02 | **Switch** | D-Link |
| 2 | Icarnegie I.T. Pro Lab 1 | 36 | **Model** | HP Pro 3090 Microtower PC |
| **Processor** | Intel(R) Core (TM)2 Duo CPU E7500 @ 2.93GHz |
| **O.S.** | Windows XP Professional (5.1, Build 2600) Service Pack 3 |
| **RAM** | 8GB RAM |
| **Hard Disk** | 360HDD |
| **Screen** | HP v 185e 18.5” |
| 3 | Icarnegie I.T. Pro Lab 2 | 35 | **Model** | HP Pro 3090 Microtower PC |
| **Processor** | Intel(R) Core (TM)2 Duo CPU E7500 @ 2.93GHz |
| **O.S.** | Windows XP Professional (5.1, Build 2600) Service Pack 3 |
| **RAM** | 6GB RAM |
| **Hard Disk** | 360HDD |
| **Screen** | HP v 185e 18.5” |
| 4 | Icarnegie I.T. Pro Lab 3 | 40 | **Model** | HP Pro 3090 Microtower PC |
| **Processor** | Intel(R) Core (TM)2 Duo CPU E7500 @ 2.93GHz |
| **O.S.** | Windows XP Professional (5.1, Build 2600) Service Pack 3 |
| **RAM** | 6GB RAM |
| **Hard Disk** | 360HDD |
| **Screen** | HP v 185e 18.5” |
| 04 | **Switch** | D-Link |
| 5 | DATABASE LAB | 30 | **Model** | HP Pro 3090 Microtower PC |
| **Processor** | Intel(R) Core (TM)2 Duo CPU E7500 @ 2.93GHz |
| **O.S.** | Windows XP Professional (5.1, Build 2600) Service Pack 3 |
| **RAM** | 2GB RAM |
| **Hard Disk** | 360HDD |
| **Screen** | HP v 185e 18.5” |
| 02 | **Switch** | D-Link |
| 6 | Object Oriented Programming Lab | 40 | **Model** | HP Pro 3090 Microtower PC |
| **Processor** | Intel(R) Core (TM)2 Duo CPU E7500 @ 2.93GHz |
| **O.S.** | Windows XP Professional (5.1, Build 2600) Service Pack 3 |
| **RAM** | 2GB RAM |
| **Hard Disk** | 360HDD |
| **Screen** | HP LV1561 15” |
| 02 | **Switch** | D-Link |
| 8 | Data Structures Lab | 48 | **Model** | HP Pro 3090 Microtower PC |
| **Processor** | Intel(R) Core (TM)2 Duo CPU E7500 @ 2.93GHz |
| **O.S.** | Windows XP Professional (5.1, Build 2600) Service Pack 3 |
| **RAM** | 2GB RAM |
| **Hard Disk** | 360HDD |
| **Screen** | HP LV1561 15” |
| 9 | Computer Programming Lab | 32 | **Model** | HP Compaq dx2480 |
| **Processor** | Intel(R)DUACORE |
| **O.S.** | Windows XP Professional (5.1, Build 2600) Service Pack 3 |
| **RAM** | 4GB |
| **Hard Disk** | 160 HDD |
| **Screen** | HP L 1506 15” |
| 10 | iC Lab  (Top Floor) | 01 | **Monitor** | 3090 Microtower PC |
| **Operating System** | Window-10 |
| **RAM** | 4 GB |
| **Processor** | Intel i5 CPU |
| **CPU** | Dell |
| **HDD** | 500 G.B. |
| 01 | **Switch** | 01 (08 Port) |
| 11 | Seminar Hall  (Ground Floor) | 01 | **Monitor** | Benq T52WA |
| **Operating System** | Windows 7 Professional 2009 |
| **RAM** | 2 G.B. |
| **Processor** | 2.0 Ghz |
| **Product ID** | 55041-001-4537117-86519 |
| **CPU** | HP |
| **HDD** | 500 G.B. |
| 12 | VLSI Lab | 20 | **Monitor** | HP Pro 3090 Microtower PC |
| **Processor** | Intel(R) Core (TM)2 Duo CPU E7500 @ 2.93GHz |
| **O. S** | Windows XP Professional (5.1, Build 2600) Service Pack 3 |
| **RAM** | 2GB RAM |
| **CPU** | 360HDD |
| **HDD** | HP v 185e 18.5” |
| 02 | **Switch** | D-Link |
| 13 | Wireless Lab | 08 | **Monitor** | HP Pro 3090 Microtower PC |
| **Processor** | Intel(R) Core (TM)2 Duo CPU E7500 @ 2.93GHz |
| **O.S.** | Windows XP Professional (5.1, Build 2600) Service Pack 3 |
| **RAM** | 2GB RAM |
| **Hard Disk** | 360HDD |
| **Screen** | HP v 185e 18.5” |
| 13 | **Model** | HP Compaq dx2480 |
| **Processor** | Intel(R)DUACORE |
| **O.S.** | Windows XP Professional (5.1, Build 2600) Service Pack 3 |
| **RAM** | 1GB |
| **Hard Disk** | 160 HDD |
| **Screen** | HP L 1506 15” |
| 14 | Research Lab  (Projected) | 08 | **Monitor** | HP Pro 3090 Microtower PC |
| **Processor** | Intel(R) Core (TM)2 Duo CPU E7500 @ 2.93GHz |
| **O.S.** | Windows XP Professional (5.1, Build 2600) Service Pack 3 |
| **RAM** | 2GB RAM |
| **Hard Disk** | 360HDD |
| **Screen** | HP v 185e 18.5” |
| 01 | **Switch** | D-Link (08 Port) |
| 15 | MAT Lab | 20 | **Monitor** | HP Pro 3090 Microtower PC |
| **Processor** | Intel(R) Core (TM)2 Duo CPU E7500 @ 2.93GHz |
| **O.S.** | Windows XP Professional (5.1, Build 2600) Service Pack 3 |
| **RAM** | 6GB RAM |
| **Hard Disk** | 360HDD |
| **Screen** | HP v 185e 18.5” |
| 16 | CAD Lab | 20 | **Monitor** | HP Pro 3090 Microtower PC |
| **Processor** | Intel(R) Core (TM)2 Duo CPU E7500 @ 2.93GHz |
| **O.S.** | Windows XP Professional (5.1, Build 2600) Service Pack 3 |
| **RAM** | 4GB RAM |
| **Hard Disk** | 360HDD |
| **Screen** | HP v 185e 18.5” |
| 17 | Design lab | 20 | **Monitor** | HP Pro 3090 Microtower PC |
| **Processor** | Intel(R) Core (TM)2 Duo CPU E7500 @ 2.93GHz |
| **O.S.** | Windows XP Professional (5.1, Build 2600) Service Pack 3 |
| **RAM** | 4GB RAM |
| **Hard Disk** | 360HDD |
| **Screen** | HP v 185e 18.5” |
| 01 | **Monitor** | asus |
| **Processor** | Intel(R) Core i5 |
| **O.S.** | Windows XP Professional (5.1, Build 2600) Service Pack 3 |
| **RAM** | 16GB RAM |
| **Hard Disk** | 240 GB SSD, 1 TBHDD |
| **Screen** | Dell 21.5” |
| 18 | Civil Lab | 16 | **Monitor** | HP Pro 3090 Microtower PC |
| **Processor** | Intel(R) Core (TM)2 Duo CPU E7500 @ 2.93GHz |
| **O.S.** | Windows XP Professional (5.1, Build 2600) Service Pack 3 |
| **RAM** | 6GB RAM |
| **Hard Disk** | 360HDD |
| **Screen** | HP v 185e 18.5” |
| 19 | CNC Lab | 13 | **Monitor** | HP Pro 3090 Microtower PC |
| **Processor** | Intel(R) Core (TM)2 Duo CPU E7500 @ 2.93GHz |
| **O.S.** | Windows XP Professional (5.1, Build 2600) Service Pack 3 |
| **RAM** | 6GB RAM |
| **Hard Disk** | 360HDD |
| **Screen** | HP v 185e 18.5” |
| 20 | PLC Lab | 06 | **Monitor** | HP Pro 3090 Microtower PC |
| **Processor** | Intel(R) Core (TM)2 Duo CPU E7500 @ 2.93GHz |
| **O.S.** | Windows XP Professional (5.1, Build 2600) Service Pack 3 |
| **RAM** | 4GB RAM |
| **Hard Disk** | 360HDD |
| **Screen** | HP v 185e 18.5” |
| 21 | Admin  Account (3), Hr. (1), Director room, principal room, (1), room no 101(1),105(1) A wing | 08 | **Monitor** | HP Pro 3090 Microtower PC |
| **Processor** | Intel(R) Core (TM)2 Duo CPU E7500 @ 2.93GHz |
| **O.S.** | Windows XP Professional (5.1, Build 2600) Service Pack 3 |
| **RAM** | 4GB RAM |
| **Hard Disk** | 320 HDD |
| **Screen** | HP v 185e 18.5” |
| 22 | EXAM | 02 | **Monitor** | HP Pro 3090 Microtower PC |
| **Processor** | Intel(R) Core (TM)2 Duo CPU E7500 @ 2.93GHz |
| **O.S.** | Windows XP Professional (5.1, Build 2600) Service Pack 3 |
| **RAM** | 4GB RAM |
| **Hard Disk** | 360HDD |
| **Screen** | HP v 185e 18.5” |
| 23 | Server Room | 01 | **Monitor** | HP |
| **Processor** | Intel(R) Core i3 |
| **O.S.** | Windows 10 |
| **RAM** | 4GB RAM |
| **Hard Disk** | 500 GB HDD |
| **Screen** | Dell 21.5” |
| 01 | **Monitor** | HP Compaq dx2480 |
| **Processor** | Intel(R) Core i3 |
| **O.S.** | Windows 10 |
| **RAM** | 4GB RAM |
| **Hard Disk** | 360HDD |
| **Screen** | HP v 185e 18.5” |
| 24 | B.S Department | 02 | **Monitor** | HP Pro 3090 Microtower PC |
| **Processor** | Intel(R) Core (TM)2 Duo CPU E7500 @ 2.93GHz |
| **O.S.** | Windows XP Professional (5.1, Build 2600) Service Pack 3 |
| **RAM** | 4GB RAM |
| **Hard Disk** | 360HDD |
| **Screen** | HP v 185e 18.5” |
| 25 | E.E  Department | 05 | **Monitor** | HP Pro 3090 Microtower PC |
| **Processor** | Intel(R) Core (TM)2 Duo CPU E7500 @ 2.93GHz |
| **O.S.** | Windows XP Professional (5.1, Build 2600) Service Pack 3 |
| **RAM** | 4GB RAM |
| **Hard Disk** | 360HDD |
| **Screen** | HP v 185e 18.5” |
| 26 | ECE  Department | 05 | **Monitor** | HP Pro 3090 Microtower PC |
| **Processor** | Intel(R) Core (TM)2 Duo CPU E7500 @ 2.93GHz |
| **O.S.** | Windows XP Professional (5.1, Build 2600) Service Pack 3 |
| **RAM** | 4GB RAM |
| **Hard Disk** | 360HDD |
| **Screen** | HP v 185e 18.5” |
| 27 | CSE  Department | 05 | **Monitor** | HP Pro 3090 Microtower PC |
| **Processor** | Intel(R) Core (TM)2 Duo CPU E7500 @ 2.93GHz |
| **O.S.** | Windows XP Professional (5.1, Build 2600) Service Pack 3 |
| **RAM** | 4GB RAM |
| **Hard Disk** | 360HDD |
| **Screen** | HP v 185e 18.5” |
| 28 | Civil  Department | 03 | **Monitor** | HP Pro 3090 Microtower PC |
| **Processor** | Intel(R) Core (TM)2 Duo CPU E7500 @ 2.93GHz |
| **O.S.** | Windows XP Professional (5.1, Build 2600) Service Pack 3 |
| **RAM** | 4GB RAM |
| **Hard Disk** | 360HDD |
| **Screen** | HP v 185e 18.5” |
| 29 | Mech.  Department  1 System Workshop | 04 | **Monitor** | HP Pro 3090 Microtower PC |
| **Processor** | Intel(R) Core (TM)2 Duo CPU E7500 @ 2.93GHz |
| **O.S.** | Windows XP Professional (5.1, Build 2600) Service Pack 3 |
| **RAM** | 4GB RAM |
| **Hard Disk** | 360HDD |
| **Screen** | HP v 185e 18.5” |
| 30 | Lecher theater | 02 | **Monitor** | HP Pro 3090 Microtower PC |
| **Processor** | Intel(R) Core (TM)2 Duo CPU E7500 @ 2.93GHz |
| **O.S.** | Windows XP Professional (5.1, Build 2600) Service Pack 3 |
| **RAM** | 4GB RAM |
| **Hard Disk** | 360HDD |
| **Screen** | HP v 185e 18.5” |
| 31 | Physics lab, ECE | 05 | **Monitor** | HP Pro 3090 Microtower PC |
| **Processor** | Intel(R) Core (TM)2 Duo CPU E7500 @ 2.93GHz |
| **O.S.** | Windows XP Professional (5.1, Build 2600) Service Pack 3 |
| **RAM** | 4GB RAM |
| **Hard Disk** | 360HDD |
| **Screen** | HP v 185e 18.5” |
| 32 | 3D Printer | 01 | **Monitor** | HP Pro 3090 Microtower PC |
| **Processor** | Intel(R) Core (TM)2 Duo CPU E7500 @ 2.93GHz |
| **O.S.** | Windows XP Professional (5.1, Build 2600) Service Pack 3 |
| **RAM** | 4GB RAM |
| **Hard Disk** | 360HDD |
| **Screen** | HP v 185e 18.5” |
| 33 | Library | 03 | **Monitor** | HP Pro 3090 Microtower PC |
| **Processor** | Intel(R) Core (TM)2 Duo CPU E7500 @ 2.93GHz |
| **O.S.** | Windows XP Professional (5.1, Build 2600) Service Pack 3 |
| **RAM** | 4GB RAM |
| **Hard Disk** | 360HDD |
| **Screen** | HP v 185e 18.5” |
| 34 | I3 Lab For ARVR | 01 | **Monitor** | Gigabyte System |
| **Processor** | Intel Core i7 |
| **O.S.** | Windows 10 |
| **RAM** | 64 GB RAM |
| **Hard Disk** | 500 GB SSD,1 TB HDD |
| **Screen** | LG LED 25” |
| **Graphic Card** | 8 GB |
| 14 | Director room | 01 | **Monitor** | Apple iMac |
| **Processor** | 7th-Generation Intel Core i5 |
| **O.S.** | Mac |
| **RAM** | 8GB |
| **Hard Disk** | 1 TB |
| **Screen** | 5K Display 27-inch |

**Laptops**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **S.No.** | **Issued** | **Quantity** | **Model** | **Specification** |
| 1 | Mr. R.S. Vyas | 1 | Lenovo | i3 4GB 500GB Windows 7 64 Bit |
| 2 | Mr. Pankaj Porwal | 1 | Hp Compaq Presario G248q |  |
| 3 | Ms. Madhu Verdia | 1 | Dell Inspiron N5010 | i3 4GB 500GB Windows 7 64 Bit |
| 4 | Mr. Neeraj Pandya | 1 | Dell Inspiron N5010 | i3 4GB 500GB Windows 7 64 Bit |
| 5 | Mr. Kailash Mali | 1 | I ball Chromebook | Intel Atom/2GB/32GB/Onboard Graphics/Windows 10/FHD |
| 6 | Ms. Meera Ranawat | 1 | Apple iPad Air | Apple iPad Mini (Wi-Fi + Cellular, 64GB) - Gold |
| 7 | Mr. R.S. Vyas | 1 | Apple iPad Air | 2019 26.67 cm (10.5 inch) Wi-Fi Tablet, 64 GB |
| 8 | Mr. Kailash Mali | 1 | Hp | C2d 4GB ,320GB Windows 7 64 Bit |
|  |  |  |  |  |