CURRICULUM VITAE

Martin Picard

514.984.0639 mpicard@smpqc.ca

EDUCATION

Bachelor in Computer Science 1992
 Sherbrooke University

College degree in Computer Science 1989

CERTIFICATIONS

Cegep Limoilou

- CCIE #4691
- CCDP
- CCDA
- CCNP
- CCNA
- Geotrain Netgun Program

LANGUAGE

- French
- English

TECHNICAL CARD

Technologies: Ethernet, Serial, Dial-up, ISDN BRI/PRI, Frame-Relay, ATM, POS

Protocols: TCP/IP, EIGRP, OSPF, ISIS, BGP, MPLS, MPLS-VPN (MP-BGP),

MPLS-TE, MPLS-CoS, QoS, Multicast

PROFESSIONNAL EXPERIENCE

HYDRO-QUEBEC

Architect – IP/MPLS Network

11/2017 - ...

Participate in the upgrade of the MPLS(v3) architecture to account for new client needs:

- HQT (CRÉA, RPTC/MSCR, etc.)
- HQD (Mobile-Radio, etc.)
- Admin (Videoconference, streaming, etc.)

SMP

Web/Mobile Development

01/2016 - 10/2017

Perfecting skills in development and simulation

- Mobile applications iOS (objC, swift)
- Web applications (html/css/js/php/googlescript)
- GNS3

HYDRO-QUEBEC

Architect - IP Network Evolution

02/2008 - 12/2015

Elaborate solutions and planning for telecom project realisation

- Management network for the Sonet-NG / DWDM environment, MPLS-VPN
- OoS Architecture Evolution
- Deployment of the MPLS-VPN network
- Equipment & technology certification process
- Structure and define IP network equipment configuration templates
- IP/MPLS network evolution (Cisco/Alcatel)

Architect - IP/MPLS Network

03/2006 - 06/2007

Quality of Service (QoS) and Multicast

- Develop QoS and Multicast architectures for the corporate network based on Cisco routers and switches.
- Prepare and lead work sessions with individuals from architecture, support and specific business application teams.
- Prepare and present QoS and Multicast architecture documents.
- Prepare and present technical sessions on the QoS mechanisms used in proposed architecture.

Integrated telecommunication network

- Participate in the redesign of the IP network to integrate the needs of all applications from the corporate domain as well as the utility domain.
- Participate in documentation structure, task identification/dispatch and contents of deliverables.

VIDEOTRON

MPLS training

06/2005

• Give a three days training on MPLS, its bases, its hierarchy and its VPNs.

<u> HYDRO-QUEBEC - TransÉnergie</u>

Main Architect - Electrical IP Network

06/2004 - 02/2006

- Elaborate the architecture and detailed design of the IP network for the telecommunication needs of the electrical plants including:
 - o MPLS, MPLS-VPN, MPLS-TE architecture
 - o OoS architecture
 - o Network management and security architecture
- Organize and lead work sessions with matter experts and clients as needed
- Prepare and present an introduction session on IP, MPLS, VPN technologies
- Prepare and present technology choices, justifications and issues to executives
- Participate in the writing of the Request For Proposals (RFP)

GOVERNMENT OF QUEBEC - JUSTICE

Architecte 2003-2004

Quality of Service

- Provide an overview of QoS concepts & technologies
- Assess QoS requirements for SNA, IPX, Voice, Video and other IP traffic
- Elaborate an end-to-end QoS architecture
- Provide detailed designs and configurations
- Provide post-production support documentation

GOVERNMENT OF QUEBEC - SAQ

Network Support 2003

- Troubleshoot network problems
- Recreate problems and test workarounds in laboratory
- Document findings

TAFISA

Network Audit 2003

- Gather current network parameters
- Assess current state of network with regards to
 - O Availability / Layer 2-3 Redundancy
 - Stability / Standardization / Upgrade
 - Layer 2-3 Optimization / Hierarchy
- Document findings
- Recommend appropriate actions

BELL NEXXIA

IP-VPNe Integrator - Secure Channel

2003

- Integrate Canada Government dedicated network onto Bell Nexxia's IP-VPNe (MPLS-VPN) platform.
- Prepare migration plans.

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- Elaborate and test solutions in laboratory.
- Produce standard typical configurations.

MICROCELL

Main Architect - IP Network

IOS Upgrade 2002

• Elaborate acceptance test plan for an IOS upgrade on the network.

Transmission Network 2002

 Evaluate the relevance of implementing a transmission network underneath the multi-service IP Network.

Internet 2001-2002

- Elaborate the architecture of the Internet service (MPLS-VPN) and access.
- Elaborate and conduct a series of tests in laboratory to validate and finalize the detailed design.
- Insure and supervise the roll-out of the service.
- Provide post-production support as well as an adequate transfer of knowledge.

Security 2001

- Contribute to the security architecture of the IP network.
- Supervise roll-out.
- Ensure adequate transfer of knowledge.

Virtual Private Networks (VPNs)

2001

- Lead a team in the architecture of a large scale VPN service : MPLS-VPN.
- Elaborate detailed VPN design for every services including, network management, corporate network, corporate services like GPRS, WAP, VoIP, etc.
- Elaborate and conduct a series of tests in laboratory to validate and finalize the detailed design.
- Ensure and supervise the roll-out of all services.
- Provide post-production support as well as an adequate transfer of knowledge.

Multi-Services IP Network

2001

- Lead a team in the architecture and detailed design of a multi-services IP network. The WAN has to allow for growth in high speed technology like Packet Over Sonet. MPLS technologies are used for their multi-services integration (VPN), quality of service (QoS) and traffic-engineering (TE).
- Elaborate and conduct a series of tests in laboratory to validate and finalize the detailed design.
- Roll-out the network in production.
- Provide post-production support as well as an adequate transfer of knowledge.

VIDÉOTRON

Main Architect - MPLS network

Third-Party Residential Internet Access (TPRIA)

2000

- Elaborate the architecture and detailed design of an MPLS and MPLS-VPN network to provide residential Internet access to third-party companies, as ruled by the CRTC. The existing ATM and POS infrastructure served as a base.
- Contribute to test plan preparation.
- Conduct tests in laboratory.
- Propose a roll-out plan.

MPLS teacher 2000

• Dispense custom-made 3-day training on MPLS, its bases, its hierarchy and its VPNs.

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Be the expert advisor in network architecture work sessions with regards to MPLS

technologies including MPLS-VPN, MPLS-CoS and MPLS-TE.

2000

GROUPE TELECOM

MPLS Advisor

SMP

MPLS Course 2000 Develop a course on MPLS, its bases, its hierarchical routing and its VPNs. Prepare hands-on exercises to illustrate the concepts. **QUEBECTEL** Architect 2000 ISP Network: GlobeTrotter Participate in the revamp of the Globe Trotter ISP network. Elaborate the architecture of an MPLS network with hierarchical routing. Elaborate and conduct tests in laboratory. Supervise roll-out. 1999 Corporate VPN Service Network Contribute to the development of the Corporate VPN service. Contribute to the architecture of the MPLS, MPLS-VPN network. Elaborate and conduct tests in laboratory. Contribute to network roll-out and migration of first corporate client. BELL CANADA, BELL SYGMA, BELL ADVANCED COMMUNICATIONS, CONNEXIM Internetworking Support 1997 3rd level support for the routers and switches network, including installation, configuration, upgrade, troubleshooting, design review and testing of new products. CISCO ROUTERS 2500s, 3600s, 4000s, 7500s, CATALYST SWITCHES 1900s, 5000s, 5500s, SYNOPTICS TOKENRING. ETHERNET et TERMINAL SERVER HUBS Remote Access Support 1995 Implementation and 3rd level support for the Remote Access Solution. IBM 8235, USR NETSERVER for DIAL-UP and GANDALF for ISDN 1995 Network API Support Develop and maintain a library of LU6.2 network functions implementing the Kerberos security system in a multi plate-form client / server environment. SUNOS, RS/6000, OS/2, VAX, CICS, LU6.2, NETBIOS 1994 RICIB Contribute to the development of a document to gather network data, to assess the existing network and help in designing a new network for the different ministries of the Québec Government. 1992 Network database developer

reports, escalation and integration of network change procedures.

Customize InfoManagement from IBM to provide a better configuration of network data, trouble

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Coop 1989

- Implementation et presentations on OS/2 Server.
- Development of configuration tools for LU6.2 Communications Manager / XCOM.
- Development and implementation of IBM Token-Ring Bridge Assembler Filter.
