

## Network Engineer - VoIP & Internet Services

### Job Description

Department: Engineering

Reports to: Director of Engineering

Location: Toronto, ON

Notes: Requires ability to participate in an on-duty rotation + occasional after-hours maintenance activities.

Here's what you will be doing...

The Network Engineer - VoIP & Internet Services, contributes to the support, maintenance, design, and implementation of Epik Networks Hosted VoIP and Internet service delivery network sand IP Telephony platforms.

### What we're looking for in a candidate:

CCIE written/lab certification and/or 5+ years of equivalent work experience in a Telecommunications Service Provider environment.

Proven experience with IP Telephony service design & troubleshooting. Broadsoft Broadworks and/or M6 experience highly desired. Ability to read and analyze SIP/SCCP ladder diagrams.

Real world experience with a working understanding of the following protocols:

- o Layer 1 – DSL, T1/T3, Ethernet
- o Layer 2 - STP, LACP, REP, CDP, L2TPv3
- o Layer 3/4 – ARP, MPLS, OSPF, BGP, GRE, TCP/IP,UDP
- o IPv4/IPv6 subnetting
- o Layer 7 – SIP/SCCP/HTTP(s)/SMTP/DNS/NTP (basic understanding)

In-depth knowledge of common carrier Layer 2/3 carrier transport types such as DWDM,TDM DS-X, Carrier Ethernet, and MPLS L3VPN.

Hands-on experience with the configuration and installation of networking equipment in customer premise and co-located environments.

Proficiency in Linux/Solaris OS. Ability to write and edit Bash, Python, and PHP scripts for the purposes of automation.

Very strong ability to problem solve with a sense of urgency. Total rock your socks off process of elimination style approach to solving technical puzzles.

Ability to communicate effectively with both technical & non-technical stakeholders,including Customers, fellow Engineers, site-technicians, Account Executives, and customer contacts.

Proficiency in the use of <http://www.google.com> and other self-reliant research methods to do self-learning & troubleshooting, aka 'crack research'.

Good organizational skills: following a consistent process to prioritize assigned tasks, to document work performed, and to communicate accurately and professionally with fellow team members.

Desire to continuously learn and keep abreast of new technologies

## Your key responsibilities...

Responsible for all technical aspects of implementation of new customer services & upgrades:

IPv4/IPv6 assignments involving registration in an IP Database, ARIN SWIP requests, and verification of routing directly on Cisco IOS backbone routers. Review of customer IP Questionnaires for adherence to ARIN IP Assignment policy.

VLAN assignment.

Basic TDM, Metro Ethernet, DSL LNS configuration supporting new customer turn-up.

Configuration of OSPF hello/dead timers/manual costing & GRE tunneling to support fast WAN failover at the customer edge.

Rate-limiting, queuing, shaping configuration (supporting voice/internet/L3VPN).

LAN switching/routing design for VoIP/data access.

Customer edge routing design for L3VPN leveraging BGP & MPLS LDP.

Customer edge routing design for transport leveraging OSPF.

Cisco CPE configuration via customization of existing text based templates.

Cisco CPE IOS upgrades.

Creation of bill of materials including switches, routers, patch cables, transceivers, IP Phones, Analog Telephone Adapters, etc...

Analysis & review of newly installed customer network to verify stability & QoS, prior to project close.

Leveraging Network Monitoring System, Cisco IOS 'show' commands, ping, IP SLA, etc... \* Creation of cut-sheets to assist on-site technicians with installation of pre-configured CPE.

Creation of Network Diagrams to illustrate service design to customers, on-site technicians, and Epik Networks Technical Support department.

Remote support of on-site technicians while they physically install CPE. Test CPE & transport circuits, add equipment to NMS, troubleshoot as necessary using Telnet/SSH access or web meeting via technician laptop.

Remote support of on-site technicians for testing & configuration of IP Phones, and Analog Telephone Adapters, SIP softphones, and Desktop/Android/iOS based call management applications.

Conduct a technical kick-off call during which all aspects of structured cabling and network design are reviewed. Create a list of assumptions to review with customer contacts, based on site survey results provided by the Project Manager. Confirm assumptions, changes, follow-up actions, and final agreed to design in writing, upon conclusion of the call. If required, summarize any required changes to scope, and coordinate with Solutions Architect/Account Executive for re-work

-Responsible for providing Tier 2/3 Technical Support:

Friendly, knowledgeable and efficient communication with customers as required.

Cisco IOS configuration changes on on-net building POP equipment, and/or Co-located Edge switch/routers for Move-Add-Changes. Examples include: service-policy, ACL, VLAN, and dynamic routing protocol (OSPF) changes.

Comprehensive troubleshooting and analysis of common routing, latency, and packet loss issue leveraging Cisco IOS show commands, looking glass tools, trace route, ping, analysis of graphing data on Network Monitoring system.

Troubleshooting DNS issues. Occasional modification of DNS A, MX, PTR, SRV, etc... records for customer MACs.

Admin level MACs in the M6 and Broadworks system that require CLI type access.

Process of elimination style troubleshooting of common IP Telephony & Internet access issues.

General process of elimination style troubleshooting within multiple network/application systems to resolve issues.

Troubleshooting common Metro Ethernet, Wireless Radio, TDM circuit errors, service disruptions etc. Working with transport providers using strong working knowledge of terminology and circuit design.

IPv4/IPv6 assignments involving registration in an IP Database, ARIN SWIP requests, and verification of routing directly on Cisco IOS backbone routers. Review of customer IP Questionnaires for adherence to ARIN IP Assignment policy.

-Contributes to Infrastructure projects:

Occasional involvement of maintenance & upgrades on core service delivery network as required by the Senior Network Engineer/Director of Engineering.

### **Why Epik?**

Since 2005 we've been a leading VOIP and Internet service company, providing state-of-the-art communications to businesses of all sizes. Over 800 clients count on us to install and support their systems, giving their business the most advanced communications systems available today with the best-in-class service. We are a growing team of professionals dedicated to providing best in the industry customer service, service quality, and overall customer experience.

The Engineering team is undertaking an exciting deployment of new systems such as the BroadSoft Broadworks, and a total upgrade/enhancement to our Cisco IOS core network platforms, and server infrastructure, offering the curious Engineer the ability to take part in the build out of new systems. We believe in leveraging our creativity and sense of urgency when solving problems. Good communication, consistency, and technical integrity are key values.

Epik Networks offers an excellent benefits package including medical/dental/vision coverage, vacation pay, and an employee stock ownership and profit-sharing participation

Job Type: Full-time