

KERNELSPHERE TECHNOLOGIES

IBM LPAR

By

Mr. Rahul (CATE)

IT ARCHITECTS.

Certified Adv Technical Expert (AIX)

IBM AIX 4.3/5.1/5.2/5.3/6.1/HACMP/VIRTUALIZATION/OPEN
DISK/CERTIFIED

KERNELSPHERE TECHNOLOGIES

#4, Ambar Society 983 Shukrvar peth,
Opp - Nehru Stadium, Vipashyana Kendra Lane,
Swargate, Pune – 411002.
Ph. 04042218546 Mobile No: +91 9960644974
e-mail: prasad.hele@kernelsphere.com,
shweta@kerneltech.com

About Faculty:

- Overall 14 yrs of exp in IT industry
- Exp in various Flavors of UNIX like SOLARIS, HP-UNIX & AIX
- Worked on SOLARIS & HP-UNIX from 1998 to 2001

- Technical service professional for AIX in IBM Bangalore
- 2001-05, supported IBM Global customer
- 2005-07, in CSC Hyd as Principal Consultant AIX, Supported Dupont, Nissan, BBT etc.
- 2007-09, Consultant in US for AIX/Storage for Global Clients like Chrysler, Toyota
- As a lecturer Unix Admin in university of south carolina school of engineering US 2008
 - 2009-10, CSC Hyd, Principal Consultant AIX/Storage
- Currently as IT-Architect virtualization/AIX/Storage in one of Top MNC Since Jan 2011
- Design & Configured AIX Solution in many pharma Companies in Hyd
- He is certified Adv. Technical expert CATE in AIX
- IBM AIX 4.3/5.1/5.2/5.3/6.1 Certified
- IBM HACMP 5.1/6.1 certified
- IBM enterprise technical support for AIX
- IBM certified virtualization technical support for AIX & LINUX
- IBM certified high end disk for open system
- Sun Solaris certified in 2001 & HP-UNIX certified in 2003
- EMC/NetApp/CCNA/Oracle Certified

About Kernel:Kernel being into Services, Solutions, Consulting and Learning Services in infrastructure technologies, has deep understanding of both technology and business processes and is competent of effectively aligning people, processes, data and technology.

Kernel supports organizations of every kind to reach the next level of service excellence through infrastructure technologies services from global Enterprises to small/medium business corporations; Kernel provides effective technology and consulting services in infrastructure space.

Kernel consists of accomplished IT consultants and management experts, with 700000 manhours of experience, has competency in architecture, development and administrative solutions and services within infrastructure horizon. Kernel believes in business based on trust, collaboration, candor and mutual respect and assures partners and clients of progressive business growth.

Lab Infrastructure: Our Lab is fully equipped with latest infrastructure with Power 6 and IBM X-series dual Xeon Based servers, EMC clarion, Netapp Unified Storage, Brocade FC switches, Cisco FC switches, Cisco L4 switch, and all the servers are integrated with SAN. All the

servers are monitored by Nagios monitoring agent with OTRS ticketing system. All the students will have an individual access to the servers through thin clients remotely. Students will be exposed to the real time scenarios through which they can get good exposure on the subject. To help the student in their practical sessions, there will be lab faculties available all the time.

COURSE CONTENT

Introduction to partitioning

- What is Partition, LPAR, PPAR
- List Partition characteristics
- List benefits of using partition
- Software licensing, what are
- POWER hypervisor and its function
- Hardware management console (HMC) and its usage
- What is DLPAR, processor concepts, Virtual I/O, Power

Hardware overview

- What is P series hardware?
- Discuss p4,P5,P6,P7 hardware
- What are features implemented in each series
- I/O drawer options
- What is a location code, physical location code convention?
- How to see AIX location codes
- Service processor and its role in system
- Advanced System Management Interface

Hardware management console

- What is HMC? Its configuration,
- What is HMC? Its configuration,
- Taking you through HMC application window
- How to configure new HMC, User and Network Management in HMC
- Configuring firewall in HMC
- How to connect managed node to HMC
- Real time issues related to HMC and managed Node
- What are important task AIX HMC manage

Integrated Virtual Ethernet Adapter

- Discuss IVE in Power 6 /Power7
 - Discuss Host Ethernet Adapter, How it used.
 - Configure an HEA adapter
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- How IVE is compared with SEA.

LPAR and Managed Node Power Management

- Managed system power states types
- How they are used in real time managed system power on/off option
- What is partition standby, system profile, auto start?
- How to power off managed system
- Real time scenario related to Power On /Off
- How to create LPAR , Usage of memory, CPU and other resources for LPAR
- What are I/O Resources
- Creating logical partition
- Guidelines in creating LPAR in real time
- Activating partition, its option during activation
- Terminal window, Partition shutdown and restart option
- Creating, modifying, copying and deleting profile
- Profile backup
- Real time issues and troubleshooting

Dynamic resource allocation

- What is DLPAR, How it works
- What are all we can DLPAR
- Memory, I/O slots, pre-requisite and steps for DLPAR
- Commands during DLPAR
- Command Line option for DLPAR
- Scenario and Issues in DLPAR
- HMC and LPAR communication, authentication
- RSCT and RMC usage in DLPAR
- Troubleshooting for DLPAR issues

Processor Concepts

- What is dedicated, shared processor

- New features in P6/P7 related to processor
- What is shared processor pool capped and uncapped partition
- What is Virtual Processor, what they do, New Feature in P6 /P7
- Fold cpu concept, What is SMT Simultaneous Multi Threading
- When SMT is used in Real Time
- Option in SMT

Virtual I/O

- What is virtual I/O
- Why virtualized I/O, What are benefits of Virtualized I/O
- What are virtual Devices we use in VIO,
- Discuss Virtual LAN
- What is Virtual Ethernet, Role of POWER Hypervisor Ethernet Switches
- What is virtual Ethernet adapters, How we use them
- Creating a virtual Ethernet adapter

Virtual I/O server

- Discuss Virtual I/O server
- Role of Virtual I/O server
- Creating a virtual I/O server and installation of VIO software.
- What is Shared Ethernet adapter?
- Role of SEA
- Trunking of adapter shared Ethernet adapter failover setup. • Testing SEA failover and different method
- What is Virtual SCSI?
- Creating Virtual SCSI server and client Adapter, virtual scsi configuration with Dual VIOS
- Dual VIOS servers configuration with MPIO in client partition
- VIO side multipathing configuration for SAN disk power path usage
- Trouble shooting client problem
- Real-time problem trouble shooting
- What is Storage Pools, LVPools and FB Pools
- How Client Side Disk are seen
- Discuss Backing Storage Discovery

Software installation

- How to install LPARS, Various option in Installation
- What is SMS menu, how it used in real-time
- Setting up NIM, How to install LPAR through NIM
- Issues during network boot and troubleshooting tips
- Installation of 2nd VIO over NIM

HMC AND MANAGED NODE Maintenance

- What are Backup critical console data and its importance? • What is period we backup CCD in Real Time
- How to restore CCD in Real Time.
- HMC patch management, Website to downloads • How to Upgrade HMC software version
- Different option to upgrade.
- How we use HMC to update Managed Node Firmware
- Real Time Steps and Precaution • Discuss HMC Role today in Sys Admin Job

Adv Topic.

- Upgrading via server, Upgrading Powerpath& EMC ODM, Backing Viomksysb, Backing via in SAN

Resume Preparation

Discussion of real time scenarios

Placement Assistance

Pre-Requisite	IBM AIX
Duration	30 Days

Course	IBM LPAR & VIO
Duration	10 Days

IBM AIX batch starting on	IBM LPAR & VIO batch starting on

Course Fee:

: Other Courses We Offer:

LINUX ADMIN 6	VMWARE 5.0
IBM AIX 6.1	EMC-SAN
IBM HACMP	NETAPP
ORACLE DBA	CLOUD COMPUTING (IaaS)
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