

**Technical Discipline - Corporate Communication**

Band 6	Ensure effective management and monitoring of the email system. Ensure effective security management and related procedures. Regular reporting and analysis of email traffic / utilisation. Ensure responsive delivery times in accordance with email SLA. Ensure email reliance and regular database maintenance. Ensure effective management of the backup, restore and disaster recovery procedures for the email system. Airwatch mobile device management design and maintenance Ensure effective management of the Email Gateway (SEA (Sophos Email Appliance)) Sophos PureMessage Administration
Band 5	Evaluate email infrastructure for upgrades, improvements and recommendations. Evaluate email infrastructure for upgrades, improvements and recommendations. Ensure complete and up-to-date server documentation including data store membership and external connectors. Provide technical expertise and training on the server / AD infrastructure, usage and troubleshooting. Provide technical expertise and training on the server / AD infrastructure, usage and troubleshooting. Airwatch Policy Administration and deployment To provide the effective management and support of Anti-Virus, Anti-spam and List Server technologies.
Band 4	To provide the effective management and support of External Mail Connectors To provide the effective management and support of Outlook Web Access server (IIS) To provide the effective management and support of Email client technologies (Outlook 2010,365) To provide the effective management and support of Instant Messaging Services (365) Airwatch Device Enrollment Troubleshoot and resolution of related faults
Band 3	To install and test client Email client technologies(Outlook 2010,2016, 365) To provide support for Email client technologies (Outlook 2010,2016, 365) To provide support for instant messaging services (MSN, Conferencing Server)
Band 2	To support and develop knowledge in the installation and testing of client Email client technologies (Outlook 2010, 365) To support and develop knowledge in the installation and configuration Email client technologies (Outlook 2010, 365)

## Technical Discipline - Virtualisation / Citrix

**Band 6**

- Ensure effective management and monitoring of the VMware core system.
- Ensure effective management and resolution of VM faults and fixes
- Capacity planning and reporting of VM infrastructure
- Ensure responsive delivery times in accordance with server SLA.
- Manage Design of scalability, availability and manageability
- Ensure effective management of the backup, restore and disaster recovery procedures for the VM Infrastructure.
- Ensure effective management of the Citrix XenDesktop environment
- Ensure effective management of the AppV environment and creation of complex packages
- Management of AppSense to support the Citrix Environment
- Ensure effective management and monitoring of all aspects of VM security.

**Band 5**

- Evaluate VM infrastructure for upgrades, improvements and recommendations.
- To effectively manage shared resources
- Ensure complete and up-to-date documentation
- Provide technical expertise and training on the VM infrastructure, usage and troubleshooting.
- Deploy and Manage VM guests
- Citrix Policies and how these apply to the environment
- To provide the effective management and support of Backup strategy.

**Band 4**

- To provide the effective management and support for VM guests.
- To provide basic management and troubleshooting of VM infrastructure
- To provide support and
- To effectively use and manage Vmotion and vStorage motion
- Troubleshoot and resolution of related faults

**Band 3**

- To install and use the VM client
- To have basic understanding VM infrastructure
- Ability to reset Citrix Sessions
- To provide basic support for users of VM infrastructure

**Band 2**

- To support and develop knowledge in VM technologies
- To support and develop knowledge of Guest VMs setup and deployment

## Technical Discipline - Network Infrastructure

Band 6	<p>Provide effective management and monitoring of the LAN / WAN infrastructure. Ensure effective security management and related procedures. Provide regular reporting and analysis of network traffic / utilisation Ensure effective troubleshooting of the physical and logical network. Ensure complete and up-to-date network documentation including fibre runs, redundant links. Provide effective and manage wireless infrastructure Provide effective support for Citrix Netscaler Ensure effective disaster recovery plans for the LAN / WAN.</p> <hr/>
Band 5	<p>Provide technical expertise and training on the network infrastructure, usage and troubleshooting. Effective detailed communications with 3rd party organisations to manage and implement new network equipment and access points. Ensure complete and up-to-date documentation of all network device addressing (IP addresses, subnet masks etc) Evaluate network infrastructure for upgrades, improvements and recommendations.</p> <hr/>
Band 4	<p>To provide network device and workstation support for hardware and network applications To provide network troubleshooting and contingency support To provide new and upgrade installation support with 3rd part organisations Troubleshoot and resolution of related faults</p> <hr/>
Band 3	<p>To provide basic network device and workstation support for hardware and network applications To provide basic network troubleshooting and contingency support</p> <hr/>
Band 2	<p>To support and develop knowledge in the installation and configuration of network and workstation devices To support and develop knowledge in the installation and configuration of network applications To support and develop knowledge in network troubleshooting</p>

### Technical Discipline - Desktop Support Services

#### Band 6

Ensure effective management and monitoring of the anti-virus domain.  
To provide effective management and support of:  
Sophos Enterprise Console  
SCCM 2012 Design, Management and Configuration  
McAfee VirusShield and related Desktop Security products  
Provide effective support and management of server database technologies (Microsoft SQL server, Sybase SQL)  
Provide technical expertise and training on installation and deployment of Microsoft and Non-Microsoft Software  
To ensure Desktops are secure including port blocking and disk encryption  
To develop and set desktop security policies (USB/Encryption/OS Application stations)  
Provide technical expertise and training on the anti-virus domain infrastructure, deployment, usage and troubleshooting.

#### Band 5

Ensure effective deployment of VirusShield to all servers and desktops within the Trust.  
Ensure all servers and desktops are configured with latest anti-virus library files.  
Evaluation and testing of all new anti-virus technologies before implementation.  
SCCM Package Management and Deployment  
To manage desktop security policies (USB/disk encryption technologies)  
To manage and recommend changes to the desktop security policies and procedures  
Ensure effective pro-active monitoring of current virus trends to assess potential threats.  
Ensure complete and up-to-date documentation of all anti-virus domain configuration.  
Provide effective support for the Pathology, Cytology and Breast Screening Data Transfer Service (DTS)  
Provide operations team with skills and tools necessary to deploy workstations and peripherals.  
Evaluate network desktops for both software and hardware upgrades, improvements and recommendations.  
Ensure effective secure, seamless remote deployment of compatible software / operating systems to desktop clients.

#### Band 4

Ensure effective provision of secure remote desktop access to all servers and desktops for fault resolution and support.  
Provide effective management and support for the installation, configuration and security (client / server) of all departmental systems.

Provide effective support for the iSoft system (Citrix support, user account / profile management, network printer support)  
Provide effective support for the Unix operating system (networking, network printers, user accounts Telnet and FTP client applications.  
Provide desktop troubleshooting for hardware, software and operating system

---

**Band 3**  
Provide Remote support for networked users  
Provide basic technical expertise  
Provide basic desktop troubleshooting for hardware, software, network and operating system

---

**Band 2**  
To support and develop knowledge in the installation and configuration of hardware, software and operating systems  
To Support and develop knowledge in troubleshooting and resolution in hardware, software.

### **Technical Discipline - Disaster Recovery and Contingency**

**Band 6**  
Provide secure server backup infrastructure using imaging technology and magnetic media libraries (Arcserve)  
Provide comprehensive recovery plans for main computer suites  
Ensure system owners are aware of risks and recovery procedures and time scales and subsequent contingency plans

---

**Band 5**  
To provide the effective management and support of:  
Disaster recovery software (Arcserve)  
Robotic tape libraries.  
Storage Area Network (SAN) device.  
Fibre Channel disk application residing on SAN.  
Periodic restores of system backups to confirm backup integrity.  
Ensure effective troubleshooting of disaster recovery schedule  
Ensure effective disaster recovery plans both onsite and offsite.  
Provide secure storage of all software and related licences required for recovery.  
Provide effective recovery of servers within agreed SLA.  
Provide detailed documentation in both electronic and manual format related to disaster recovery.  
Provide comprehensive recovery plans for individual servers  
Provide comprehensive recovery plans for backend servers and departmental servers

---

**Band 4**  
Backup and restore of files, folders, workstations and server applications  
Backup and restore of Microsoft server Applications (SQL, SMS Server)  
Basic Media management  
Knowledge of Image and sector level backups and services

---

**Band 3**  
Backup and restore of files, folders and workstations  
To support and develop knowledge in Disaster Recovery Planning

Band 2

To support and develop knowledge in Disaster Recovery Planning  
To develop knowledge to backup and restore files, folders and workstations

**Technical Discipline - Active Directory and Appsense System Support**

Band 6

Provide effective management and monitoring of Microsoft Active Directory Domain infrastructure.  
Provide effective management and technical design changes of Appsense Management Suite  
Provide technical expertise and training on the server / AD infrastructure, usage and troubleshooting.  
Provide comprehensive AD design and development plans  
Evaluate server / AD infrastructure for upgrades, improvements and recommendations.  
Provide penetration and security testing on servers and network using 3rd part tools

Band 5

To provide the effective management and support of:  
Microsoft Windows 2012 TCP/IP infrastructure (DHCP, WINS and DNS).  
All Active Directory account information ensuring it conforms to the NHS Directory Service standards.  
All Windows 2012 security accounts (inc Exchange Mail Accounts), security groups, email distribution lists, NTFS shares permissions.  
Safecom Print Management  
Windows 2012 Group Policy Objects for security and software installation.  
Windows 2012 Remote Installation Services.  
Windows 2012 Profiles and Folder Redirection.  
Windows 2012 Certificate Services.  
Active Directory / NHS Directory Connector Service.  
Provide effective management and monitoring of Microsoft Active Directory Domain infrastructure.  
Ensure effective Operating System security patches for servers/desktops and essential upgrades.  
Provide effective performance tuning / monitoring of Windows 2003/8 Active Directory Domain structure (inc use of third party tools)  
Ensure complete and up-to-date server documentation including group membership and system owners and hardware / software inventory.  
Provide the installation / configuration of hardware for file and application servers.  
Provide configuration and support for the system and security patch via patch management infrastructure

Band 4

Provide support for Windows 2012 user and computer accounts

Provide troubleshooting and support for AD Deployed Software  
Provide troubleshooting and support in patch management  
Provide day -to-day operation of system and security patch via patch management infrastructure

Band 3 To support and develop knowledge in the configuration and design of a Windows 2012 active directory infrastructure  
To support and develop knowledge in the configuration of intellimirror and Software Deployment via GPO  
To support and develop knowledge in installation and configuration of patch management

Band 2 To support and develop knowledge in the configuration and design of a Windows 2012 active directory infrastructure  
To support and develop knowledge in the configuration of intellimirror and Software Deployment via GPO  
To support and develop knowledge in installation and configuration of patch management

### Technical Discipline - Security and Firewall Technologies

Band 6 Ensure effective management and monitoring of the firewall/s infrastructure (Checkpoint Firewalls, SecurID, CISCO ISDN Routers)  
Ensure effective management and monitoring of the remote access infrastructure (Shiva, VPNs, Checkpoint Firewalls, SecurID)  
Ensure gateway reliance, minimise downtime with load balancing and clustering infrastructure.  
To provide the effective management and support of:  
Checkpoint Firewall Security Policy.  
Checkpoint, Shiva and SecurID security accounts.  
Secure connections to / from NHSNet and to the Internet using Network Address Translation (NAT)  
Secure Connections from remote users via the AccessGateways, Bband VPN using token based authentication and VPN technologies.  
Web browsing, Web caching and Web access security (Sophos UTM)  
Evaluate firewall/RAS infrastructure for upgrades, improvements and recommendations.  
Effective detailed communications with 3rd party organisations to enable the secure connections between the Trust and the 3rd party.  
Ensure complete and up-to-date documentation of –  
security policies, account information, TCP/IP address information and change control information.  
Provide technical expertise and training on the firewall/RAS infrastructure, usage and troubleshooting.

Band 5 Provide basic troubleshooting and support of firewall infrastructure  
Provide basic troubleshooting and support of remote access infrastructure

Band 4 Awareness of flow of traffic and information through firewall / remote access gateways

Band 3 Awareness of flow of traffic and information through firewall / remote access gateways

Band 2 Awareness of flow of traffic and information through firewall / remote access gateways

### Technical Discipline - Project and System Development

Band 6	SQL and Access database installation and configuration SQL and Access database design, development and support Programming ability in one or more languages (HTML, ASP, VB, .NET, C) Advanced Server and Database Scripting Advanced Server and Database Reporting Manage and support large scale I.T projects
Band 5	Basic SQL and Access database installation and configuration Basic SQL and Access database design, development and support Some Programming ability in one or more languages (HTML, ASP, VB, .NET, C) Server and Database Scripting Server and Database Reporting Support large scale I.T projects
Band 4	Provide basic troubleshooting and support for SQL and Access Database Provide basic Server and Database scripting Support I.T projects
Band 3	Provide basic troubleshooting and support for SQL and Access Database Provide basic Server and Database scripting Support I.T projects
Band 2	Develop knowledge to provide basic troubleshooting and support for SQL and Access Database Develop knowledge to provide basic Server and Database scripting

Support I.T projects

**Technical Discipline - Designing and Building of Server Technologies (Hardware & Software)**

Band 6

Ensure effective management and monitoring of the server infrastructure (hardware and software)  
Advances support and development of the server infrastructure (hardware and software)  
Ensure security, resilience, minimise downtime to a high level for server hardware and software  
To provide the effective management and support of:  
New 3rd party companies server installations  
Internal corporate servers services (inc email, file and print services, network support services)  
Ensure complete, secure and timely server backups (in conjunction with Disaster recovery policy)  
Liaise with 3rd part maintenance companies to resolve hardware and software issues  
Evaluate server technologies for upgrades, improvements and recommendations.  
Effective detailed communications with 3rd party organisations to enable the secure connections between the Trust and the 3rd party.  
Ensure complete and up-to-date documentation of –  
security policies, account information, TCP/IP address information and change control information.  
Provide technical expertise and training of the server infrastructure, usage and troubleshooting.  
Build troubleshoot and support windows 2003/8 cluster services

Band 5

Provide troubleshooting and support of server hardware and software  
Provide development and upgrade of server hardware and software  
Provide server hardware and software design in conjunction with senior technical staff

Band 4

Awareness of server technologies and basic-Medium troubleshooting skills

Band 3

Awareness of server technologies and basic troubleshooting skills

Band 2

Awareness of server technologies

**Technical Discipline - Designing and Building of SAN and Storage Technologies (Hardware & Software)**

Band 6	Ensure effective management and monitoring of the storage infrastructure (hardware and software) Advances support and development of the storage infrastructure (hardware and software) Ensure security, resilience, minimise downtime to a high level for storage hardware and software To provide the effective management and support of: VM Guest servers installations and maintenance Windows 2003/8 Cluster Services Ensure complete, secure and timely storage backups (in conjunction with Disaster recovery policy) Liaise with 3rd part maintenance companies to resolve hardware and software issues Evaluate storage technologies for upgrades, improvements and recommendations. Maintain and install SAN switching fabric Ensure complete and up-to-date documentation
Band 5	Provide troubleshooting and support of SAN hardware and software Help Provide development and upgrade of SAN hardware and software Provide server hardware and software design in conjunction with senior technical staff
Band 4	Awareness of server technologies and basic-Medium troubleshooting skills
Band 3	Awareness of server technologies and basic troubleshooting skills
Band 2	Awareness of server technologies