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| Qualifications  ¥ Bachelor’s Degree in Engineering or equivalent experience  ¥ 5+ years of experience managing mission-critical online services and monitoring of critical processes and functionality  ¥ Operations tools hands-on experience (not just using but administering Linux servers and contributing to implementing/enhancing tools like Ansible, Chef, Puppet, or SaltStack)  ¥ Hands-on experience in a Linux environment, including Systems Administration, Scripting (Perl/BASH/Python) and supporting Internet Services such as HTTP (Tomcat)  ¥ Strong familiarity with virtualization platforms such as KVM / VMware / Xen  ¥ Experience in deployment and use of both SNMP-based (OpenNMS, etc.) and agent-based (Nagios/Icinga) alerting/monitoring tools  ¥ Hands-on experience with AWS / Azure / OpenStack  ¥ Knowledge of Cloud computing, Web App services, and production SaaS experience a plus  ¥ Creative problem-solver, capable of self-direction |
| Ammeon is a services and solutions partner that helps organisations grasp the opportunities presented by emerging technologies and maintain that leading edge. Our end-to-end set of consulting, learning and technology services and solutions enables our customers to derive value from DevOps, Cloud and related fields. We believe the future should never leave our customers behind and we are committed to realising this vision. If this sounds good to you – join us.   The OpenStack Deployment Engineer will work on projects for one of our clients who is a global leader in Open Source products. This role involves up to 70% travel in the EU and has the potential to be based remotely when not on site.    Job Requirements:   * Planning and deploying OpenStack computing clouds for our customers. * Facilitating knowledge transfer to customers during deployment projects. * Working with back-end teams to resolve issues and improve our processes. * Contributing to the deployment knowledge base. * Integrating and implementing supporting technologies such as open source monitoring tools. * Executing handoff to the support team upon project completion. * This role involves extensive global travel (70%+) and includes the option to be based remotely when not on-site with customers.   Experience Required:   * Solid Linux system administration and troubleshooting skills. * Good understanding of networking technologies and protocols. * Excellent understanding of Linux Network Stack and associated tools. * Experience of working with configuration management frameworks (such as Puppet and Chef). * Knowledge of virtualisation platforms (such as KVM, XEN, LXC and VMWare) and understanding of the pros and cons of different types of virtualisation. * Extensive scripting and programming experience (using languages such as Shell, Python and Perl). * Exposure to OpenStack and/or CloudStack, VMWare vCloud Director or other cloud management frameworks (deployment, configuration, operations).   Desirable Skills:   * Experience with orchestration frameworks for cluster management (such as SaltStack and MCollective). * Knowledge of open source storage solutions and distributed file systems. * Experience of working with Linux HA stack (Pacemaker, Corosync, Keepalived). * Good understanding of network gear and ability to configure switches and routers from different manufacturers. * Good understanding of server hardware and experience deploying and configuring servers including IPMI/DRAC/ILO, BIOS and RAID.   Package:   * Competitive salary. * Healthcare. * Great location in the heart of Dublin city centre. * Excellent opportunities to experiment with new technologies. * Learning and development opportunities. * Staff technical talks. * Regular staff competitions.   Ammeon is an equal opportunities employer. Ammeon reserves the right to request an employee to be flexible in his or her duties when the business needs require it.     * ifconfig (or ip link, ip addr) - for obtaining information about network interfaces * ping - for validating, if target host is accessible from my machine. ping is also could be used for basic DNS diagnostics - we could ping host by IP-address or by its hostname and then decide if DNS works at all. And then traceroute or tracepath or mtr to look what's going on on the way to there. * dig - diagnose everything DNS * dmesg | less or dmesg | tail or dmesg | grep -i error - for understanding what the Linux kernel thinks about some trouble. * netstat -antp + | grep smth - my most popular usage of netstat command, which shows information about TCP connections. Often I perform some filtering using grep. See also the new ss command (from iproute2 the new standard suite of Linux networking tools) and lsof as in lsof -ai tcp -c some-cmd. * telnet <host> <port> - is very useful for communicating with various TCP-services(e.g. on SMTP, HTTP protocols), also we could check general opportunity to connect to some TCP port. * iptables-save (on Linux) - to dump the full iptables tables * ethtool - get all the network interface card parameters (status of the link, speed, offload parameters...) * socat - the swiss army tool to test all network protocols (UDP, multicast, SCTP...). Especially useful (more so than telnet) with a few -d options. * iperf - to test bandwidth availability * openssl (s\_client, ocsp, x509...) to debug all SSL/TLS/PKI issues. * wireshark - the powerful tool for capturing and analyzing network traffic, which allows to analyze and catch many network bugs. * iftop - show big users on the network/router. * iptstate (on Linux) - current view of the firewall's connection tracking. * arp (or the new (Linux) ip neigh) - show the ARP-table status. * route or the newer (on Linux) ip route - show the routing table status. * strace (or truss, dtrace or tusc depending on the system) - is useful tool which shows what system calls does the problem process, it also shows error codes(errno) when system calls fails. This information often says enough for understanding the system behavior and solving a problem. Alternatively, using breakpoints on some networking functions in gdb can let you find out when they are made and with which arguments. * to investigate firewall issues on Linux: iptables -nvL shows how many packets are matched by each rule (iptables -Z to zero the counters). The LOG target inserted in the firewall chains is useful to see which packets reach them and how they have already been transformed when they get there. To get further NFLOG (associated with ulogd) will log the full packet.   [share](http://unix.stackexchange.com/a/50099)[improve this answer](http://unix.stackexchange.com/posts/50099/edit)  [edited Oct 6 '12 at 17:48](http://unix.stackexchange.com/posts/50099/revisions)    [Stéphane Chazelas](http://unix.stackexchange.com/users/22565/stéphane-chazelas)  162k27254448  answered Oct 6 '12 at 13:55    [dr.](http://unix.stackexchange.com/users/4824/dr)  581159  add a comment    up vote 7 down vote  A surprising number of "network problems" boil down to DNS problems of one kind or another. Initial troubleshooting should use ping -n w.x.y.z in order to leave out DNS resolution of a hostname, and just check IP connectivity. After that, use route -n to check the default IP route without DNS resolution.  After verifying IP connectivity, and routing, nslookup, host and dig can yield information. Remember that "locking up" can indicate that DNS timeouts are occuring.  Don't forget to check existence and contents of /etc/resolv.conf. DHCP clients change that file with every lease, and sometimes they get it wrong, or if disk space is tight, an update might not happen.  [share](http://unix.stackexchange.com/a/50105)[improve this answer](http://unix.stackexchange.com/posts/50105/edit)  answered Oct 6 '12 at 16:25    [Bruce Ediger](http://unix.stackexchange.com/users/732/bruce-ediger)  26.5k33990  add a comment  up vote 5 down vote  Cabling problems can exist. If you have access to the hardware, ensure that the cables are all plugged in and mechanically engaged. If you can see routers or ethernet interfaces, ensure that the link lights are on.  Remotely, you have to depend on ethtool and mii-tool.  [root@flask ~]# ethtool eth0  Settings for eth0:  Supported ports: [ TP MII ]  Supported link modes: 10baseT/Half 10baseT/Full  100baseT/Half 100baseT/Full  Supported pause frame use: No  Supports auto-negotiation: Yes  Advertised link modes: 10baseT/Half 10baseT/Full  100baseT/Half 100baseT/Full  Advertised pause frame use: Symmetric  Advertised auto-negotiation: Yes  Speed: 10Mb/s  Duplex: Half  Port: MII  PHYAD: 24  Transceiver: internal  Auto-negotiation: on  Supports Wake-on: g  Wake-on: d  Current message level: 0x00000001 (1)  drv  Link detected: yes  "Link detected: yes" is good, but 10Mb/s and Half duplex are not good, as the NIC on that computer can do better. I need to figure out if the NIC is goofed up or the cable is. Another computer plugged into the same router says 100Mb/s, Full duplex.  [share](http://unix.stackexchange.com/a/50124)[improve this answer](http://unix.stackexchange.com/posts/50124/edit)  answered Oct 6 '12 at 23:46    [Bruce Ediger](http://unix.stackexchange.com/users/732/bruce-ediger)  26.5k33990  add a comment  Skills Requirement:  - 7+ years in Senior software development role (5+ years specific to networking)  - Excellent programming skills in Python/Java/Perl, XML/JSON/UML  - Working knowledge of configuration management tools like Ansible/Chef/Puppet  - Hands-on experience with Openstack (Mitaka/Liberty/Kilo) and related projects of OVS, Heat, Fuel, Murano, OpenDaylight, OpenContrail; Hypervisors (ESXi, KVM); Docker/LXC containers  - Combination of Openstack Cloud, NFV Orchestration, IP Networking and acceleration technologies (OVS/DPDK, SRIOV and VPP)  - Telecom, networking expertise-IP Networking (L2/L3/L4-L7 protocols, TCP/IP, routing, switching, VXLANs, GRE, Openflow)  - Knowledge of Big Data Analytics  Intermediate Cloud Systems Engineer  Job Duties Description:  This position will be an Intermediate Systems Engineer for the Defense Information Systems Agency (DISA). The Intermediate Systems Engineer will collaborate with industry and government experts to develop, implement, and sustain cloud-based solutions and initiatives. They will work with cross-functional teams to deploy a state-of-the-art underpinning infrastructure to support the next generation of cloud-based applications & services.  Qualifications   * 3+ years of experience with engineering and implementing solutions using server technologies such as Microsoft Server/Windows, SUSE/Red Hat Linux, and VMware * Experience with Cloud Computing services such as Amazon Web Services (AWS) and Microsoft Azure is a plus * Experience in various IaaS architectures, to include Redhat OpenStack, VMWare vCloud suite, Eucalyptus, and CloudStack is a plus * Experience in various hypervisor technologies, to include Redhat KVM, VMWare vSphere and Microsoft HyperV * Understanding of Cloud Orchestration and Automation methods and technologies is a plus * Bachelor’s Degree in an Engineering or Information Technology field is desired, or equivalent combination of education and experience * Excellent analytic and troubleshooting skills for problems that span multiple domains (application, network, system, hardware) * A strong understanding of building security into the technical design will be needed * Experience with Microsoft Office products and MS Visio * Sound interpersonal, communication, presentation, and writing skills    Certification Requirements   * Advanced systems certifications such as MCSE, RHCE,  VCP, CLE (Plus) * Security certifications such as Security+, CEH, and/or CISSP (Plus)   Location:  Ft. Meade, MD  U.S. Citizenship required and must be able to obtain a DoD security clearance  EOE/M/F/Vet |