**WLAMB Training   - Agenda**

* Physical Architecture
* Network Infrastructure
* Network management - Spiceworks
* Windows Domain
  + Creating Users
  + Setting up mailboxes
* File Server management
* FTP Access
* Remote Access
* Managing Exchange
  + Working with SMTP, POP3, and MAPI protocols
  + Setting up customer mailboxes
  + Troubleshooting mail flow
* Terminal Services
  + Updates / management
* VMWare management
* Customer servers
* Citrix and VDI
* Provisioning services
  + Updating software
  + Setting up new VDisks

**Questions**

1. Naming conventions for new server/ Exchange domains

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Management – 10.200.10.10 – Switches, Physical devices

10.200.20.0 – Wlamb Internal – VDI, Terminal Services

10.200.99.0 – DMZ – Backup

10.200.60.0 – Future Uses – No nodes on the network (no device – server, printer, etc.) – Ready to go.

192.168.200.0/24 – VPN IP address range

DFS – Windows Explorer – Tells you which server you are on.

Shared Folders must be done on the Fileserver

Ftproot, sysftp: - FS01

S: - both fileservers [\\wlamb.local\shared](file:///\\wlamb.local\shared) - [\\wlamb-fs01\shared\](file:///\\wlamb-fs01\shared\) - map to local, not fs01

H: [\\wlamb.local\users$\](file:///\\wlamb.local\users$\) - personal

Z: - [\\wlamb-fs01\sysFTP\](file:///\\wlamb-fs01\sysFTP\)

Spiceworks – read only 10000 foot reporting tool.

* Inventories everything on your network
* Remote Desktop \admin
* Inventory – Shows all the systems, ports, memory, etc.
* Wlamb-mgmt:9675\login
* Reports – custom reports, disk space, antivirus, etc.
* Network configurations can be backed up, information, side by side changes in database – management server
* [mike@wlamb.com](mailto:mike@wlamb.com) wlamb123

http:\\wlamb.mgmt:\9675\login

WLAMB-DC01

* This is used to give permission to others for temporary access to our VMs.

Active Directory (wlamb-dc01 – use your own account)

H:\citrixprofile\ - profile settings for the XP and 7

Security Groups – We can add or modify persons to this group so they have temporary access

New Group

Group Policy Management – Policy is for both user group and computer groups

Distribution groups – mailing groups

Create group through Active Directory (right click new -> group)

* Use universal group scope – distribution
  + Members tab, Add mail enabled users
* Go into exchange to enter addresses
* Security groups – global
* Go into the VM that you will be adding a user.
  + Configuration -> Local Users -> groups (Administrator)
  + Add group that was created in Active Directory to the group
* Go back to Active Directory and add a new accounts
* Managed Resources -> Service Accounts -> Maintanence Accounts
* Make sure the member of has the security group associated with it.

Exchange

* Recipient configuration
* Distribution group – new distribution group -> existing group
* Alias – nothing to do with email address – no spaces
* Don’t create an archive
* Double click to get information –
* Mail Flow Settings – Message Delivery restrictions – uncheck ‘require that all senders are authenticated’ – For Groups only
* Managed Resources – Customer e-mail – [actv@wlamb.com](mailto:actv@wlamb.com) as an example
* Managed Users – copy similar profile to the user you want to add – staff users
  + Change home folder – ‘profile’ tab,H: - [\\wlamb.local\users$\%username%](file:///\\wlamb.local\users$\%25username%25) - will change variable
  + ‘Member of’ tab – changes with groups the user is in
  + ‘account’ – change user login ‘@wlamb.com’
  + Check or uncheck for disabled
  + User must change password at next login
  + Go to exchange to add mailbox
  + Hmail, ftp -> fs01
* Organization configuration –
* Recipient configuration – User mailbox – existing user

Fs02 – blackberry enterprise server

F:\Wlamb department shares

* Create new shared folders in this folder

F:\WLAmb User Shares

* TS Profiles – individual Terminal Services are located here.
* \UserDocs\ - H: for each user

DFSRoots – empty target pointer folders

Lastpass.com

* Keypass

DFS Management

* Namespaces - [\\wlamb.local\Shared\](file:///\\wlamb.local\Shared\)
  + Name of New Folder
  + Path of new folder
  + Add authenticated Users – full control
  + Set permissions in ‘Security’
  + Add folder target in DFS Management
  + Add new folder to the other file shared
* Replication
  + New replication group (multipurpose group)
  + Replication group members
  + Bandwidth – Full
  + Primary Member – master copy
  + Folders to replicate – Choose folder to replicate
  + Local Path – Set to the location exactly like the master folder
  + Replication group for Data collection – two way mirroring

Exchange

* Recipient Configuration
  + Contacts – global contact for everyone to see
    - External e-mail address – Sets type of email
    - Alias does not quite matter
    - Place it in a folder to organize
    - General Properties – Hide from Exchange address lists
  + Select a contact
    - Properties -> Mail Flow Settings -> Delivery options
      * Forward to: ‘Choose an email to forward an email to’
    - Message Size Restrictions
    - Message Delivery Restrictions – Can accept or restrict from certain users.
  + Mailbox features – Can change the way a person gets their emails
  + Calendar Settings – automated settings for the calendar. Notification
* New Accepted Domain – Place to add a new domain name to add a variation to an email address (hub transport)
* Server Configuration
  + Owa – external url – webmail.wlamb.com\owa
  + Hub transport – client connection – do not change
  + Internal Relay –
  + Wlamb Client External Auth – can send to any address,
  + Client Access - POP/IMAP -
* Organization Config
  + Hub Transport
    - Send Connectors – verbose logging
  + Global Settings
    - Can change the size
  + C:\Program Files\Microsoft\Exchange Server\V14\TransportRoles\Logs\ProtocolLogs\
    - SmtpSend – See all email sent out
    - SmtpReceive –
* Toolbox
  + Queue Viewer
    - Junk mail
  + Mail flow troubleshooter

ScanMail Management Console – use typical email and password

<https://wlamb-exchange:16373/smex/>

Terminal Services

Citrix Delivery Services Console

* This will create or install a new application
* XenApp (click to make sure there is stuff below) – Click the node to ‘discover’
  + Applications (will see what is deployed)
  + Publish Application
    - Display name -Call it whatever
    - Application description
  + Content – URL, no special control
  + Application
    - from a server – not streamed
    - command line – get from the existing Terminal Services
    - Servers – apply to all servers
    - Operating System User Selector - Then chose users – changed to Entire directory
    - Click ‘configure advanced application settings’
    - Percent of client desktop – 98%

cmd> change user /install – gets session ready to install

cmd> change user /execute – gets session ready to execute applications

wlamb-avsrv – antivirus info, updates comes here

* Windows server update services
* All updates
  + Unapproved – status – failed or needed

VMware vSphere Client – wlamb-mgmt (vmware – managing servers from here) – 10.200.20.55

* Vcenter
  + Hosts and Clusters
  + Datastores
  + Wlamb-mgmt (10.200.20.9)
    - Use normal username and password
    - Use wlamb\administrator
    - New VM (right click on container)
      * Typical – give a name and location
      * Pick a server (10.6 – ESX2)
      * Pick a location VM hard disk – WLAMB customer (archive is stuff we do not care about or is not in use)
      * Pick guest operating system
      * Give it a Virtual Disk Size
      * Leave Thin Provisioning blank and Fault Tolerance blank
      * Can Add a Hard Disk
      * Click CD/wrench – ISO image on local disk
      * VM -> guest -> ctrl-alt-del
      * Can force BIOS Setup on options
      * Ctrl-Alt to release mouse pointer
      * Install VM tools (Guest -> Install/upgrade VMWare Tools)
      * Do windows updates
      * Enable remote desktop
      * To create a template, use an existing VM and then right click to clone to template
        + Same format or Template thin (instances Thick)
        + Customize using an existing customization template (Use customization wizard)
        + Enter name
        + Product Key – License per seat
        + Log in automatically
        + Network settings – Custom Settings

Edit settings for IP Settings

Default gateway (10.200.40.1)

(10.200.20.5, 10.200.20.6)

* + - * + Generate New Security ID (SID) checked
        + Make sure network card is in the VLAN
      * Can edit settings while a s system is running. Cannot change CPUs, memory while it is running
        + Check network adapter
      * Add to inventory – vmx file (keeping physical disk, taking it out of the vsphere)
      * Snapshot
        + Creates a pointer to the existing configuration
      * Can power down, power up, reset system, etc. using this program
    - Templates (Cannot start it up) – can clone or convert to VM
      * Deploy VM
    - C:\Autologin.exe – Automatically launch with a specific profile (enable)
      * Should be in the S:System Administrators\
      * [\\server-name\c$](file:///\\server-name\c$) - Automatically gets to the directory on the C: on the right server
    - Compmgmt.msc – command line
      * Can connect to different systems, edit users
      * Can add to local systems
* Group Policy
  + All Programs -> Administrator Tools -> Group Policy Management
* Citrix Infrastructure
  + WLAMB\_TS01 -> XenApp
  + WLAMB\_TS02 -> XenApp
  + WLAMB-CTX01 – Web Secure Gateway portal
    - Citrix web interface management
      * Controls services functionality
    - Reboot the box or restart the service if it acts wobbly
    - Secure Gateway Management – On or off.
  + WLAMB-XenD01 – Desktop Delivery
    - controls which one is running
    - Desktop Studio – controls all VDI functionality
      * Machines – All different profiles for the machine assignments
      * Container controls VDIs
        + Create Catalogue to create a dedicated VDI (Dedicated – single user)
        + Machines -> right click -> create Catalog
        + Set Assignments for users – access users/rights
        + Logging off – Just like shutting down the system, getting it ready for the next user.
        + Can access new catalogues
        + Install VDA agent on the systems
        + Maintenance mode – to stop people from logging into the systems

Do this through the assignments

Shut all windows version down (Not power off)

* + WLAMB-PVMGMT – Provisioning Services (VDI for development, support)
    - Limits how many are allocated
    - Provisions Services Management – standard credentials
      * Sites – Datacenter (not important)
      * vDisk Pool – all connections must be cleared
        + Private Mode – one system can hit it
        + File Properties -> Mode

Private Image

Boot up any one of the VDIs

2 network cards

One to dedicate to streaming service (PVS)

One to isolate to domain network (Wlamb)

Only for a shared provision VDI

We can login with our user

* + Installing on provisioned VDIs – Citrix Desktop Studio
    - Go to wlamb-xend01 – login to desktop studio
      * Click assignments
      * Put group in maintenance mode
    - Go into vmware and shut down VDIs associated with that group
    - Go into WLAMB-PVMGMT
      * Start -> Citrix -> provisioning services. Open provisioning services console (wlamb-pvmgmt)
      * Expand sites -> DataCenter -> VDiskPool
      * Change VDisk to private mode
    - Go back to VMware and boot the VDI to update
      * .\wlamb
      * p@ssw0rd
      * Change to wlamb (not wlamb.local). Use your own username and password
    - Turn on Windows Update Service on Computer Management
      * Push it to manual, and then disable it when finished
    - Shut down the system
    - Do updates on the Terminal Services first
    - Reboot the VDI after updates
    - Shut down the VDI in the VMware console
    - Go back to PVS
      * Put Vdisk and back to shared mode
      * Enable client side cache
        + File Properties -> Mode -> Access Mode Standard Image
        + Cache on device’s HD
    - Jump back over to XEN01
      * Open Desktop Studio
      * Go to assignments
        + Disable maintenance mode

VMware Template to add a new VDI

* DataCenter -> XenDesktop Setup Wizard (right-click)
* WLAMB-XEND01 (use catalog already out there)
* Wrench next to icon is a template
* Select your host for the location of the new VDI (set template)
* Use your domain credentials to get templates
  + Show templates in the same datastore
  + Allocates template to the host (only shared vDisks will show up)
  + Place in the assignments
  + Tell it how many machines, cpus, memory. Pulling from the templates.
  + Create it in the same pool
    - Will jump the numbers with a scheme if the existing VDI is there
    - Select existing catalogue
    - Hit finish
  + Assign desktops

Use vCenter to shut down and restart VMs.

* Use your own user name and password
* 10.200.20.9 as the location
* Navigate to the VM and create a snapshot
* Power down after a snapshot

Other notes:

* VMWare Tools is a package that interacts with the VMWare console

VM Updates

* WLAMB-FS01 – 5 Windows Updates
* WLAMB-MCOPY-TWC01 – 10
* WLAMB-MSPT-SRV01 – 10
* WLAMB-MHOST-SRV01 – 17
* WLAMB-MGATE-SRV01 - 8