

Network Software Architect

Working in **IBM Cloud** gives you the platform to learn, develop and utilize your skills everyday by working on the latest cloud related technology products and services. You'll be working in an environment where we understand how we can thrive best when we play to our strengths. That's why developing our people is key to our success, the door is always open for those ready to advance their career.

Curiosity and courageous thinking are both vital when working in IBM Cloud, as we continue our dedication in guaranteeing that we are at the forefront of cloud technology. Our renowned legacy means we are leading the way in everything from analytics and security through to unmatched hardware & software designs. We provide our clients with the full end-to-end transformation as we build **IBM's next generation cloud platform** which is focused around delivering performance and predictability at a global scale.

IBM's product and technology landscape includes Research, Software, and Infrastructure. Entering this domain positions you at the heart of IBM, where growth and innovation thrive.

Your role and responsibilities

- **Architectural Design:**

- Design and implement robust network monitoring solutions capable of providing real-time insights into network performance and health.
- Develop automation frameworks to streamline network management, including provisioning, configuration, and incident response.
- Leverage Kubernetes for deploying and managing containerized network monitoring and automation applications, ensuring scalability and reliability.

- **AI/ML Integration:**

- o Incorporate AI/ML technologies to enhance network monitoring, including predictive analytics for network performance, anomaly detection, and automated incident response.
- o Develop and implement machine learning models that can analyze network data and provide actionable insights for optimization.

- **Technical Leadership:**

- Lead the development and integration of innovative network monitoring and automation strategies.
- Establish and enforce industry standards and best practices for software development within the network domain.

- **Development and Implementation:**

- Ensure seamless integration of monitoring and automation tools with existing network infrastructure and third-party systems.

- **Collaboration and Communication:**
 - Work closely with cross-functional teams, including Network Reliability Engineers (NRE) and Service Reliability Engineers (SRE) to ensure the effective use of monitoring and automation solutions.
- **Performance Optimization:**
 - Continuously monitor, optimize, and tune network monitoring and automation systems to meet required service levels.
 - Develop and implement automation scripts and tools to improve network incident response times.
- **Security and Compliance:**
 - Integrate security considerations into the design of monitoring and automation solutions.
 - Ensure compliance with industry regulations, including the development of automated auditing and reporting features.
- **Continuous Improvement:**
 - Provide training and mentorship to team members on the latest technologies and methodologies.

We are seeking a highly skilled Network Software Architect with extensive experience in network monitoring and automation.

The ideal candidate will have a proven track record in designing and implementing scalable, high-performance solutions that enhance the reliability, security, and efficiency of complex network infrastructures. In this role, you will play a pivotal role in driving innovation, establishing best practices, and leading the development of cutting-edge technologies that empower our network operations.

This position will also involve leveraging Kubernetes for containerized environments and incorporating AI/ML technologies to optimize network monitoring and automation processes, pushing the boundaries of what's possible in modern network management.

Required technical and professional expertise

Bachelor's or Master's degree in Computer Science, Information Technology or a related field.

8+ years of experience in network architecture, with a focus on network monitoring and automation.

Strong programming skills in languages such as Python, Java, or Go

Extensive experience with network monitoring tools (e.g., Nagios, Prometheus), automation frameworks (e.g., Ansible, Puppet, Chef), and Kubernetes.

Deep knowledge of networking protocols such as BGP, VxLAN, SNMP, NetFlow, and streaming telemetry.

Experience with AI/ML technologies, particularly in network monitoring and predictive analytics.

Experience with DevOps practices and tools (e.g., CI/CD, Jenkins, Git).

Familiarity with AI/ML-based network monitoring and predictive analytics.

Knowledge of containerization technologies (e.g., Docker, Kubernetes).

Deep knowledge of networking protocols such as BGP, VxLAN, SNMP, NetFlow, and streaming telemetry.

Proven track record of designing and implementing scalable, high-performance network solutions.

Strong problem-solving skills and the ability to work in a fast-paced, dynamic environment.

Excellent communication skills, with the ability to convey complex technical concepts to non-technical audiences.

Preferred technical and professional experience

Industry certifications such as CCIE, ACE, JNCIE, or relevant cloud certifications are a plus