ANDRE BASSON Graduate Systems Engineer @ Lancom Technology

Comprehensive Breakdown

The following is a comprehensive* breakdown of the IT services performed, as well as systems & technologies leveraged and managed while working at Lancom Technology as a Tier 1 (Graduate) Systems Engineer

* For a Condensed Breakdown | click <u>here</u>

GRADUATE SYSTEMS ENGINEER (T1)

Lancom Technology | 03/2021 - 02/2022

Perform a range of IT support services at T1 level at a rapid growing Managed Service Provider, including:

- Provide IT support for Windows Workloads for both on-premises or in the cloud systems for remote customers.
- Review, Diagnose, Manage and Close all assigned tickets within SLA
- Analyse tickets & find key problems to investigate & resolve root causes
- Liaise with clients, customers and vendors, answering inbound support calls and log tickets
- Exhibit fantastic written and verbal communication skills, as well as have an excellent understanding of the fundamentals of good customer service

Manage, support and leverage technologies at Tier 1 level for:

Lancom Technology (Employer):

- Liaising with staff members
 - Service desk manager (SDM) Dennis Apolonio
 - Customer success manager (CSM) Mike Foresyth
 - Pod/team leader, pod/Team members, incl. cross pod
 - o Jonathan Sinclair (Green pod)

Ticketing Systems

- Connecwise Manage
 - o Log, update, manage & assign tickets
- Deskdirector Tech
 - o In-house application interfacing with Connectwise Manage
- Logging time on tickets for actions performed, etc.

Automation & Remote access

- ScreenConnect to remote locations
- Connectwise Automate (labtech)
 - o Remote connection to computers
 - Investigations/troubleshooting of user's computer hardware & software, and network/infrastructure detail
 - Pushing scripts (pre-defined)
 - Starting/restarting services on remote machines
 - Port scanning

- o Configure automated updating/patching software, incl. 3rd party software
- Teamviewer
- MS Quick Connect
- Remote Desktop Protocol (RDP)

Storage and Collaboration

• OneDrive, SharePoint, OneNote

• Correspondence & Email

- Outlook
- Outlook web application (OWA)
- MS Teams

• In-house applications

- CSP portal
- Web app interfacing with MS license intermediary (eg. Dicker Data) to purchase and allocate licenses in realtime to client.
- Desk Director Tech
- Ticketing system & interface to Connectwise management
- Lancom Button ticketing system front end interface to Desk Director Tech (both client and technician portal)

PBX/QVR systems

- 3CX
- Managing new and current users, filters, call-forwarding, ring-groups, provisioning DDIs and phones, etc.

• IT Documentation Database

ITGlue

• Company Analytics, Reporting, Gauging, Metrics, Customer Satisfaction (CSAT)

Brightguage

Other

• LastPass, Nitro PDF, Adobe, Bloomberg Terminal client application.

Clients, Customers and 3rd Party Vendors:

- Liaising with clients, customers and 3rd party vendors, incl.:
 - Taking/making phone calls, messaging via ScreenConnect messenger, email and ticket updates
 - Creating and providing instruction manuals to customers
 - Writing of reports (eg. License distributions, etc.) for customers

• Computer Hardware

- HP, Dell and Lenovo laptops, PCs and tablets/surface Pros, HP Thin Clients
- Docking stations (USB-C, USB3)
- Hardware diagnostics and fault-finding, incl.:
 - o General troubleshooting in Windows
 - o 3rd party and/or manufacturer standard diagnostic tools
- Software & BSOD troubleshooting
- LAN/wifi Printers setup and driver installations

• Windows 10 Professional

- Installation, setup, configuration, upgrades, hardware/software troubleshooting
- Manage local user profiles, accounts and group membership, etc.

• Line of Business (LoB) Software Application Support

- General support, installation and troubleshooting
- Liaising with 3rd party vendors
- Lodging support tickets with Microsoft, Bluebeam, LastPass, Bloomberg, etc.

Managed File Transfer (MFT) systems

- GoAnywhere MFT
 - Manage, troubleshoot and investigate file transfer projects and alerts issued, incl. understanding the basics of:
 - MFT Project monitors, triggers, workflows, filters, schedules, audit logs, etc.

Microsoft 365 Apps for Business/Enterprise

- MS Outlook
 - Installation and setup
 - o Management & troubleshooting, incl.:
 - Add-ins & 3rd party extensions (eg. Hubspot CRM, Bluebeam)
 - Troubleshoot MS license activation/sign-in issues & fixing user mail
 Profile issues
 - Mail rules and filters
 - Adding 2nd primary mailbox of shared mailboxes manually in Outlook desktop app
 - Mailbox resizing (eg. historical email retrieval time-frames)
 - Distribution lists/group management (O365 portal, or manually)
 - Email Signature setup (manually in desktop app, in OWA, or pushed via Connectwise Automate script)
 - Setup "out of office" emails from Office 365 user portal
 - Email exporting, quarantining, releasing, investigation, etc. in Security & Compliance Centre.

• Microsoft Office Apps (Word, Excel)

- o Installation, general usage, upgrading and troubleshooting, incl.:
 - Investigating macros run-time issues, add-ins, extensions & plug-ins
- Vast array of general troubleshooting practices, incl.:
 - License sign-in and activation issues

Microsoft Teams

- o Installation & general troubleshooting on common issues
- o General usage, incl.:
 - Creating Teams channels
 - invite/schedule Teams meetings
 - adding users to a team in Teams
- o General admin in MS Teams Admin Centre, incl.:
 - Enable, configure and invite external access / collaboration for external users

OneDrive

- o Sign in, setup and troubleshoot user's OneDrive on PC
- o Map user's OneDrive location to local drive on PC

SharePoint

- o General admin, troubleshooting and investigations in SP Admin Centre.
- o Syncing SharePoint site folders to computer (accessible in File Explorer)
- o mapping local drive to SharePoint site folder
- Investigate and troubleshoot general user experienced issues, eg. Access to SP site issues
- o Manage user/group access permissions to Sharepoint site and folders
- o file restoration or reversion to previous versions

• Office/Microsoft 365 Admin Centre

- Create and manage user accounts
- MS License management
- Perform an assortment of investigations, incl.:
 - Checking Office app service health
 - Users at risk investigations (eg. Authorization/sign-in attempts, conditional access triggers, etc.)
 - Email exporting, quarantining, releasing, investigations, etc. in Security & Compliance centre.
- Configuring guest user access for external users (MS 365 groups, MS Teams, file sharing)
- Configuring external sharing to Sharepoint sites and OneDrive.
- Manage MS Groups and memberships
- Syncing information from AD (on-prem) and Azure AD from PowerShell.
- Creating and manage mail distribution groups/lists
- lodging MS support tickets

Exchange Online/Admin Centre

- Manage mailboxes (primary or shared) and mailflow/email trace issues, incl.:
 - o Access permissions to (shared) mailboxes, and (shared) calendars

- Incl. using PowerShell scripts
- Setup mail forwarding
- Distribution lists (creating, add/remove accounts)
- o Email quarantining, releasing, investigations, etc.
- SPAM filtering
- o Mailbox In-place archiving
- o Mailbox resizing (limitation of historical email retrieval)
- o Testing mailflow via message trace investigations
- Investigate email delays, non-deliveries, including analysis of headers (eg. SPF records authentication issues) in **MXtoolbox**.

• Patching and Updates

- HP Thinclient Widows patching/updates via HPDM 5.0 admin portal
 - o Pre-defined scripts employed during updates/patching.
- Connectwise Automate:
 - o Configure auto updates of 3rd party software using plug-in (eg. Ninite)
- Windows Server Patching
 - o Following best practice and company provided guidelines.

Windows Desktop (Windows 10 Professional)

- Installation, setup, configuration, upgrades, hardware/software troubleshooting, incl. peripherals and docking stations
- Computer to AD and/or Azure AD domain joins/registrations
- Manage local user profiles, accounts and local security group membership in Active Directory (Azure or on-prem)
- Backups and restoration of user personal data, incl. browser bookmarks and password credentials, and email signatures
- Implement vast array of troubleshooting techniques and common practices, incl.:
 - Computer Management tools
 - Event log investigations
 - o MS and 3rd party hardware and software diagnostics (eg. Bloomberg Terminal)

• Windows Server (2008, 2012, 2016)

- Task scheduling management and investigation
- CMD line scripting
- PowerShell scripting, eg.:
 - Manage access permissions to shared mailboxes, calendars, distribution groups, etc.
 - o Manage/investigate user mailbox details (eg. Email Forwarding)
 - o Investigate AD/AAD join status
 - Manage OWA mailbox policies (eg. Block/allow file types)
- Event logs, incl.:
 - o Investigate and troubleshoot RDS & VPN connection issues
 - o Investigate into VPN authentication issues on Radius (NPS) Server
- Clustered SQL server patching
 - Performed AOAG clustered Windows server patching using SSMS to control failover between primary and secondary servers.
- Data restore & recovery via Backup manager
- Free space management using **Wiztree** tool

Printer Server management

 Investigating and troubleshooting printer issues using "Print Management" service on Windows Server

• Active Directory (on-prem) on Windows Server

- AD/AzureAD Domain join computers
- Create and manage of user accounts and groups
- Syncing information to O365/Azure
- Replicating AD to other Domain Controllers via AD Sites and Services
- Group Policy Object (GPO) management in GPM
 - primarily to investigate current GPOs and how it relates to mapped network drives and user access permission to resources.
 - o Create new GPOs
- Manage access and access permission to shared resources (network paths) & printer access (see GPO/GPM)
- Manage and investigate Applocker application permissions/access in Event logs and GPOs
 - o Manage Applocker rules for apps running on WVD/AVD host servers.

Microsoft Azure

- Also see Office 365 portal for similar management options and functionality
- Azure Active Directory (Azure AD)
 - o Investigate and manage user accounts, security groups and devices
 - o Device AAD domain join and/or registration
 - o MS 365, Teams and Security Group management
 - o Manage & investigate Conditional Access policies protect user identity
 - Eg. force MFA, geo (un)blocking, setup named locations for remote workers, allow on-prem single sign-on (SS0)
 - Manage and troubleshoot user Multifactor Authentication (MFA), incl. setup of MS authenticator app on mobile phone
 - Review/Manage approved Enterprise Application registrations and federation/SSO, incl. approving admin consents.
 - o Manage access roles and access permissions to Azure subscriptions
- Intune/MDM/Microsoft Endpoint Manager
 - Enroll & Sync devices to Intune manually, and in MS Endpoint Manager Admin Centre.
 - o Manage devices: Wipe, reset, etc.
 - o Create and manage customer Configuration Profiles:
 - Eg. Custom screen inactivity lockout
 - o Investigate device compliance and audit logs to track and monitor events
 - Managed Apps: App configuration
- Defender for Endpoint
 - Eg. Email quarantining, releasing, investigations, etc. in Security & Compliance center.
- Privileged Identity Management (PIM)
 - o Manage Admin AD roles
- Azure Backup Center
 - Use Azure Backup Center to recover/restore user data/files from Backup Vaults in Azure Storage Accounts.

- Azure Storage Accounts
- Windows/Azure Virtual Desktops (WVD/AVDs)
 - AVD/WVD Desktop client management (install/uninstall, troubleshooting, subscriptions)
 - Managing WVD/AVD user access:
 - Ie. Adding/removing users to host pool either manually in Azure, or via
 Security Group Policy membership in AD or Azure AD.
 - o Drain (load balance) AVD host server into/out of available host pool
 - o Restore/recover files from VM/AVD/WVD from Azure VM backup
 - o Troubleshooting AVD/WVD issues, incl.:
 - Login issues
 - Blank user profile issues
 - eg. Manage/delete stale connections (SMB handles) in user's profile from Azure Storage Account.

Antivirus

- Manage user licensing
- Perform basic admin management and troubleshooting of AV applications for ESET, MS
 Defender AV, Webroot

VPNs & Firewalls

- VPN client applications setup and management, incl.:
 - o Azure P2S, SonicWall, Sophos, etc.
- Sonicwall VPN and firewall setup via SonicWall portal, incl.:
 - o User and user license management

Web Browsers

Install & Troubleshoot common issues for: Google Chrome, Edge, Internet Explorer,
 Firefox

• Assortment of 3rd party application support, incl.:

- MS Visual Studio & Visual Studio code
- MS SQL Server
 - ODBC drivers
- Bloomberg terminal and Splashtop Business (remote connection) app
- Etc.