

# Ian Dexter D. Marquez

## Linux systems administrator

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With more than 15 years extensive experience in administering Linux and Unix platforms. Develops and maintains various automation tools for infrastructure management and application deployment. Collaborates with global software development and operations teams in application delivery and support. Certified in Red Hat Enterprise Linux, Microsoft Windows, and ITIL Foundation in IT Service Management. Last update: 15 FEBRUARY 2020

### OVERVIEW

#### Skill areas

- Unix/Linux systems administration (18 years / advanced)
- Infrastructure automation (10 years / proficient)
- Application deployment and support (13 years / advanced)
- Network design, development and administration (5 years / proficient)
- Web design, development and management (3 years / proficient)
- Identity management (2 years / proficient)

### EXPERIENCE

#### Platform technical solutions engineer

*Databricks*

**FEBRUARY 2020 TO PRESENT**

Amsterdam, The Netherlands

Provides technical guidance and advice to customers in their Databricks journey. Databricks helps data teams solve the world's toughest problems by providing a unified data analytics platform for massive scale data engineering and collaborative data science.

- Troubleshoots, and resolves complex customer issues related to the Databricks platform.
- Delivers proactive suggestions, and best-practice guidance for improving performance and efficiency in customer environments.
- Assists with issues around third-party integrations with the Databricks environment.
- Participates in the creation and maintenance of Databricks documentation and knowledge articles.

#### Support and deployment engineer

*Bright Computing*

**FEBRUARY 2019 TO JANUARY 2020**

Amsterdam, The Netherlands

Supported customers in managing their high-performance clusters (HPC) using Bright Cluster Manager (BCM). Bright Computing develops high-quality software for deploying and managing high-performance clusters, Kubernetes clusters, and OpenStack private clouds in on-premise data centers and public cloud platforms.

- Provided intermediate-level support for managing HPCs, workload schedulers, Kubernetes clusters, and OpenStack private clouds.
- Deployed large-scale HPCs for global customers.
- Coordinated closely with software development teams in identifying and resolving issues identified through customer reports or testing.
- Worked on the latest hardware like GPUs and high-speed interconnects, and software stacks such as distributed filesystems and hypervisors, to leverage the functionalities of the HPC management software.
- Evaluated new technologies in the HPC space for integration with BCM.

#### Senior DevOps engineer

*CompareGlobalGroup*

**DECEMBER 2015 TO DECEMBER 2018**

Hong Kong

Headed the distributed team that handles the maintenance and operation of the organization's cloud infrastructure. CompareGlobalGroup is the most comprehensive financial comparison platform in the world, with presence in Asia, Europe and Latin America.

- Led a team of system administrators and engineers who managed the infrastructure spread out across multiple availability zones and regions.
- As part of the technology management team, assisted the CTO in setting the technology direction for the organisation.
- Established a service desk for incident management, providing a single point of contact for customers, and greatly improved the response time to production issues.
- Led the project to develop and maintain a business monitoring platform, which improved the visibility of application uptime.
- Developed and maintained tools for infrastructure management and application deployment.
- Provided technical guidance in infrastructure management for other ventures under Nova Founders Capital.

**DevOps engineer (part-time)**

*CompareGlobalGroup*

**NOVEMBER 2014 TO NOVEMBER 2015**

Makati City

Part of the global team that created and upgraded the organization's cloud infrastructure. CompareGlobalGroup is the most comprehensive financial comparison platform in the world, with presence in Asia, Europe and Latin America.

- Managed the infrastructure spread out across multiple availability zones and regions.
- Developed and maintained tools for infrastructure management and application deployment.

**Linux system administrator**

*Asian Development Bank (under RCG IT, Inc.)*

**APRIL 2010 TO DECEMBER 2015**

Pasig City

Developed and maintained automation tools to manage the Unix infrastructure for the Bank's mission-critical applications like ERP, data warehousing, financials, and business intelligence. The Asian Development Bank is a multilateral financial institution that provides technical and financial assistance to developing countries.

- Provided platform-level support to the Bank's development and infrastructure operations teams.
- Coordinated with various software development teams on continuous integration, rapid deployment, performance monitoring and tuning, and application support.
- Developed and maintained tools for application deployment, monitoring, and performance tuning.
- Documented testing and deployment scenarios for the Unix infrastructure requirements of the Bank.
- Supported Unix servers that run Apache, Tomcat and WebSphere web servers, Oracle and MySQL database servers, Oracle ERP applications, and IBM business intelligence software.
- Maintained an automation script that improves the deployment of Oracle applications. The deployment script, used within the Oracle web UI, was not actively maintained, and had numerous feature requests and issues submitted by the development teams. Upon assumption of code maintenance, feature requests and bugs were reduced to less than 10%.
- Wrote an orchestration tool that provides self-service capabilities for tasks such as database and application server restarts, log retrieval, initiation of cold backups, among others. Commonly requested tasks from the development and operations previously went through the service request queues before being acted on by other teams. The use of the tool significantly decreased these requests, improving workflows across various teams.
- Streamlined the provisioning process for Linux (physical and virtual) servers, which reduced build times from one day to less than an hour.
- Automated the security baseline configuration for Linux servers as part of compliance requirements at the Bank. Quarterly security audits tended to be time-consuming exercises for administrators. The automation process helped decrease the number of audit findings and interventions to more than 60%.
- Created and deployed a management tool for setting scheduled jobs from a centralized repository. Scheduled jobs were previously stored and managed locally. With the sync tool, jobs were centrally managed from a repository, and pulled by the corresponding servers, thus improving the scheduling workflow, and minimizing errors. This project was accepted in the League of Professional System Administrators (LOPSA)

Mentorship Program.

- Re-factored a service that routes SMS acknowledgements for Nagios alerts. The previous service was not capable of accepting alert acknowledgements through SMS. The new service resulted in shorter response times from different operations teams when acting on service alerts.
- Wrote Nagios plugins and scripts for a monitoring dashboard. The dashboard, used by analysts for a critical business application, provides a single interface for tracking message workflows across various platforms.
- Wrote and maintained various scripts in Perl, Python and Bash for automating system administration, performance monitoring, and tuning tasks.
- As subject-matter expert, provided quality control and source code review for automation tools and scripts used in the Unix infrastructure.

### **Senior software engineer**

*Accenture, Inc.*

**MAY 2007 TO APRIL 2010**

Pasig City

Supported the global directory services, identity management, and web infrastructure of a leading financial services firm. Accenture is an industry leader in global management consulting, technology services, and outsourcing.

- Maintained the firm's directory services and identity management infrastructure using third-party open source and internally developed tools.
- Supported the firm's global web and enterprise products infrastructure.
- Worked closely with global software development teams in the areas of application deployment, monitoring and support.
- Resolved infrastructure issues reported through automated alerts, and from the global help desk.
- Subject-matter expert and training resource for shell scripting and Linux administration.
- Created a web application that interfaced with a service fulfilment facility. The application significantly streamlined the creation and closure of service requests for common tasks.
- Wrote and maintained various scripts to automate administrative tasks, including a tool for group management notification, a helper script that gathers LDAP information from various sources, and checkout scripts that provide inputs for the global monitoring framework.

### **Unix system administrator**

*Asian Development Bank (under Cytronics, Inc.)*

**JANUARY 2007 TO APRIL 2007**

Pasig City

Operated and maintained Unix servers in the Bank's data centre. The Asian Development Bank is a multilateral financial institution that provides technical and financial assistance to developing countries.

- Ensured 99.999% uptime of production Unix (Solaris, AIX, and SLES) servers in the Bank's data centre.
- Projects included the deployment of Subversion repositories for more than 20 software development projects; server consolidation; staging and installation of centralized log servers for Unix and Windows platforms; and testing and deployment of server backup strategies (on SAN) for about 100 Unix servers.

### **Systems engineer**

*Trend Micro, Inc.*

**APRIL 2006 TO JANUARY 2007**

Quezon City

Provided intermediate-level technical and engineering support for Trend Micro enterprise products as part of its EMEA Technical Support Centre infrastructure. Trend Micro is a global leader in anti-virus and security solutions, providing comprehensive enterprise-level services across multiple platforms and customer segments.

- Handled troubleshooting and technical issue resolution for internet gateway (web and messaging) security products on Windows, Solaris and Linux platforms, using intensive testing procedures and set-up of lab environments for simulations and software patch testing.
- Initiated customer recovery procedures through teleconferences and web-based live meetings with senior product specialists and developers.
- Performed beta testing and technical documentation of upcoming products such as network appliances and gateway security software.

- Acted as a subject-matter resource on Linux and systems administration, and provided technical coaching for new engineers.
- Contributed technical solutions articles to Trend Micro's knowledge base.

**Linux and web administrator**  
*Philippine Rice Research Institute*

**JULY 2004 TO MARCH 2006**  
 Science City of Muñoz

Managed Linux servers of the corporate intranet in the local and wide area networks, and numerous web-based services for the Institute. Developed a portal for the Open Academy for Philippine Agriculture, the Pinoy Farmers' Internet. The Philippine Rice Research Institute is a premier research and development facility in Asia that pioneers and promotes rice science and technology.

- Managed Linux systems (on Red Hat, Fedora and CentOS) with services such as DNS, IMAP, LDAP, proxy, database, and HTTP.
- Developed and maintained the web portal for the Pinoy Farmers' Internet.
- Successfully deployed a 30-node Linux Terminal Server Project (LTSP) site running Ubuntu Linux as the IT training lab for the PhilRice Biotechnology Intellectual Property Rights Center.
- Deployed and maintained the Farmers' Contact Center web application in collaboration with the DOST Advanced Science and Technology Institute (ASTI). With the app, farmers and agricultural extension workers can send queries, and receive tips through SMS.
- As a science research specialist, performed research on the evaluation and usability of learning management and content delivery systems for agriculture extension workers; and the evaluation and installation of a content management system for the corporate intranet and the web portal. These studies were presented and gained recognition in various scientific research fora.
- Other projects: configuration, deployment and maintenance of redundant database servers with high-availability and fail-over; high-availability and load-balancing clusters for WAN routers and local web proxy caches; improved network security through reformulation and implementation of network policies; and migration from proprietary software to open source.

**Network administrator**  
*National Irrigation Administration*

**APRIL 2002 TO JULY 2004**  
 Quezon City

Designed and implemented the NIA Central Office local area network, and implemented services such as Active Directory, intranet, web, e-mail, and instant messaging. The National Irrigation Administration is the lead Philippine agency that provides irrigation services, development, operation and maintenance.

- Initiated the partnership between the NIA and PREGINET of DOST ASTI for the Agency's inclusion to the nationwide broadband research and education network.
- Designed, prepared bid documents and specifications, and managed the structured cabling project of the NIA CO LAN.
- Developed the roll-out and implementation strategy for the NIA CO LAN.
- Developed and maintained the company intranet using Apache, PHP and MySQL, with a content management system running on Drupal.

**Community relations / information assistant**  
*National Irrigation Administration*

**FEBRUARY 1999 TO MARCH 2002**  
 Science City of Muñoz

Implemented the public information infrastructure for the Casecnan Multipurpose Irrigation and Power Project (CMIPP), and frequently assigned to IT-related activities. The CMIPP is NIA's flagship project that provide irrigation services to northern Central Luzon and supplementary power to the Luzon grid of the National Power Corporation.

- Designed and developed information materials such as stand-alone kiosks, multimedia presentations, magazines, newsletters, brochures, flyers, and radio plugs.
- Involved in the Project's IT initiatives like software and hardware acquisitions, technical evaluation in IT procurement activities, and maintenance and troubleshooting of PC hardware.
- Spearheaded the creation of a Public Information Desk for the Project.

## OTHER INFORMATION

**Interests:** DevOps, Cloud infrastructure, PaaS, IaaS

### Qualifications

- **Bachelor of Science in Computing major in Computer Science**, 2011  
Technological University of the Philippines, Manila
- **Red Hat Certified Engineer**, OCTOBER 2008 (NOT CURRENT)
- **ITIL v3 Foundation in IT Service Management**, JULY 2008
- **Red Hat Certified Technician**, NOVEMBER 2006
- **Microsoft Certified Professional**, MAY 2006
- **Trend Micro Certified Security Expert**, JUNE 2006

### Languages

- Bash (18 years / advanced)
- Perl (9 years / proficient)
- PHP (3 years / proficient)
- Python (8 years / proficient)
- SQL (2 years / proficient)
- JavaScript (7 years / proficient)

### Platforms

- Red Hat Enterprise Linux, CentOS, Fedora (18 years / advanced)
- SuSE Linux Enterprise Server (4 years / advanced)
- Ubuntu, Debian (8 years / proficient)
- Sun Solaris, IBM AIX (1 year / basic)
- Microsoft Windows 2003 Server (1 year / basic)

### Tools

- Network and systems administration: Ansible, Chef, Nagios, Netcool, Apache, Tomcat, Squid, Nginx, Postfix, Sendmail, Courier, Dovecot, Procmail, MySQL, PostgreSQL, Sybase, Oracle, Redis, Memcache, Trend Micro InterScan Web and Messaging Security Suite for Windows and Unix, Ethereal/Wireshark, Sniffer, tcpdump, Cisco IOS, F5 BIG-IP ZebOS, VMware, VirtualBox, Docker, Kubernetes, Subversion, Git, Amazon Web Services, OpenShift, OpenStack, Google Cloud Platform, Azure
- Identity management: Sun Directory Server, Sun Identity Manager
- Web and content development: Drupal, WordPress, TWiki, MediaWiki, Dokuwiki, Laravel, Node.js, Flask
- High-performance computing: Bright Cluster Manager, Slurm, PBS Pro, Univa Grid Engine
- Big data and analytics: Databricks, Apache Spark