



MR. ALASDAIR GRANT

Position Description

Computer Application Support - Senior

Profile

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

Key Skills:

- Knowledge of new and old Information systems; focus in emerging technologies and cloud computing.
- Knowledge of ITIL.
- Experience with hypervisors and virtual machines.
- Experience architecting cloud solutions leveraging IaaS, PaaS, and SaaS technologies.
- Experience with cloud transformation projects.
- Experience building and maintaining hardware (desktops, laptops, servers, and networking).
- Experience delivering a cloud environment with Authority to Operate (interim/ATO).
- Solid understanding of security: on-premise, users, network, and data management (in-transit/at-rest).
- Experience in designing, maintaining and operating a well architected IT framework.
- Experience working with scientific community (Defence scientists).

Language

English

Security Clearance

Level: Secret
File No: 96-16-4869
Expiry: 10-December-2028

Education

2019, Computer Systems Technician (CST), Algonquin College
{M1}

Professional Development

2018,2021 - Amazon Web Services (AWS) – Certified Solutions Architect – Associate (2018) Professional (2021) {M4}

Professional Experience

Project 1 Department of National Defence January 2020 – Present

Computer, Application Support (Workload Migration & Cloud) - Senior

(25 months)

Joint Defence Cloud Program

The Joint Defence Cloud Program (JDCP) was DND's cloud service broker and it offered a growing portfolio of cloud services and customized platforms. Currently, the JDCP offered commercial cloud technologies through service accounts in Amazon Web Services (AWS) and Microsoft 365/Azure, which were essential to the completion of this program. There were plans to include Google Cloud Platform as well as locally run private cloud, with hybrid connectivity on the horizon. Mr. Grant's role in the JDCP involved Workload Migration (WLM) with a focus on identifying cloud candidate applications residing in traditional data centers as well as the groundwork necessary to prepare DND's AWS environment for these applications. The security requirement for Protected B workloads in the cloud was established and the classified network environment was made up of about 400 configurable controls, monitors, and alerting mechanisms. Without this groundwork, government departments would not be able to leverage cloud resources for any meaningful work. {M1}{M2}{M5}

Responsibilities: {M1: All Lines}

- 1.1 Identified and recommended Workload Migration (WLM) candidates for cloud.
- 1.2 Implemented PBMM guardrail security controls on Amazon Web Services (AWS) to support the cloud operational environments, including the below tasks and achieved iATO for PBMM workloads in AWS cloud. {M3}
 - 1.2.1 Created new accounts and automated security controls. {M3}
 - 1.2.2 Worked with AWS Secure Environment Accelerator (AWS Managed Service) to apply sweeping security control automation and complex security requirements on cloud resources. {M3}
 - 1.2.3 Provided Identity and Access Management for users of new accounts. {M3}
 - 1.2.4 Ensured security monitoring and alert notifications and responded to security alerts as they were received. {M3}
 - 1.2.5 Assisted in creating architecture documents. {M3}
 - 1.2.6 Created a Virtual Desktop solution architecture for a secure work from home environment and cloud-based solution. {M3}
 - 1.2.7 Designed and implemented a multi-factor authentication (MFA) solution to enforce security controls on ancillary cloud services. {M3}
 - 1.2.8 Worked with AWS Enterprise support as primary liaison .
- 1.3 Architected cloud solutions and commercial cloud technologies for new cloud clients, including migrating and refactoring applications or rebuilding these applications to be AWS/cloud native. {M5}
- 1.4 Created infrastructure as code templates and artifacts for increased automation and security control compliance.

- 1.5 Managed access to and from the perimeter, ensured route tables reflected the correct AWS internal network environments and that traffic inbound/outbound was allowed, and enforced restrictions with least privilege and security in mind. {M3}
- 1.6 Ensured all network traffic was logged and monitored in case of an incident and ensured security monitoring teams were able to respond effectively and quickly. Assisted newly onboarded clients with setting up their own virtual networks in their cloud environments to be compliant with security guardrails and conform with JDCP and AWS security best practices. Assisted legacy network teams (DRENET & DWAN) in establishing and evaluating network rules to allow communication between some on-premise networks and cloud endpoints. While much of this work was still in early stages, the JDCP and clients were able to securely connect to their internal resources without exposing the networks over public internet. {M3}
- 1.7 Created guides and SoPs as new processes were established and refined.
- 1.8 Communicated and collaborated with clients and stakeholders for each application or project and ensured that deliverables were being met.
- 1.9 Developed, architected, and designed cloud solutions in an unclassified sandbox environment, which offered IaaS, PaaS, and SaaS services on different cloud platforms. {M3}
- 1.10 Developed, architected, and designed a Protected B environment, including tiered network layers for multi-tier application workloads such as routing, hardened perimeter, firewalls, load balancers, and certificate management.
- 1.11 As a part of the security incident detection and incident response, trained the security monitoring team on AWS security services and best practices and on emerging technologies.
- 1.12 Acted as the primary responder for AWS security incidents in interim as the security monitoring team developed their skills.
- 1.13 Acted as the primary point of contact for the AWS enterprise support team and delegated tasks and requirements to enterprise support.
- 1.14 Participated in the Covid-related emergency response. The JDCP was the authority in the cloud space. Tasked with business continuity activities as a result of lockdown in March, including the following:
 - 1.14.1 Rapid creation and onboarding of over 100K Microsoft 365 accounts.
 - 1.14.2 Implemented a temporary *Champion* model; a peer-to-peer support model to assist with mundane administrative tasks such as password resets for countless new users.
 - 1.14.3 Created and maintained an M365 onboarding and adoption metrics system using cloud-based SQL solutions and Microsoft Power BI (transitioned to serverless).
 - 1.14.4 Assisted in training M365 helpdesk for an interim In-Service-Support solution and provided advice to users on the identified difficulties.
 - 1.14.5 Provided a scientific research account in AWS for the purpose of High-Power Compute (HPC) scientific simulations for COVID-19 analysis and prediction modeling.
 - 1.14.6 Ongoing innovation with COVID-19-based scientific research and endeavours.

Project 2

HostedBizz **August 2018 – December 2019** *Computer, Cloud Support – Senior* (17 months)

Cloud Services

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 from virtual servers and desktops to hosted email and mobile marketing applications, their services easily scale organizational needs.

Sub-Project 2A: Cloud Comparison

Mr. Grant was lead on a cloud comparison project, where the goal was to create a comparative analysis between the commercial cloud technologies of 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. The factors measured were network performance, computer and workload, and storage media speed. All these measurement metrics were compared against cost.

{M1}{M5}

Sub-Project 2B: Exchange to O365 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. **{M1}{M5}**

Responsibilities: **{M1, M5: All Lines}**

- 2.1 Provided technical and administrative support for IT security such as recommending and implementing complex security requirements and information infrastructure protection requirements such as analysis, concept definition, strategy development, planning, implementation, and coordination activities.
- 2.2 Managed enterprise network environments for several clients, including cloud gateways, commercial cloud technologies, physical LAN/WLANs on-site, and the cloud networks within the data centre. Ensured the client cloud networks were reachable from their local gateways and troubleshoot connectivity. Occasionally visited client sites to repair, replace, or reconfigure problematic network components such as Wi-Fi access points, switches, or cables. **{M3}**
- 2.3 Managed enterprise assets for several clients, including new workstations and peripherals, and built, maintained, and purchased hardware such as printers and ensured the service provider would image them, domain join them, install endpoint security agents, and keep track of the assets through a product called N-Central (SolarWinds MSP product). Delivered, installed, and configured these devices for the client. **{M3}**
- 2.4 Provisioned and maintained a hosted Microsoft service (Exchange, SharePoint, CRM, and Lync).
- 2.5 Architected server farms in a cloud environment (i.e. RDS server farm).
- 2.6 Performed extensive monitoring of cloud meta-structure, hypervisors, and virtual environments.
- 2.7 Developed, architected, and designed cloud solutions in a sandbox environment for different cloud platforms, including IaaS, PaaS, and SaaS and worked with vSphere/vCloud to deploy and manage Infrastructure as a Service (IaaS). **{M3}**
- 2.8 Produced use case scenarios for SaaS, PaaS, IaaS software technology. **{M3}**
- 2.9 Architected Cloud Solutions for environments offering the following: **{M3}**

- 2.9.1 IaaS: Provided instances in AWS, Microsoft Azure, and vSphere in private/hybrid cloud environments. {M3}
- 2.9.2 PaaS: Set up cloud-based business continuity/disaster recovery products such as Veeam backup and replication as well as cloud-based organization file sync solutions such as Axcient eFolder. {M3}
- 2.9.3 SaaS: Created Office 365 tenancies, provided and rightsized software solutions based on client needs, and troubleshoot hybrid environments with traditional Microsoft infrastructure products. {M3}
- 2.10 Supported and troubleshoot client cloud operational environments, including troubleshooting an issue of file system corruption in a recent cloud migration instance. The client (reseller called Compunet Infotech) had done a lift-&-shift of an on-premise server to the cloud environment where issues of stability had developed. Provided a new cloud server native to the environment as the solutions and worked with the client to bring it into a production state. {M3}
- 2.11 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 and to compare the conceptual architecture to the real-world environments.
- 2.12 Designed and developed roadmaps for the migration of existing applications such as CRM with associated databases, SharePoint, and 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.
- 2.13 Worked with SolarWinds and Veeam products for backup, business continuity, and disaster recovery.
- 2.14 Worked with Spam Titan anti-spam filter to monitor and maintain underlying systems.
- 2.15 Created resources using public cloud solutions such as AWS, Azure, and Office 365.
- 2.16 Produced feasibility studies for the deployment and the hosting of SaaS solutions, including the Office 365 software deployment in the Azure cloud.
- 2.17 Ensured the solution provided seamless integration with MS Office 365 software and provided support and advice/training to users in response to any identified difficulties and to team members on emerging technologies.
- 2.18 Performed Sys Ops administration using Linux (Centos) and Windows Server 2008/2012/2016.
- 2.19 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 Aroma Espresso Bar October 2015 – July 2018

Operations Manager

(34 months)

Responsibilities:

- 3.1 Ran every aspect of a small coffee shop/restaurant.
- 3.2 Managed and maintained a vast inventory (over 300 items) in a small space with 30% of the items being perishable.
- 3.3 Managed employee recruitment/training, scheduling; payroll, and tax forms.
- 3.4 Performed and facilitated the maintenance of restaurant equipment.
- 3.5 Maintained health, safety, and fire standards to municipal, provincial, and federal regulations.

- 3.6 Optimized cost by renegotiating deals with suppliers, tested new products in conjunction with corporate, and created reports on success, shortcomings, and suggestions.
- 3.7 Maintained quality control up to a very rigorous brand standard.

Project 4

SeaBoard Group **August 2014 – August 2015** *Computer Application Support - Senior* (13 months)

Project Description

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 policy. 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.

Project A: Uganda Police

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. The rationale was to create an immutable identification system within a classified network environment, which doubled as an inventory of forensic data should a crime need to be investigated or should an unforthcoming individual need to be identified. {M1}{M2}

Responsibilities: {M1: All Lines}

- 4.1 Assessed the scope of a proposed project and determined the general number of records that need to be managed, including size of the police force and identified any barriers such as limited access to professional technical support or bandwidth limitations in network capacity within the client country.
- 4.2 Liaised with technology developers to build a list of specifications to meet the collective needs of end users of the system.
- 4.3 Built and maintained hardware such as servers and workstations. The hardware was used specifically for database management (servers), field units (mobile rugged laptops with fingerprint scanners), and clerical and administrative tasks by the police (workstations). {M3}
- 4.4 Worked in an international government classified network environment. Users were required to have a formal security clearance to view or handle the classified documents or to access classified data. {M2}
- 4.5 Submitted a RFQ to major system builders such as Dell/HP and negotiated prices of hardware, post-sales support, and extended warranty.
- 4.6 Assessed costs of transportation of equipment as well as installation and maintenance.
- 4.7 Created an invoice to present to the client government for the hardware with pricing options for various levels of post-sales support, warranty, and options for future upgrades.

Project 5

Erika's Aero Group
Chef Pilot

November 2011 – April 2014
(30 months)

Project Description

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. These items are often highly perishable in nature and the only way to move these goods quickly is by airplane.

Responsibilities:

- 5.1 Managed courier and charter company.
- 5.2 Oversaw flight planning and dispatching and ensured airworthiness of aircraft.
- 5.3 Maintained relationships with parts suppliers and customs officials to expedite receipt of parts.
- 5.4 Piloted the aircrafts.
- 5.5 Updated technical logs and aircraft type certification and rewrote technical data and specifications when aircraft parts were changed.
- 5.6 Dealt with customs inspections, being knowledgeable on how international shipping of nontraditional parcels (controlled items, high value, perishable food, etc.) needs to be managed.
- 5.7 Developed presentation decks for training other pilots in this business.
- 5.8 Established a network of known suppliers of perishable goods throughout the entire Caribbean as well as around the world to meet customer demands.

Project 6 Rogers August 2007 – April 2011

Computer Application Support – Senior

(45 months)

Responsibilities:

- 6.1 Initially worked in Sales and moved into wireless technical support after two years. Troubleshot network outages, hardware failures, and damaged or defective mobile devices and 3G network adapters. Began the support role during the iPhone 3G adoption period, a time most postpaid wireless subscribers were beginning to use smartphone data services.
- 6.2 Set users up with Blackberry Enterprise Services (BES).
- 6.3 Troubleshot hardware issues.
- 6.4 Provided cellular (2G/3G) Network Support.
- 6.5 Coordinated hardware swaps and upgrades with customers.