James Garrigan

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INNOVATIVE AND MULTIFACETED IT INFRASTRUCTURE ENGINEER

**Scripting | Directory Services | Messaging | E-Discovery | Archiving | Cyber Security | Documentation
Patch Management | Business Continuity Planning (BCP) | Disaster Recovery | High Availability
Connectivity Devices & Protocols | Network Communications**

TECHNICAL SKILLS

PowerShell | Active Directory | DNS | Windows 2022/2019/2016/2012/2008/2003 R2 | Group Policy | Hyper-V | VMware | Exchange 2007/2003 | Enterprise Vault Email / File System Archiving | Compliance Accelerator | Discovery Accelerator | Mobile Device Management (MDM) | Network Applications | TCP-IP | NetApp SAN

NATIONAL SECURITY ELIGIBILITY DETERMINATION

Federal Public Trust (SF-85P) [Interim][1]

WORK EXPERIENCE

Technical Reviewer (Freelance assignment) | 10/2024 - Present
Packt Publishing, New York, NY
Freelance
- Assignments
    - Windows Server 2025 Administration Fundamentals

IT Systems Engineer | 7/2023 - Present
PHM Services, New York, NY
Part-time
- I provide a variety of ad-hoc IT services for small business clients.
    - Windows based servers: Operating system installations, Active Directory
    - Windows based desktop computers: Operating system installations, software upgrades
    - Small business networking hardware: Example: Update the DHCP configuration in a SonicWall firewall.

Expert IT Specialist Contractor via Broad Crossing Inc. | 7/2021 - 7/2023
New York City Department of Education, Brooklyn, NY
Contract
Accomplishments:
- The contract job was renewed for two more years with a new job title via Broad Crossing Inc.
- I managed 40,000 lines of PowerShell code for the server integration tasks. Circa July 2019 550 lines of code existed.
- As new requirements for the integration process arose, I updated the code and the QA process accordingly.
- I updated the code to function with Server 2022.
- I completed a major update of the server integration script to accommodate a new networking architecture while maintaining full compatibility with the current environment. I added support for VLSM, new DHCP scopes, and settings such as DNS addresses were moved from code to text files.
- Because I planned appropriately, when the entity changed its DNS settings, I only needed to update one text file for the script and one tab for the QA process in the Excel worksheet template file.
- I continued to increase the level of automation by reducing the amount of human input.
- I added encryption. The process became more secure. The operator does not need to enter two pairs of credentials.
- I developed code that proactively monitors and manages over 3,300 physical and virtual servers.

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[1] On August 29th 2024 I learned the government job was put on hold on or before August 10th 2024. It seems you're cleared, but unfortunately, the position in New York is currently on hold from the client's side. They issue an interim clearance first, and then you receive the final clearance after the interview. You can start working with the interim clearance.

- The monitoring framework enabled the servers to automatically resolve faults for both Hyper-V replication and DHCP and some unresponsive operating system states.
- In addition, the framework ensured that Windows-based servers with more than 30 days of uptime are restarted outside of normal operating hours. Before implementing the code, it was not unusual to find servers that had not been restarted for several years.
- I created multiple scripts to change the DNS IP address settings in the Hyper-V servers, virtual machines, and DHCP services.
- Via PowerShell, I generated reports which enabled management to proactively allocate larger blocks of IPv4 addresses to schools. I also created code that updates the configuration of the respective DHCP scope.
- I implemented and deployed code that creates a centralized nightly backup of the DHCP configuration from each school.
- I received requests from the SCCM team to create code to enable their processes to execute.
- On Fridays, I conducted online classes for interns and the server team.
- Within related internal correspondence, my name appeared on the list of recipients along with members of management.
- Key technical and educational staff members reached out to me instead of their in-house bureaucratic IT groups for assistance and timely decisions.

Specialist / Classroom Connectivity - Server QA Deployment Engineer Contractor - IIT | 7/2019 - 7/2021
New York City Department of Education, Brooklyn, NY
Contract
Accomplishments:
- From the existing PowerShell scripts, 550 lines of code compatible only with Server 2012R2, I developed a cohesive process using PowerShell which manages the configuration of the Hyper-V Host servers and multiple Windows and Linux virtual machines. Approximately 30,000 lines of code existed at the end of the first contract.
- I created new versions of the integration scripts for Windows Server 2016, Windows Server 2019, RHEL 7.7, RHEL 8.2, and CentOS 7.
- I reduced the deployment time from hours to approximately 50 - 60 minutes. The VM's are simultaneously created and configured.
- I created a quality assurance process to verify the configuration. I utilized Excel to create an integration checklist with a QA tab.
- I significantly reduced the quantity of manual input for the integration. For the Linux VMs, I used plink.exe to automate tasks that were manually executed via the vi editor. I also used winscp.exe to automate copying files to the Linux VMs. For Server 2016 … I leveraged PowerShell Direct and for Server 2012R2 I developed an innovative solution.
- I created Red Hat and CentOS Kickstart images which enable automated custom settings per site. The existing RHEL 6.4 script required the operator to manually key in the configuration.
- Within the integration script, I provided the operator with the ability to selectively execute blocks of code thus enabling the operator to recover from externally caused errors and rebuild individual VMs.
- I created a PowerShell script that locates and resolves Hyper-V replication problems.
- All blocks of code that execute changes were evaluated within an IT lab before being used in the production environment.
- I created and updated documentation for the pre-integration tasks and the integration tasks. I shared it with the related teams.
- I also executed live demonstrations for my colleagues.
- Daily tasks included receiving help desk tickets, executing the scope of work, and updating the tickets.

Information Technology Contractor | *7/2019 - 7/2023*
New York City Department of Education, Brooklyn, NY
Contract
Responsible for:
- Provide support for the Classroom Connectivity Project of school server integration including but not limited to delivery, installation, and break/fix activities. Candidates may have to travel to schools.
- Configure physical (Windows 2012 R2 Core) and virtual servers (3 Windows VMs and 2 Linux VMs), Remote Access cards, Active Directory, DNS Services, LAN, and network services.
- Troubleshoot and provide support for hardware and software problems during the server integration including, but not limited to, DHCP, DNS, Active Directory, SNMP, TCP/IP, and WINS.
- Create and update documentation of all work efforts to support server integration for sites, including design documents and process diagrams.
- Perform testing on Servers.
- Interact with the client's end-users and vendors to resolve logistic and hardware issues with equipment.
- Script/automate tasks to improve provisioning and troubleshooting.

IT Systems Engineer - IT Training and Job Search - NYC DOE Hiring Process | 10/2018 - 7/2019
Job Search Activity, New York, NY
Notable activities:
- IT Training: Skillsoft online training classes | O'Reilly series "Head First Python" | System Center 2012 Configuration Manager (SCCM) Unleashed; Sams Pearson
- Created an Internet site within Linux to advertise my skills | Distributed cover letters, and resumes - Integrated with Google Analytics | Adsense, Search engines: Bing, Google, Yandex
- <mark>The hiring process for the NYC DOE role began in February. The start date was 22nd July 2019. [5 months]</mark>

IT Systems Engineer | 4/2019 - 4/2019
PHM Services, New York, NY
Self-employed
Projects:
- Wonder Works Construction - Disaster recovery team member.
  - Desktop support - Formatted hard drives, deployed Windows 10: added to the domain and installed software.
  - Server 2012 support - Active Directory issues - diagnosed (dcdiag) / repaired (eseutil) after a system restore.

IT Systems Engineer | 3/2019 - 3/2019
Baseil Associates, New York, NY
Part-time
Projects:
- Cravath, Swaine & Moore LLP - I was a member of a team that updated the Lenovo software on Windows 10-based computers and verified/updated the inventory of the end-user computer hardware.

IT Systems Engineer | 12/2018 - 3/2019
PHM Services, New York, NY
Self-employed

IT Systems Engineer | 11/2018 - 12/2018
SourceWave Inc., New York, NY
Self-employed
Projects:
- American Express - End User Relocation | New York Life - End User Relocation

IT Infrastructure Engineer | 5/2018 - 10/2018
Kipany Productions, Ltd, New York, NY
Full-time
Responsible for supporting:
- The company network, data center, end-user computing hardware, Office 365 / Email encryption, Asset inventory
- Security and Compliance Initiatives: PCI DSS, HIPAA/Hitech, and SOC 2
- Documentation | Visio Diagrams

IT Systems Field Engineer | 5/2017 - 5/2018
PHM Services, New York, NY
Self-employed
I provided a variety of ad-hoc services for clients.
- Administration - Migrated Exchange mailboxes | Created/Deleted Active Directory user accounts.
- Problem Resolution - VMware-based Windows Servers | Desktop Operating systems | Applications | Software

IT Messaging Contractor via Kforce | 1/2017 - 5/2017
New York City Department of Information Technology & Telecommunications, Brooklyn, NY
Contract
I was responsible for assisting DoITT with planning and implementing new Enterprise Vault email archiving policies. From a recommendation - Though the project never got off the ground, James did write a comprehensive document on what the City needed to do to reach its goal.
- The NYC DoITT Director offloaded tasks to me.
  - I created proposals to enable city agencies to obtain funds to purchase equipment and/or software.

IT Systems Consultant via PHM Services | 7/2016 - 12/2016
Industrial and Commercial Bank of China Financial Services LLC, New York, NY
Contract
I added value to the client by partnering with the in-house IT staff to complete the assignments with a high level of precision. A discovery process was performed, the subject matter was researched, the client was presented with options, and based on the client's feedback the plan was amended, verified within a VMware-based IT lab, and executed in production. A detailed runbook with Visio diagrams was created for the implementation.

- Built a VMware-based IT lab environment that contained elements from production to prepare for live changes.
- Upgraded the existing single-node BlackBerry Enterprise Server (BES) v. 5.0.2 with MSDE to a two-node Active/Passive (high availability) configuration v. 5.0.4 MR13 cluster with SQL 2014.
- Created a Mobile Device Management (MDM) proposal to deploy and manage Apple devices.
- Active Directory
  - o Optimized Microsoft DNS and group policies in a multi-forest environment.
  - o The recovery plan leveraged a combination of scripts with command line utilities to export the DNS configuration/data and similar scripts were created and verified for restoring the environment.
  - o Prepared for an IT audit by identifying stale computer objects via PowerShell scripts.
  - o Customized reports were created by modifying an Excel add-in to accept LDAP queries.
- Upgraded legacy operating systems, e.g., Server 2008 to Server 2012 R2 via the use of VMware OS templates.
  - o Migrated - FSMO roles | certificate authorities (PKI) | domain controllers | application servers.
- Provided guidance and functioned as a technical resource to both IT management and the service desk.
  - o IT Management: MDM Solution | Microsoft Technology | FINRA Compliance
  - o Service Desk: Symantec Ghost | McAfee EPO
- Patch Management - Deployed a VMware-based 2012 R2 server with the WSUS role in the "DR" datacenter.
  - O Utilized group policies to enable the DR computer objects in the forests to use the same WSUS server.

IT Infrastructure Engineer / Team Leader | 3/2011 - 5/2016
Lloyds Bank, Plc., New York, NY
Full-time
Hired as a full-time employee. I had been a contractor.
I was a trusted advisor to management, developed innovative solutions for unique problems, delivered projects in a timely and efficient manner, resolved end-user and other technical issues, and shared knowledge with colleagues.
Systems: Exchange 2003 - High Availability - CA RHA Clusters, Exchange 2007 Microsoft Clusters (CCR's) on VMware, and BlackBerry 5.x / 12.x, RightFax - High Availability, using VMware Site Recovery Manager.

- Participated in a data center migration: Data circuits | Created a script to copy data from EMC storage to NetApp storage. The script leveraged Robocopy and recursive logic to mitigate issues with long file/folder paths.
- PowerShell / batch file scripts / scheduled tasks were utilized to extract and forward data via email to UK teams.
- A PowerShell script was created to increase the efficiency of the monthly Microsoft patch installation process. The script stopped services on related groups of servers, application servers followed by the database servers. All servers were restarted, patches were installed, necessary reboots occurred, and the services were started on the database servers followed by the application servers.
- Redesigned the US Active Directory - Forest Consolidation | Group Policy | Schema updates - to harmonize US AD to headquarters' directives with minimal impact on production.
- Implemented Cisco IronPort email security appliances with redundancy.
- Implemented MessageLabs SPAM Manager: Reduced IT overhead | Provided better service to the colleagues.
- Managed Microsoft Exchange - Consolidated Exchange Organizations | Upgraded Exchange 2003 to Exchange 2007 Microsoft Clusters (CCRs) on VMware.
- Implemented BlackBerry 5.x and 12.x with high availability.
- Integrated InfoBlox DNS physical and virtual appliances with Microsoft DNS: Harmonized US and UK systems and enhanced the security posture of the IT environments.
- Managed RightFax | Upgrades | SIP line migration | BCP via VMware Site Recovery Manager
- Optimized/redeployed Websense and Microsoft ISA to achieve better integration in the production and the DR data centers thus eliminating past issues | Leveraged pac files - enabled a simple method of automatic failover/ load-balancing. Utilized group policies to push the configuration to servers and workstations.
- Replaced Websense / Microsoft ISA with appliances from Trustwave (M86): Malware filtering, URL filtering, Internet Proxy - Created the initial policies, regex expressions … - handed over to the US IT Security team.
- Participated in the rollout of Windows 7 | Policies | Configuration | Application Palette
- Composed documentation for business requirements, project implementation, bulletins, Visio diagrams.
- Created PowerPoint presentations to educate and build consensus for strategic decisions.
- Functioned as IT Liaison to internal and external counsel for all US and relevant UK Legal Discovery (e-discovery), gathering relevant data for active and pending litigation. Application - Enterprise Vault Discovery Accelerator
- Managed the US IT Compliance (FINRA) program for a broker/dealer business from inception, employing Enterprise Vault Compliance Accelerator with WORM storage to satisfy FINRA requirements 17a-3 and 17a-4.

- Responsible for the annual audit with the Bank's 3rd party designee to FINRA.
- Implemented Globanet's Merge1 to capture BlackBerry SMS | PIN-to-PIN | Bloomberg Email
- Implemented Actiance Vantage software to capture Cisco Jabber chat data.
- Managed and executed the IT Infrastructure tasks for a business divestment.
- Guided the UK e-surveillance program to satisfy a LIBOR requirement for the FSA.
- Primary contact between US IT Infrastructure and UK - Home Office IT for Cyber-security and Infrastructure projects | IT related - Architecture, Project funds, Human Resources - Training systems | Employee Records
- Built multiple VMware-based preproduction test environments in the US that were integrated with the respective UK headquarters IT test environments to facilitate the deployment of UK applications/systems in the US.
- Leveraged VMware to deploy Windows servers from OS templates integrated with UK standard build scripts.
- Assisted with the administration and maintenance of Citrix XenApp, NetScaler, VMware vSphere, NetApp SAN

EDUCATION

Cisco Networking Academy - Cisco CCNA
Compu21 - Cisco CCNA | Microsoft Server 2016 MCSE
Global Knowledge - Citrix XenApp Training | Exchange 2013 Training - Core Solutions | Advanced Solutions
Rutgers University New Brunswick, NJ - Electrical and Electronics Engineering

CERTIFICATIONS

Microsoft Certified System Engineer - Microsoft, License 2164299

RECOMMENDATIONS / TESTIMONIALS

From a Director at [ ]: James is very knowledgeable with IT systems and would be an asset to any company.

Additional recommendations / testimonials are at https://www.garrigan.info/

Recommendations / testimonials are in my LinkedIn background image. https://www.linkedin.com/in/jimgarrigan

Other

Videos of sample work products: https://www.youtube.com/playlist?list=PLgkRipPFmxPPvjxYbTR-iDrGWWwJMJg0y

Interview Requirements: Video calls require a dial-in telephone number for audio, three business days of lead time, and confirmation via a calendar appointment with the job description attached.

Preferred Contact Method: Email garriganjobsearch@outlook.com

Personally owned equipment policy:

I do not use personally owned equipment for job-related electronic communications. A few examples of prohibited use are apps, chat, email, text, and video. In other words, job-related data of any type is neither saved on nor passes through personally owned equipment.

I may use personally owned equipment for job-related work solely for voice calls via a cellular/landline phone and remote computer sessions via a virtual machine designated only for the job. Only screen images, keystrokes, and mouse actions flow between the remotely connected systems.