

## IT INFRASTRUCTURE

AS ON MARCH 2022

### IT Infrastructure Center

JIIT is one of the few Indian universities, which can boast of its state-of-the-art computing resources and network across the campus.

JIIT has Central IT Infrastructure Center for IT support. The main objectives of the dedicated Server Room ( IT Infrastructure Center) are to provide easily accessible and excellent computational facilities, support to all members of JIIT on all aspects of academic, research and recreational requirements, to implement and maintain IT Infrastructure and application software, to impart introductory and advanced instructions to users, generate trained manpower to maintain IT Infrastructure (Servers, Desktops, Data Security, University Network), to provide support to Institute computerization efforts, to do in house research & development, and to serve a user population of more than 4600 users consisting of undergraduate, postgraduate, research scholars, faculty and staff of the University.

In addition, it also owns the responsibility to develop and implement application software for various needs of University like finance, payroll, results, MIS reports and electronic attendance system etc.

### General Computing Facilities.

Dedicated and secured Data centre. The Server Room is equipped with Intel Nehalem Quad-Core Servers for high performance windows 2008R2/2012/2016/2019 Computing Server, Intel Xeon servers with multiple processors, High end Intel Pentium servers with multiple processors, various engineering and technical computing software's, network management tools, Client/Server Database computing System connected over a switched fast Ethernet with Optical Fiber backbone. All computers are a part of Windows Domain Controller with support of additional domain controllers. For our printing needs we have 104 HP printers which includes Heavy Duty Network Laser Printers, Desktop Printers and Multi function Printers. Central Antivirus server provides security for entire network.

### Hardware Configurations (Servers and Desktops).

#### Servers:

Sr.No.	Location	Server Configuration	Qty.
1	JIIT-62	Dual Zion Processor 3.0 ghz	3
		Processor XEON 2.8 GHZ	5
		Dual core Xeon 5120 2.0 ghz	1
		Dual Zion Processor 3.0 ghz	4
		Intel XEON Pro, E5520 2.26 GHZ 8MB L2 Cache	5
		Intel Xeon Quad Core E5620 2.4 ghz	1
		Intel Xeon QUAD CORE ,E3 1220 3.10GHZ	2
		Intel Xeon 2.27 GHZ, 8 MB CACHE	2
		Intel Xeon Processor E3 1220, 3.1 Ghz	2
		INTEL XEON, CORE 8 E5-2650	2
		2X Intel XEON 8C E5 Octa Core 2630 V3, 2.5Ghz	1
		Intel Xeon E5-1620w V3 Processor, 3.50Ghz	1
		2* Intel Xeon E5-2620 V4, 2.10ghz	3
		2* Intel Xeon Silver 4114 10C85W, 2.2ghz	3

		HPE DL380 Gen10 4214 1P 16G 12LFF Svr	3
		Sophse XG 550 Firewall	2
		HP DL20E 2236	2
		HP DL20 Gen10 2236	1
<b>2</b>	<b>JIIT-128</b>	2* Intel Xeon Silver 4114 10C85W, SR530	3
		Intel Xeon Quad Core 3.1Ghz, X3100-M4	3
		Intel Xeon Quad Core 2.13Ghz, X3400-M3	2
		Intel Xeon Quad Core 2.27Ghz, X3400-M2	2
		Intel Xeon 3.1Ghz, ML-110 G7	1
		Sophos XG 430 Firewall & Proxy Server	2
		HPE DL20, Gen 10 E2236, 3.4 Ghz/16GB RAM, 1.2TB SAS HDDX3, Model No: P17081-B21	2
		<b>Total</b>	<b>58</b>

### Desktops/Laptop:

Sr.No.	Location	Model	Desktop Configuration	Qty.
<b>1</b>	<b>JIIT-62</b>			
		HP DX-6120MT	Intel Pentium 4 - 3.00GHz, 512Mb - RAM, 80GB SATA HDD	5
		ThinkCenter-8326	Intel P-4 3.06 Ghz, 512 Mb -RAM, 80GB HDD MB RAM	1
		Lenovo-8985-B85	Intel Dual Core 1.8 GHz, 1GB RAM, 160GB SATA HDD, CDRom	30
		Lenovo-6075E8Q	Intel Core2 Duo 2.4 GHz, 1GB RAM, 160GB SATA HDD, CDRom	49
		HP DX-2480	Intel Core 2 Duo 2.4 GHz, 1GB RAM, 160GB SATA HDD, CDRom	51
		LENOVO 7413-A81	Intel Core 2 Duo 3.0 GHZ, 2GB RAM, 160 GB SATA HDD, DVDRom	35
		Lenovo-5474-RS7	Intel Core I3-530 Pro 2.93GHz, 2GB RAM, 250GB SATA HDD, DVD Rom	145
		HP-DX 7380		2
		HP 6200 MT PRO	Intel Core I3 3.10 GHZ, 2GB RAM, 500GB SATA HDD, DVD Rom	74
		HP 280 G1-60	Intel Core I5 3.0 GHZ ,4GB RAM, 500GB SATA HDD	59
		HP 280 G1-75	Intel Core I5 3.0 GHZ ,4GB RAM, 500GB SATA HDD	75
		P310-P500 AR Lab		6
		Lenovo S510	Intel Core i5 3.0 GHZ, 8GB RAM, 500GB SATA HDD	59
		Lenovo P310	Intel Xeon E3-1225 3.3 Ghz, 8GB RAM, 1TB SATA HDD	15
		Lenovo S510	Intel Core I5,8 GB DDR4, 1TB/7200,Windows 17	31
		HP 280 G2 MT	Intel Core I5@6500 3.2 GHZ,8 GB DDR4, 1TB/7200, NVIDIA GeForce,DVDRW, Windows 10	155
		Dell Vostro-3669	Intel Core I5@7400 3.5 GHZ,8 GB DDR4, 1TB/7200, AMD Radeon,DVDRW, Windows 10	200

		HP 280 G3	Intel Core I7@7700 3.6 GHZ,8 GB DDR4, 1TB/7200, NVIDIA GeForce,Windows 10,5YW	150
		Lenovo P330	Intel Core I7@8700 3.2 GHZ,16 GB DDR4, 1TB/7200, 2GB NVIDIA,Windows 10,5YW	250
		Dell- Precision T5820	XEON W2123,16 GB DDR4, 1TB,NVIDIA GE-Force,Windows 10Pro,3YW	3
		Lenovo P330	Intel Core I7@8700 3.2 GHZ,16 GB DDR4, 1TB/7200, 2GB NVIDIA,Windows 10,5YW	300
		Dell Optiplex 5080	Core i7/16GB RAM/1 TB/Win 10	100
		HP 280 ProG8	Core i7/16GB RAM/1 TB/Win 10	40
		HP 280 ProG8	Core i7/16GB RAM/1 TB/Win 10	45
			Laptop	25
<b>2</b>	<b>JIIT-128</b>			
		7413-A81	Lenovo Desktop, Thinkcentre M58 E, Intel Core 2 duo processor E8400(3.0 Ghz, 6Mb L3 cache, 1333Mhz FSB), Intel G41 Chipset motherboard, RAM-2GB DDR II, HDD 160GB SATA, 16X DVD ROM Drive, Onboard 10/100/1000 Ethernet Adapter, USB KBD & Optical Mouse, Win XP Professional	110
		M5474-S7	Lenovo Thinkcentre M90, Core i3-530, Processor,(2.93 Ghz, 4MB Cache) Intel Chipset Q57 Motherboard, 2GB DDR-III RAM, 250GB SATA HDD, DVD-ROM Drive, Ethernet on Board, KBD, Optical Mouse & MSWIN7PRO	90
		HP 6200PRO	HP Compaq 6200 Pro MT PC , Intel Core i3 2100 Processor(3.10Ghz, 3MB Cache), Q65 Express Chipset, 2GB DDR III 1.3Ghz RAM, 500GB-HDD 7200RPM, 16X DVDROM Drive, Ethernet on Board, HP USB KBD, Optical Mouse, MSWIN7PRO	120
		MT-M5048-C93	Intel core i3-2120 Processor (3.30 Ghz, 3MB internal cache), Intel Q65 Express, RAM 4GB DDR III, HDD 500Gb SATA, DVD ROM Drive, USB KBD & Optical Mouse, Win & professional	140
		MT-M3597-3M5	Lenovo Desktop, M-72, Intel core i3-3220 Processor (3.3 Ghz, 3MB L3 Cache), Intel chipset H61 motherboard, Ram-4GB DDR III, HDD-500GB SATA, DVD ROM, 10/100/1000 Builtin Ethernet Adapter, Usb KBD & Mouse, Win 7 Professional 64 Bit	100
		HP-280-G1	HP 280G1 MT Desktop/Intel Core i5@4590s 4th Gen@3.0 GHZ/4GB	20

			RAM DDR3/ 500GB HDD/ USB Mouse, Keyboard with Win 8.1 Pro DG to Win 7 Pro OS, 3-3-3 Warranty Only, HP 21.5 " TFT LED	
		Dell Vostro 3650MT	6th Generation Intel® Core™ i7-6700 3.4 Ghz Processor, 1 8GB Single Channel DDR3L 1600 Mhz (8GBx1), 1 TB SATA HDD 7200 rpm I DVD W/R , 2GB GDDR5, 1 Windows 8.1 64 Bit	8
		Lenovo PC310	Lenovo PC310, Intel Xeon E3-1225, *MB Cache, upto 3.3 Ghz, 8GB DDR4 2133Mhz Ram UDIMM, Windows 7 Pro 64, 1TB HDD 7200RPM 3.5 SATA, Nvidia Quadro K420 2GB(DVI+DP) 3Yr Warranty	3
		HP 280 G3 MT	HP 280 G3 MT, Processor Intel core i7-7700(QC/8MB/8T/3.6Ghz/65W), RAM: 8GB 1x8GB 2400 Mhz DDR4, HDD: 1TB 7.2K RPM SATA 6Gbps, NVIDIA Gef GT730-2GB HDMI, Univ Audio, 19.5" HP TFT,	50
		Lenovo P-330MT	Lenovo Think Station Tower i7-8700, 3.2GB 6C/C246 210W 85%, 16GB DDR4 2666Non-ECC UDIMM, 1TB HDD 7200 RPM 3.5 SATA 3, 2GB Graphic Card, Windows 10 Prof. 5Yr Warranty, TFT 19.5"	350
		Dell Precision T5820	Xeon W2123 Processor, 16GB RAM DDR-IV, 1TB HDD, DVDRW, Win10Pro., NVIDIA Graphics (RTX2080TI), 19.5" TFT, 3Yr Warranty	2
		HP280Pro-G8PC	HP 280 Pro microtower G8 PC, Intel Core i7-11700 8 Core, 18MB Cache, 2.5Ghz-4.9Ghz/ 180W Power Supply, Intel H570 Chipset, 16GB DDR4 RAM upgradable to 64GB, 1TB SATA HDD 7200 RPM, Intel Integrated graphic, HP 19.5" Display, Factory Preloaded MD Win 10 Pro OS, HP USB KBD & Mouse with 5 Year Warranty	160
			Laptop	2
			<b>Total</b>	<b>3060</b>

## Engineering, Technical Computing and General Use Software's.

Software Name	Software Name	Software Name
3-DMax	LabView	PSPICE
Ace Equity	LANTanner	RationalRose
Adobe Software Suite	LotusDomino	SAP
ADS	Macromedia Software Suite	SigmaPlot
Animo	Mathematica	Softlink Liberty
BorlandC++	Matlab	SPSS
Gaussion	Memspro	Sophos Endpoint Protection
HEP-I	Msoffice	Virtuoso (Cadense VLSI UG Bundle)
Illustratorpe	MSPProject	VisualStudioNET
Jboss	Oracle11g	Xilinx
KEIL	Photoshop Pe	Synopsys
Adobe Acrobat DC	Corel-2019	G Suite

### Database Service.

The Server Room has a Client/ Server Database Computing System- Oracle 11g with Developer 2000 version 6.0. At the front end, the platform is Windows XP/Widnows7/Windows 8.1/Windows 10 and at the back end, Intel Xeon basedRedHat Enterprise Linux.

### Network Services.

The whole campus is interconnected through a highly secured Virtual Private Network, where over 3000 PCs are connected to the internet through Internet Leased link connections whilst 36 hi-end servers power the network for 100% redundancy and efficient data management. Completely automated High end Biometric systems for attendance of faculty and staff. Eight biometric reader machines have been installed in different academic blocks for capturing the attendance of the faculty and staff. 58 bullet cameras, 194 dome cameras, 04 CS Mount camera, 22 DVRs to monitor the various buildings including Academic areas, Faculty residence, Hostels and grounds.

The institute Local Area Network (LAN) is a state of the art switched network with Fiber Optics Backbone and enhanced CAT6/CAT6a UTP for providing seamless connectivity. It consists of more than 8000 network access points spread using 109 Cisco Switches, 4 Routers, 288 Wireless access points and 28 VLANs to provide the needed scalability, security and traffic control. The network access is provided to every room in student's hostel, faculty & staff residence, doctors at JIIT Hospital, cafeteria & mess (Annapurna), laboratories and rooms in guest houses.

JIIT Campus has an excellent Internet connectivity, provided through a router, Sophos firewall. We have 1.10 Gbps (1:1) leased circuit from BSNL NKN (1 Gbps) and AIRTEL (10Mbps) on OFC. Apart from Internet and Intranet many more services including mail, web, library book search, domain name, anti virus and software upgrades are being provided over this network.

JiIT has SOPHOS XG-550 and Sophos XG 430 Firewall & Proxy Server in HA mode installed for ISPs load balancing, fail over and Malware/ Spyware / Spam detection, content filtering and anti-virus protection at the gateway level. Lotus Domino is being used by JiIT for its official mailing services.

Apart from above all Lecture Theaters and major class rooms are equipped with Projection System

**New Additions :( Sector-62)**

Desktop Systems	: HP 280 ProG8	: <b>85Nos.</b>
Server	: HP DL20E 2236	: <b>01Nos.</b>
Printers Desktop	: HP 1000A	: <b>06Nos.</b>
	HP M712 DN	: <b>02Nos.</b>
	HP 1200A	: <b>02 Nos.</b>
	HP Color CP5225Dn	: <b>01 Nos.</b>

**New Additions :( Sector-128)**

Desktop Systems	: HP 280 ProG8	: <b>160 Nos.</b>
Server	: HP DL20E 2236 gen 10	: <b>02 Nos.</b>
Printers Desktop	: LaserJet LJ P1108	: <b>01 Nos.</b>