MR. ALASDAIR GRANT

Position Description

Cloud Architect

Profile

Mr. Grant is an Amazon Web Services (AWS) Certified Solutions Architect with more than 5 years' experience in technical and customer support. He is a highly motivated individual with solid knowledge in installing, configuring and maintaining computer systems, various security software and hardware products. He's recently upgraded his knowledge in computer networking and cloud solution technologies

Key Skills:

- Knowledge of computer systems old & new; focus in emerging technologies & cloud computing.
- Knowledge of ITIL.
- Experience with hypervisors & virtual machines.
- Experience architecting cloud solutions leveraging IaaS, PaaS, SaaS technologies.
- Experience with cloud transformation projects.
- Experience building & maintaining hardware (desktops, laptops, servers, networking).
- Experience managing wireline & wireless network topologies: Cisco & Aruba.
- Solid understanding of security: on-premise, users, network and data (in-transit/at-rest).
- Experience in designing, maintaining and operating a well architected IT framework.

Language :	English	
Security Clearance	Level:	Secret
	File No:	96-16-4869
	Expiry:	10-December-2028
Education	2019, Computer Systems Technician (CST), Algonquin College	
Professional Development	2018, Amazon Web Services (AWS) – Certified Solutions Architect – Associate	

Professional Experience

Project 5
Department of National Defense – Joint Defence Cloud Program January 2020 – Ongoing
Workload Migration & Cloud (Technical) Solutions Architect *(11 months)*

Reference
Name: James McIntosh
Title: Senior Cloud Architect

Joint Defence Cloud Program is DND's cloud service broker, offering a growing portfolio of cloud services and customized platforms. Currently JDCP offers service accounts in Amazon Web Services (AWS) and Microsoft 365 / Azure. There are plans to include Google Cloud Platform as well as locally run private cloud; with hybrid connectivity on the horizon. Mr Grant's role in JDCP is in Workload Migration (WLM) – with a focus on identifying cloud candidate applications residing in traditional datacentres – as well as the ground work necessary to prepare DND's AWS environment for these applications.

The security requirement for Protected B workloads in the cloud is well established, made up of about 400 configurable controls, monitors and alerting mechanisms. Without this ground work, government departments are not able to leverage cloud resources for any meaningful work.

Responsibilities:
6.1 Identify and recommend Workload Migration (WLM) candidates for cloud
6.2 Implement PBMM guardrail security controls on AWS cloud accounts
- 6.2.1 Creation of new accounts & automating security controls
- 6.2.2 Identity and Access Management for users of new accounts
- 6.2.3 Ensure security monitoring and alert notifications, respond to security alerts as they come in
- 6.2.4 Assist in creating architecture documents

6.3 Architected cloud solutions for new cloud clients (migrating & refactoring applications or rebuilding these applications to be AWS/cloud native
6.4 Create Infrastructure as Code templates and artifacts for increased automation & security control compliance.
6.5 Creation of guides and SoPs as new processes are established and refined.
6.6 Communicate and collaborate with clients and stakeholders for each application or project and ensure that deliverables are being met
6.7 Development, architecture and design of an unclassified sandbox environment on different cloud platforms (IaaS, PaaS and SaaS).
6.8 Covid-related emergency response – JDCP being the authority in the cloud space was tasked with business continuity activities as a result of lockdown in March. Many of these activities were temporary; Mr Grant's involvement focused on:
- 6.8.1 Rapid creation & onboarding of 100+k Microsoft 365 accounts
- 6.8.2 Implementing a temporary *Champion* model; a peer-to-peer support model to assist with mundane administrative tasks – password resets for countless new users
- 6.8.3 Creating and maintaining an M365 onboarding & adoption metrics system using cloud-based SQL solutions & Microsoft PowerBI (Transitioned to serverless)
- 6.8.4 Assist in training M365 helpdesk for an interim In-Service-Support solution

6.8.5 Provision a scientific research account in AWS for the purpose of High Power Compute (HPC) scientific simulations for COVID-19 analysis & prediction modeling

6.8.6 Ongoing innovation with COVID-19 based scientific research & endeavours

Project 4

HostedBizz October 2018 – November 2019

Computer Application Support – Senior *(14 months)*

HostedBizz is a cloud service provider in Ottawa that is built on the commitment of delivering the best cloud infrastructure service experience in the industry. HostedBizz is a 100% Canadian-based and a Canadian-hosted integrated technology solutions provider for small and medium sized businesses. HostedBizz has a suite of hosted business critical, IT applications and managed services that help to remove the technical challenges and reduce the costs associated with infrastructure and application ownership. From hosted applications and services, virtual servers and desktops to hosted email and mobile marketing applications, their services easily scale organizational needs. Mr. Grant worked on the two projects listed below simultaneously as a Senior Application Support Specialist:

Sub-Project 1A: Cloud Comparison and Implementation

Mr. Grant was the lead on the Cloud project, which had an objective of creating a comparative analysis between the incumbent Cloud Service Providers (CSPs) Microsoft Azure, Amazon Web Services and HostedBizz IaaS offerings. The analysis was conducted on several comparable instance classes across the three providers. Mr. Grant performed the analysis, measuring network performance, compute & workload processing times, and storage media speed in the operational environment. All these measurement metrics were compared against cost, and it was determined that the HostedBizz IaaS Cloud solution would be implemented. Mr. Grant acted as the user support liaison between vendors, information systems technicians, and end-users (HostedBizz clients) ensuring that the selected Cloud product was operating as expected within the environment. The implementation of this commercial cloud technology was central to the completion of the project since this platform was a core business solution.

Sub-Project 1B: Exchange to Office 365 Migration

Mr. Grant was part of an ongoing multi-tenant hosted Exchange to Office 365 (o365) migration. HostedBizz had over 300 tenants on dedicated Exchange servers which are being phased out over several months. There were over 3,500 mailboxes between these clients that are being migrated into o365 mailboxes with varying offerings of o365 Office SaaS solutions. Mr. Grant provided services during this transformation for the o365 CSP portal, provisioning the organizational domain admins, and providing o365 Active Directory integration. The o365 cloud implementation was central to the completion of the service as business needs mandated a more streamlined, highly integrated cloud-centric platform in the Microsoft ecosystem.

Below is a list of the tasks Mr. Grant performed on both of the projects listed above:

Responsibilities:

6.9 Provided technical and administrative support for IT security and information infrastructure protection requirements analysis, concept definition, strategy development, planning, implementation, and coordination activities.

6.10 Provisioned and maintained a hosted Microsoft service (Exchange, SharePoint, CRM, and Lync).

6.11 Architected server farms in a cloud environment (i.e. RDS server farm).

6.12 Supported the cloud operational environments for both projects by performing extensive monitoring of cloud meta-structure, hypervisors and virtual environments.

6.13 Supported the cloud operational environments for both projects by working with vSphere/vCloud to deploy and manage Infrastructure as a Service (IaaS).

6.14 Development, architecture and design in a sandbox environment different cloud platforms (IaaS, PaaS and SaaS).

6.15 Supported the cloud operational environments for both projects by developing use case scenarios for SaaS, PaaS, IaaS software technology.

6.16 Architected Cloud Solutions for environments offering IaaS, PaaS and SaaS. Developed the cloud adoption plans, the cloud application design, and performed cloud management and monitoring for the following environments:

6.16.1 IaaS – architected cloud instances (solutions) to provide virtualized computing resources over the internet. This included AWS (to run scalable applications to help achieve better business outcomes), Micosoft Azure (to be used to manage the infrastructure while installing, configuring, and managing software) as well as VSphere private/hybrid cloud environments to provide 24/7 support;

6.16.2 PaaS – architected cloud-based solutions to incorporate underlying cloud infrastructure components for different platforms to assist with backing up, and replicating servers hosted in the cloud should disaster recovery be required. This included Business Continuity/Disaster Recovery products such as Veeam backup & Replication (to backup, restore and replicate functionality for cloud-based workload), and a cloud-based organization file sync solutions such as Axcient eFolder, to provide backup and disaster recovery;

6.16.3 SaaS – architected the cloud-based Microsoft Office 365 solution for the SaaS environment to allow for the licensed software (o365) to be centrally hosted. This required creating Office 365 tenancies to store all the data for o365. Updated and made changes to the solution based on client needs. Performed troubleshooting on hybrid environments with traditional Microsoft infrastructure products.

6.17 Supported the cloud operational environments for both projects by troubleshooting the cloud environments. For example, provided troubleshooting on an issue of file system corruption in the recent cloud migration instance. The client (reseller called Compunet Infotech) had done a lift-&-shift of an on-premise server to the cloud environment, and issues of stability had developed. Mr. Grant provisioned a new cloud server native to the environment and worked with the client to bring it into a production state.

6.18 Developed roadmaps and reference architectures for the cloud solution builds, this included all cloud foundation elements and how the overall cloud solutions would be deployed. The roadmaps and the reference architectures were used for the build and the implementation of the cloud. They were used to identify risks and limitations. They were also used to compare the conceptual architecture to the real-world environments.

6.19 Designed and developed roadmaps for the migration of existing applications such as CRM with associated databases, Sharepoint & Wordpress onto the new cloud solution. These roadmaps identified the migration waves in which the applications would be migrated from the existing infrastructure over to the new cloud solution.

6.20 Worked with Solarwinds and Veeam products for backup, business continuity and disaster recovery.

6.21 Worked with SpamTitan anti-spam filter, monitoring and maintaining underlying systems.

6.22 Created resources using public cloud solutions: AWS, Azure / Office 365.

6.23 Produced feasibility studies for the deployment and the hosting of SaaS solutions including the Office 365 software deployment in the Azure cloud.

6.24 Ensured the solution provided seamless integration with MS Office 365 software.

6.25 Performed SysOps administration using Linux (Centos), and Windows Server 2008/2012/2016.

6.26 Participated in meetings and workshops with business clients and SMEs on the strategy for moving the applications to the AWS and Azure cloud platforms.

Project 3
Seaboard Group
August 2014 – August 2015
Computer Application Support - Senior *(13 months)*

Uganda Police

SeaBoard Group is a leading technology research and strategy consulting company. SeaBoard's research covers security issues, telecommunications and technology markets, products and services, and communications policies. Seaboard sells turnkey forensic system solutions to governments. Generally, clients are governments of developing countries in Africa looking to modernize their police force and provide an effective judicial service by building a fingerprint registry of known offenders, which is a common practice in the Western World.

The Uganda National Police was tasked by the Inspector General of Police (IGP) to implement a centralized system of citizen identity management using microchip identity cards as well as a fingerprint database, within their classified network. The rationale here was to create an immutable identification system which doubles as an inventory of forensic data, should a crime need to be investigated or should an unforthcoming individual need to be identified. Mr. Grant worked as a Computer Application Support Specialist, participating in the software development and implementation of the department-wide forensic system, resolving any technical issues as they arose and communicating with information systems technicians and Uganda Police employees (end-users) throughout the project.

Responsibilities:

6.27 Assessed the scope of a proposed project and determined the general number of records that needed to be managed, size of police force and identified and managed network barriers such as limited access to professional technical support or bandwidth limitations in network capacity within client country.

6.28 Liaised with technology developers to build a list of specifications to meet the collective needs of end users of the system.

6.29 Built and maintained hardware such as Uganda National Police servers and workstations. Built the server for the forensic system to be secure, using secure FTP and VPN, and maintained the server by testing it to ensure it was functioning as expected. Also built the workstations for sensitive tasks for that the information would be protected, and maintained the workstations by ensuring all updates were applied, and by installing anti-virus software. The hardware was used specifically for database management (servers), field unit (mobile rugged laptops with fingerprint scanners), clerical and administrative tasks by police (workstations).

6.30 Participated in the implementation of the forensic system, ensuring it was operational within Uganda's classified network environment. The system needed to be implemented into the classified network as it stored sensitive citizen information that could not be made available to the general public, therefore users were required to have a formal security clearance in order to view or handle the classified documents or to access classified data.

6.31 Mr. Grant managed the Uganda National Police network environment by ensuring it met compliance standards, developing a change control process, setting up alert notifications, and implementing standards for getting network information.

6.32 Submitted RFQ to major system builders such as Dell / HP; negotiate prices of hardware, post-sales support, and extended warranty.

6.33 Assessed costs of transportation of equipment as well as installation and maintenance.

6.34 Created an invoice to present to client government for the hardware with pricing options for various levels of post-sales support, warranty, options for future upgrades, etc.

Project 2
Erika's Aero Group
November 2011 – April 2014
Chef Pilot *(30 months)*

Erika's is a company that facilitates a concierge service for large yachts, usually chartered by wealthy people. Erika's sources gourmet items and imports them; they are often highly perishable in nature and the only way to move these goods quickly is by airplane.

Responsibilities:

6.35 Managed courier and charter company
6.36 Flight planning, dispatching and ensuring airworthiness of aircraft
6.37 Maintaining relationships with parts suppliers and customs officials to expedite receipt of parts
6.38 Piloting aircraft
6.39 Update technical logs, aircraft type certification; rewrite technical data and specifications when aircraft parts were changed
6.40 Dealt with customs inspections, being knowledgeable on how international shipping of non-traditional parcels (controlled items, high value, perishable food, etc.) needs to be managed
6.41 Developed presentation decks for training other pilots in this business
6.42 Establish a network of known suppliers of perishable goods throughout the entire Caribbean as well as around the world to meet customer demands

Project 1
Rogers
August 2007 – April 2011
Computer Application Support – Senior *(45 months)*

Mr. Grant worked as a Computer Application Support Specialist, troubleshooting network outages, hardware failures, damaged or defective mobile devices and 3G network adapters in Rogers operational environment. He provided support during the iPhone 3G adoption period, and postpaid wireless subscribers were beginning to use smartphone data services. He provided network and internet support to users in response to identified issues, solving complex end-user technical problems, and provided advice and training to other employees.

Responsibilities:

6.43 Responsible for Telecom services. Built and maintained hardware such as servers and workstations which included all desktops, servers, networking, Exchange (email), Active Directory, file and print services, LAN connectivity, VPN, firewall, anti-spam services, backups, disaster recovery, telephone and voicemail system.
6.44 Provided a wide range of support to 2,000+ users of LAN/WAN, built, installed, configured, monitored, maintained, and troubleshot a wide range of informatics hardware/software or peripherals at the desktop, network and server level.
6.45 Utilized TCP/IP, VLAN's, Remote Access, DHCP, and DNS networking fundamentals.
6.46 Provided guidance and support to all users.
6.47 Administered and supported employee mobile devices for email, VPN, and communications.
6.48 Implemented automated desktop audit and patching.
6.49 Set users up with BES (Blackberry Enterprise Services).

6.50 Provided user and network support in a Microsoft Windows Server 2003 R2 /2008 R2 network and Windows desktop environment including printers, telephone hardware, and BlackBerry troubleshooting. Managed the network environment by setting up alert notifications, and by having a process for monitoring all users and devices.

6.51 Performed installation and upgrade of desktop and laptop hardware such as RAM, CPU, Video Card, Network Card. Troubleshot hardware issues.

6.52 Resolved issues related to Windows, application, virus isolation, and removal, storage and hardware configuration problems.

6.53 Responsible for applying security updates and patches on servers, desktops, and laptops.

6.54 Provided Cellular (2G/3G) Network Support.

6.55 Coordinated hardware swaps and upgrades with customers.

6.56 Applied problem solving skills to troubleshoot and resolve technical problems.