**Mike Barr**

**IT Systems Engineer, PowerShell Developer**mike.barr.resume@tuta.com
[https://cloudinterfaces.biz](https://cloudinterfaces.biz/)

Experienced IT generalist with virtualization, imaging automation, SQL queries/updates and administration, network technology, enterprise storage, and datacenter rack hardware. PowerShell script module and script development for: Active Directory, SCCM, SCOrch, Web APIs, HTML/CSS, CSV, MSSQL, Oracle, HRIS, Data Tables, Exchange, Task Scheduler, Drivers, Diagnostics, Monitoring, File System, Storage, Networking, Virtualization, Hyper-V, Azure, AWS.

**SKILLS**

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**OS**: Expert server/client Windows and hobbyist Linux admin. Server 2000-2022, Win 7/8/10/11, CentOS, Ubuntu.

**Server**: Build/config/maintain/migrate hosts: File, IIS, MSSQL, Hyper-V, Active Directory, DNS, SMTP, etc.

**Network**: Switching, routing, cabling standards, host/edge firewalls, F5 HLB, scripted virtual network mgmt.

**Scripting**: Batch for cmd line tools/taskschd/wrappers, AutoIt and WinForms for GUI tools/interaction.

**PowerShell**: Advanced functions, one liners, script modules: Tasks APIs .NET CIM SQL AD EMS SCOrch Azure.

**Hardware**: Build/upgrade/repair workstation, laptop, rack mount, and blade hardware at the component level.

**Imaging**: WDS, WinPE, AIK, DISM, extensive automated config of physical and Hyper-V/Cloud VMs/images.

**Security**: VPNs, MFA, IPS/IDS, FDE tools, CVE aware, secure scripting, certificate/patch/password mgmt.

**Web**: Working knowledge of HTML, CSS, JavaScript, PHP and MySQL for website/utility/report creation.
**CAD**: Fast block modeling, fitting/tolerances, rapid prototyping, 3D printed functional parts, concept art.

**Etc**: Self-starter, detail oriented, high quality work, quick prototyping with new concepts, 120 WPM typing.

**EXPERIENCE**

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**Cloud Interfaces LLC** – Lacey, WA **May 2022 – Present
Self-Employed: Design Engineer, IT Systems Engineer**- Bootstrapped in 2024 because I have a prototype, and I’m sick of jabbering recruiters wasting my time.
- Business: Infrastructure deployments, migrations, documented process automation, service agreements.
- Residential: OS diagnostics, ESD-safe part handling, network/storage security, malware removal, data recovery.
- Solo designing, prototyping, and launching a fully 3D printable consumer product, self funded with Bitcoin.

**Employment Security Department** - Lacey, WA **July 2018 – Oct 2018**

**WITS DE Team FTE Position: IT Solutions Engineer IV**

- Developed PowerShell projects, software packaging, BMC Remedy tickets, patching, O365, project status sheet.

- Wrote PowerShell script modules, scripts, and SCOrchestrator runbooks for automated employee on-boarding.
- Created compact GUI admin tool to easily launch scripts and runbooks, w/toggle against SCCM collections.
- AFSCME union IT role, abruptly terminated; mgmt couldn’t grant access, or say where data was stored.

**Esterline Corporate** - Bellevue, WA **May 2016 – Jun 2017**

**IT Infrastructure Team FTE Position: Automation Technician**

- Developed PowerShell v2/3/4 projects within a Server 2012 production environment:

 - Wrote script modules: Oracle HCM (SOAP/XML), Bluejeans account/meeting mgmt (REST/JSON).

 - Created scripts/tasks: HCM/AD bi-directional contact/user sync, custom employee tables/reports,

 share permission SOX audit w/HTML tree view email output, Bluejeans user entity tagging for usage billing,

 scheduled task cloning for new gMSA principals, and SQL table bulk updates w/regex column data validation.
 - Nightly task that creates/maintains Exchange DLs using HCM records w/custom field matching CSV config.

- Integrated HRIS HCM employee data with IT SQL based applications, using REST/SOAP API endpoints.

- Updated administrative GUI tool, which launches Orchestrator runbooks for account and security validation.

- Created Unicode HTML mail templates for AD/SCOrch: new hire welcome, password/lockout notification.

- Wrote documentation pages for all production modules/scripts/runbooks, in a shared OneNote notebook.

- PSModules: AD, SCOrch, ScheduledTasks, MSSQL, Exchange (EMS). Tools: ISE, SSMS, ADUC, RDCMan.

**Microsoft** - Kirkland, WA **Feb 2015 – Dec 2015**

**Insight Global Vendor Position: IT Systems Engineer**

[**343 Industries**](https://www.343industries.com/), IT Engineering Team

- Supported studio dev systems: storage/cache/build/deploy servers, game clients; upgrades, documentation.

- Built VM hosts, content/lightmap/code builders; rack/network/image/config, SSD/SAS RAID, 20/40Gb LACP.

- Developed PowerShell v4 projects for server and client farm build/config automation:

 - Post-imaging script module: runs role specific setup steps, whitelisted spare drive initialize/partition/format,
 syncs TFS farm tool branches, installs utilities, and logs/mails the result, from a batch wrapper double click.

 - Migration of on-prem VHDX to new Azure VM with automatic UEFI bootloader conversion using DISM tools.

 - Scripts for AD cleaning/prestage, farm maintenance, storage/service monitoring with service restart sequence,

 Hyper-V network/storage batch config, and Wireshark install/remove w/CDP filter for switch port location.

- PSModules: ActiveDirectory, Hyper-V, Azure, ScheduledTasks, TFS, Storage, NetAdapter, SQL, Exchange.

- Tools: ISE, SSMS, TFS (check-ins, projects, tasks), ADUC, RDCMan, Solarwinds, Wireshark, Office 2016.

- Offered FTE by studio, which I turned down, due to the 2013 Snowden NSA leaks that implicated Microsoft.

**Microsoft** - Redmond, WA **Mar 2014 – Sep 2014**

**Experis Vendor Position: IT Service Engineer**

**MSIT Identity and Access Management**, FIM/AD Sync, Service Availability

- PowerShell v3: Developed config/object/account mgmt scripts for Server 2012 R2 environment:

 - Script that verifies/updates registry via async remote jobs, using path/key/value table, with audit style logs.

 - MSA module that will create/clone/modify tasks, set service principals, and grant account object permissions.

- Frequently used PowerShell ISE and TFS 2013 for check-ins and task tracking, misc SQL/event query scripts.

**Microsoft** - Bellevue, WA **Mar 2013 – Dec 2013**

**Insight Global Vendor Position: Systems Engineer II**

**Microsoft Commerce Transaction Platform**, Ops SE Team

- Daily triage, investigation or team engagement for service endpoint/server health alerts from SCOM/Partners.

- Participation in a 7x12 on-call rotation as part of T3 SE team supporting servers hosting business-critical APIs.

- Supported multiple distributed PPE/Prod environments running IIS 7-8, SQL 2008R2 based web services.

- PowerShell v2: LDAP query, SQL select/insert (PS/TFS bugs, X.509 thumb/exp, GUIDs), net/file validation.

- Regular use of SSMS, LogParser, SCOM Console, NetMon, Profiler on WS2008R2/2012, Office 2013.

**Microsoft** - Bellevue, WA **Aug 2011 – Dec 2012**

**CSI Vendor Position: Systems Engineer**

**MSN Global Live Site Engineering**, Publishing Platform and Extended

- Utilized internal tools for change/request/incident tracking, and SCOM/URL/Keynote monitoring of \*.msn.com.

- Deployment and decom of PPE/Prod servers in CMS/FE roles, while maintaining site/service availability.

- Investigation and resolution of live site incidents, or escalation to appropriate team/individual.

- Install/config/repair: IIS 7.5/7/6 pools, SQL 2008 R2 cluster replication, Wansync, CMS fetchers (Shuttle).

- Batch/cmd: IE security zones/options for CMS access, FEW deployments, endpoint IS/OOS, advfirewall.

- Wrote helper AutoIt tools to assist with granting CMS permissions through ASP web forms and autofilling of emails.

- Clarified deployment/KB docs; managed F5 WIP/VIP traffic/failovers; add'l tools: Octopus, Autopilot, Fiddler.

**Microsoft** - Redmond, WA **Jan 2008 – June 2011**

**CompuCom Contract/Vendor Position: Lab Manager, Software Test Engineer III**

**Microsoft Expression Web**, Test Automation Lab

- Maintained pool of test clients, service machines, and Hyper-V VMs, both individually and on a lab team.

- Tested daily product builds using dynamically generated VMs hosted in a Hyper-V cloud environment.

- Created custom WIM image library using ImageX/AIK tools, used for automated bare metal WinPE imaging.

- Hardware building, racking and Server 2008 setup in on-campus labs (Raritan, Smart-PDU, VLAN, RAID).

- Windows setup automation, registry and permissions scripting, UAC/LUA handling, web service log parsing.

- Daily use of SCVMM, batch/VBS/AutoIt scripting, internal test run tools, Office 2010 and Sharepoint.

- Strong exposure to software development lifecycle; present for three major version product releases.

- Wrote AutoIt lab client mgmt/imaging/status GUI; TFS for scripts and tooling adds/fixes/updates.

**IBM** -Kirkland, WA **Aug 2004 – Jan 2008**

**CDI/CTG Contract Position: Hardware Test / Rework Engineer**

**IBM Center for Microsoft Technologies**, eServer xSeries BVT, WHQL Test Lab, Build Lab

- Performed build verification testing, provided status for socket 604/771/775/940/AM2 rack/bench servers:

 - Windows Server 2003/2008 network/domain mgmt, with hardware, firmware, and driver troubleshooting.

 - Planar rework, including SOIC/SMD installation and removal, jumper wires, circuit and laminate repair.

- Filled requests for Beta/RTM OS builds, created bootable media/images, scripted WinPE 2.0 custom drivers.

- High-value part tracking using internal inventory control tools, quarterly reconciliations, strict record keeping.

- Wrote setup and installation technical docs for server and desktop products, for external web publication.

- ESD training and equipment calibration. Led annual site training, quarterly equipment validation.

**Amgen** –Datacenter Migration Contract - Seattle, WA **2004**

**Terabeam** –Desktop Support - Redmond, WA **2003**

**EDUCATION**

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**Networking / Virtualization Home Lab**

Built, configured, and maintain a home lab, on a Haswell Xeon server and 12U network/storage rack.

 - Used as lab/eLearning sandbox for configuration, testing, and automation with PowerShell and Python.

 - Server 2012 R2 hosting VMs for SQL 2012 server, IIS 8 server, Win 10 client, and CentOS.

 - Cisco switches w/OOB console server, fanless Snort IDS, and iSCSI NAS VHD catalog.

**Cascadia College 2004**

Received Associate of Applied Science in Network Technology degree

IPC 7711/7721 Certified Rework and Repair 2006

Serial No. RR-S 4901

CompTIA A+ Certified 2003

ID: COMPI0669548

**LINKS**

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- <https://github.com/mbarr564/New-SubredditHTMLArchive>

- <https://www.linkedin.com/in/mike-barr-305b499>