Ethan Banks: From Network Manager to Blogger to CCIE

In April 2010, after nearly 4.5 years with Chase Paymentech Solutions, Ethan Banks, CCIE #20655, left to begin a new job with SkillSoft, an e-learning technology provider and Cisco Authorized Learning Partner. **Describe your current job and what a typical day is like for you.** I have recently changed jobs. Most recently, I was at Chase Paymentech Solutions, as a member of a team of 6 people. I was the network architecture manager on the team and did design, implementation, and maintenance of the core network that processes payments for Chase's large retail and online businesses. In April 2010, I left Chase after nearly 4.5 years to work at SkillSoft, a Cisco Authorized Learning Partner. At SkillSoft, I am a global network engineer supporting SkillSoft's routing, switching, security and related network infrastructure. I made the shift to the position with SkillSoft because I felt the new position offered me a broader scope of responsibilities including a greater focus on security, the chance to help a growing business ramp up its global infrastructure, and the opportunity to cross over into technologies such as virtualization, which is what I am seeking in my career path (right now). This position has also afforded me a bit less stress. Working in financials can be challenging for a network engineer. A network supporting payment streams requires predictable amounts of low latency, rigorous security, and extremely high uptimes. Maintenance windows must be executed with no impact to in-flight traffic. New equipment must be brought online with no impact to the production environment. All of these goals are achievable with proper planning and a detailed understanding of network protocols and traffic patterns, but they also place a great deal of pressure on lead engineers, especially when things don't go as planned. The network environment I am supporting today, while still requiring excellence from me and my co-workers, is more forgiving if the unexpected happens. For me, this means I can go home, and still have something left for my family. **What did you study in school and did your career turn out the way you envisioned it would?** Not even close. I double majored in Computer Science and Business Administration at Pensacola Christian College. I carried a very full schedule for 4 years, but I was able to complete both majors in that time, rather than the more typical major complemented by a minor. My BSCS was focused on programming, but after I graduated, I taught Computer Science for a year at a small Christian school, worked in a credit union as the electronic services operator for a year, and then ended up going to Novell school. Novell school started me down the path of network engineering. I loved it so much, that I never pursued programming positions. I have used my programming skills to do small projects in Perl, PHP, and SQL, but only as a hobby. The business degree was sort of a bonus. I evaluated careers as a stockbroker by interning with Shearson-Lehman one summer. I worked as a bank teller and in electronic services for awhile but found those career paths didn't quite suit me. A stockbroker position involved lots of sales, which is just not my personality type. Deposit services roles in banking tend to be routine ? the same tasks day after day. I get bored easily, so anything too repetitive makes me anxious. I need new challenges to keep my brain engaged. That said, the background I got from an education in corporate finance, cost accounting, and international business has given me a better perspective on business process for all the employers I have had. **What professional and personal experiences have brought you to this place in your career?** It may be surprising to learn that I value my technical experiences less than my personal ones. As a young man new to the workforce, I had a kindly boss who worked with me to get my rampant ego under control. There is no other person or event in my working life that had any greater significance. Once someone "gets over themselves," they are more valuable to their boss, their peers, and the company as a whole. That experience was almost 15 years ago, and it's become a part of me to try to place my ego aside, no matter the professional milestones I've achieved. In another experience, I was assigned to manage a LAN cabling installation for a small company. There was one catch: I didn't know much about cabling. With about a half-hour before I was supposed to be on the road to the work site, my boss taught me the EIA/TIA 568-B pinout, showed me how to strip a CAT-5 cable, punch down to a wall-jack, load an RJ-45, and test the runs. I motored off, and the cabling job was a success. I learned there that you must communicate effectively with your peers. When you are an effective communicator and willing to share your knowledge, the team reaps the benefits. **Who have been role models for your career and what did you learn from them?** While I was growing up, my father put himself through night school to educate himself for a career in IT. He was dedicated to self-improvement for the benefit of his family. My father became a programmer/analyst, and later a highly respected LAN administrator I know he was highly respected, because for a while he and I worked in the same organization. His accomplishments have served as a model for me to keep pushing myself to the next level over the years. **What has been your biggest professional contribution to date?** I throw myself whole-heartedly into any company I work for. But if I had to pick one, my role as a project manager to build a new Chase Paymentech data center network has to rank up near the top in my professional contributions. The network we built had to allow for a smooth transition of all network services from the existing data center to the current facility. This required a great deal of planning, equipment management, and people management. For about 6 months, we rolled out network environment after network environment, preparing racks to accept migrated servers. The systems administration teams were counting on moving, racking,

powering and plugging their servers into the new network with no hiccups to meet their deadlines. The project was successful and I don't pretend to take all the credit for what was a extraordinary team effort. I still look back proudly at that migration as a great accomplishment for all involved. What do you hope to still discover, learn, or accomplish in your career? I believe that IPv6 is the transport protocol of the future, and I'd like to champion an IPv6 migration effort on a large enterprise network. I would like to make a significant design contribution to an international network that carries Internet traffic. Frankly, I'm not close to being able to do such a thing right now ? those aren't the circles I play in now, and that isn't my background. But that's where I'd like to end up. I would like to travel internationally as a high-level trainer/consultant. That's a long-term goal I'm saving for when my kids are off on their own. Right now, it's more important to me to be a Daddy who is home every night, as opposed to a Daddy who is gone for weeks at a time. **What excites you about technology and networking and about working with financial services or with SkillSoft?** What wisdom do you have to share with someone considering networking career in your industry? The payments network I supported at Chase carries transactions from merchants in every corner of North America. In effect, that network is the pulse of the North American economy. There was excitement in being a part of a network that actually mattered in the grand scheme of things. In modern enterprise networks, downtime is less and less tolerable. Nonetheless, hardware fails, software has bugs, protocols don't work as intended, and previously bulletproof designs fall prey to unforeseen circumstances. To successfully support an enterprise network, a senior network engineer is comfortable designing, implementing, and troubleshooting highly available networks. Senior level network engineers who excel in financial services deeply understand the protocols that help keep traffic flowing, anticipate problems and design around them, and can handle the intense pressure and scrutiny that comes during a network outage. Engineers who don't like the spotlight will struggle when saddled with senior network engineering duties in the financial services world. The spotlight is generally quite bright, and usually unexpected. The best network engineers in any industry keep the future in mind. A good network engineer is thinking about a VoIP deployment and getting ready for it before a phone vendor ever walks through the door to peddle their wares. WAN acceleration might not be an immediate need, but the forward-thinking engineer already knows his WAN circuit utilization, latencies, and application profiles. A static network indicates a network engineer who isn't forward-thinking. A network engineer shouldn't be reacting to business needs: rather, the engineer should proactively recommend services to facilitate a smoother-running business. What first steps would you recommend someone considering networking take? Learn networking basics really, really well. Believe it or not, you will draw frequently on your knowledge of spanning-tree, etherchannels, trunks, enterprise routing protocols like EIGRP and OSPF, and first-hop redundancy protocols like HSRP and VRRP. Get familiar with Cisco "best practice" designs for data centers. Cisco's concept of core, distribution, and access layers is a reference you will draw from all the time as you design and troubleshoot highly available networks. Learn the Catalyst 6500 hardware platform inside and out. An engineer who can build a Cat6500 chassis and deploy it for high-availability has a skill that's valuable to the majority of enterprise networks. For the payment card industry specifically, read the PCI standards and familiarize yourself with the security challenges retailers and payment processors face. Security standards as defined by PCI compliance drive a good portion of the network design in the retail and payment processing space. **You passed the CCIE R&S lab on the first try. What tips do you have for others who also want that outcome?** Commit, commit, commit. The people I know who are struggling in their quest for CCIE certification aren't fully committed to the program. Those who struggle the most have other interests they can't quite let go of to make progress as a CCIE candidate. Create a schedule, and then stick to it. A study calendar will help motivate a CCIE candidate who might want to slack off on the studying because of a tough day at work. If you use a specific vendor or bootcamp-style program to help you prepare, try to limit yourself to one or two vendors. Sampling material from six different vendors is not nearly as effective as working through the entire course of study one or two specific vendors will offer you. Set expectations for your family, especially your significant other. That special person in your life needs to understand what you're trying to accomplish, and what it will take. If he or she doesn't support you, that will make an already difficult challenge downright arduous. Getting my CCIE certification was a year and a half long process that my family will never forget. It also took awhile to normalize life again once I was through that process. **You used to write the blog CCIE Candidate. When did you start blogging and why?** I started the CCIE Candidate blog January 1, 2007. At the time, I searched for other blogs that were technical and discussed CCIE blueprint topics in preparation for both the written and lab exams, but I didn't find much out there that was valuable. I used CCIE Candidate mostly for technical articles that served as my study notes and soon others began to take notice. As I continued to blog through the official CCIE Certification exam study guide, my blog stats began to double every month. I developed a more engaging style because I wanted to learn but also to be interesting to others who were going through the same process. Looking back, blogging was a very positive experience. It created a community of sorts for me and forced me to learn the concepts really well?plus it forced me to consider how I was presenting them to an audience. And because people were watching, I felt the pressure to know my stuff. A blogger who is technical, accurate and engaging is rare. I credit my blog as one of the reasons I

passed both my written and practical CCIE exams on the first try.