



NATO Communications and Information Agency
Agence OTAN d'information et de communication

INSTALLING LOGFAS ON VMWARE APPSTACK

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Applies to: LOGFAS 6.5.0 and all previous versions.

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INSTALLING LOGFAS ON VMWARE APPSTACK

1 GENERAL

This document describes how to install LOGFAS using the VMWare AppStack environment for Virtual Desktop Infrastructure (VDI). AppStack is used to create a virtualised application that can be provisioned to VDI users. In the Troubleshooting section, this document describes common issues that are known to occur with this setup, and how to resolve them.

2 INSTALLATION STEPS

NOTE

Please note that the following procedures are meant only for a fresh (**NEW**) installation of LOGFAS and **NOT for an upgrade of a previous version**. Upgrading from a previous version has additional considerations that need to be taken into account and are not covered in this article. It is advised to always perform a fresh installation.

2.1 Prerequisites

- Create a new Provisioning VM or ensure that an existing provisioning VM is running.
- Verify that the App Volumes agent is installed on the provisioning machine and is configured to connect to the App Volumes Manager.

2.2 Create an AppStack

Step 1. Log in to your VMware App Volumes Manager Console.

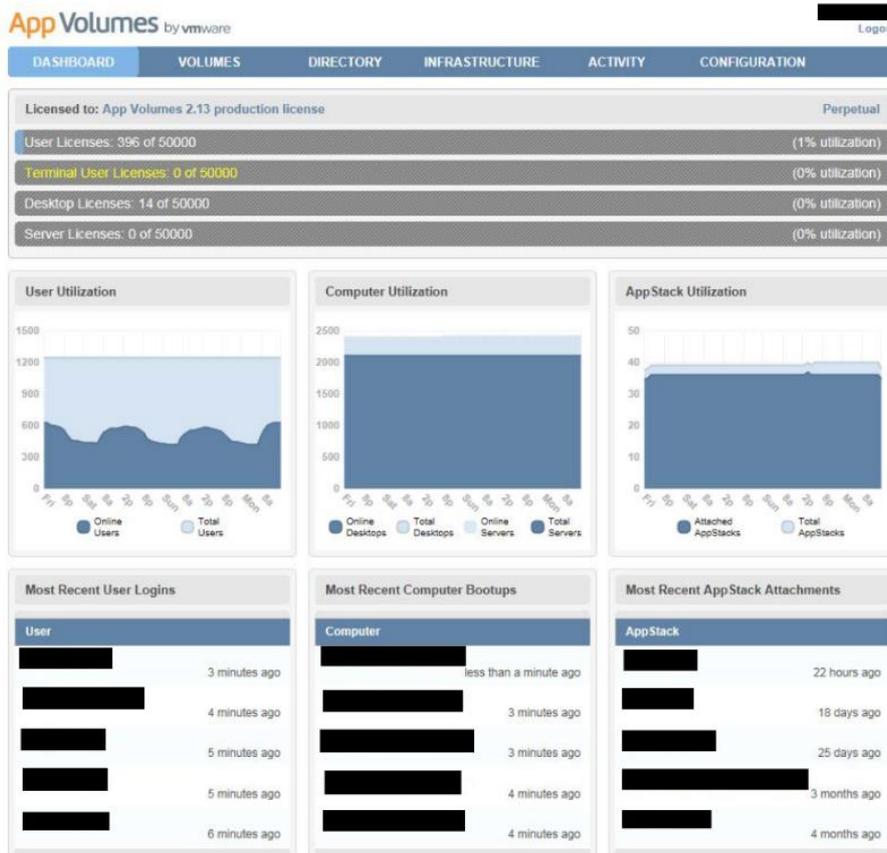
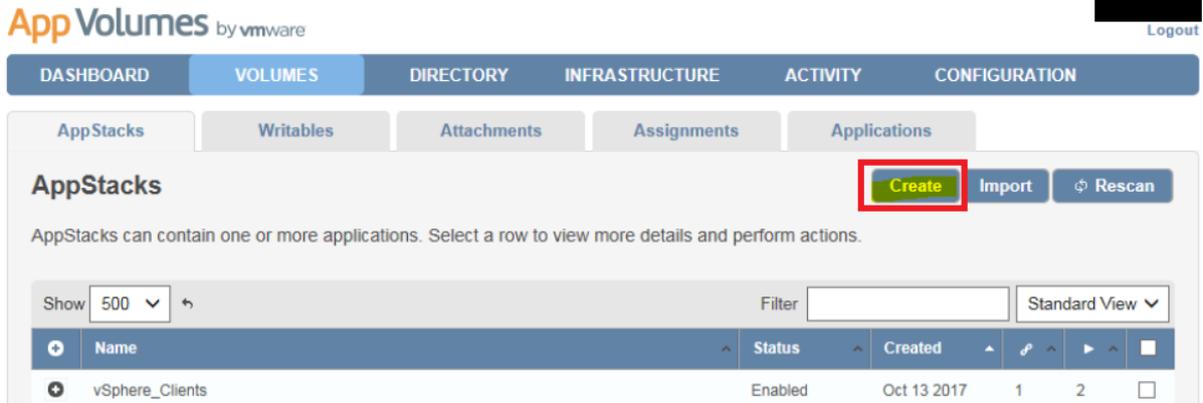


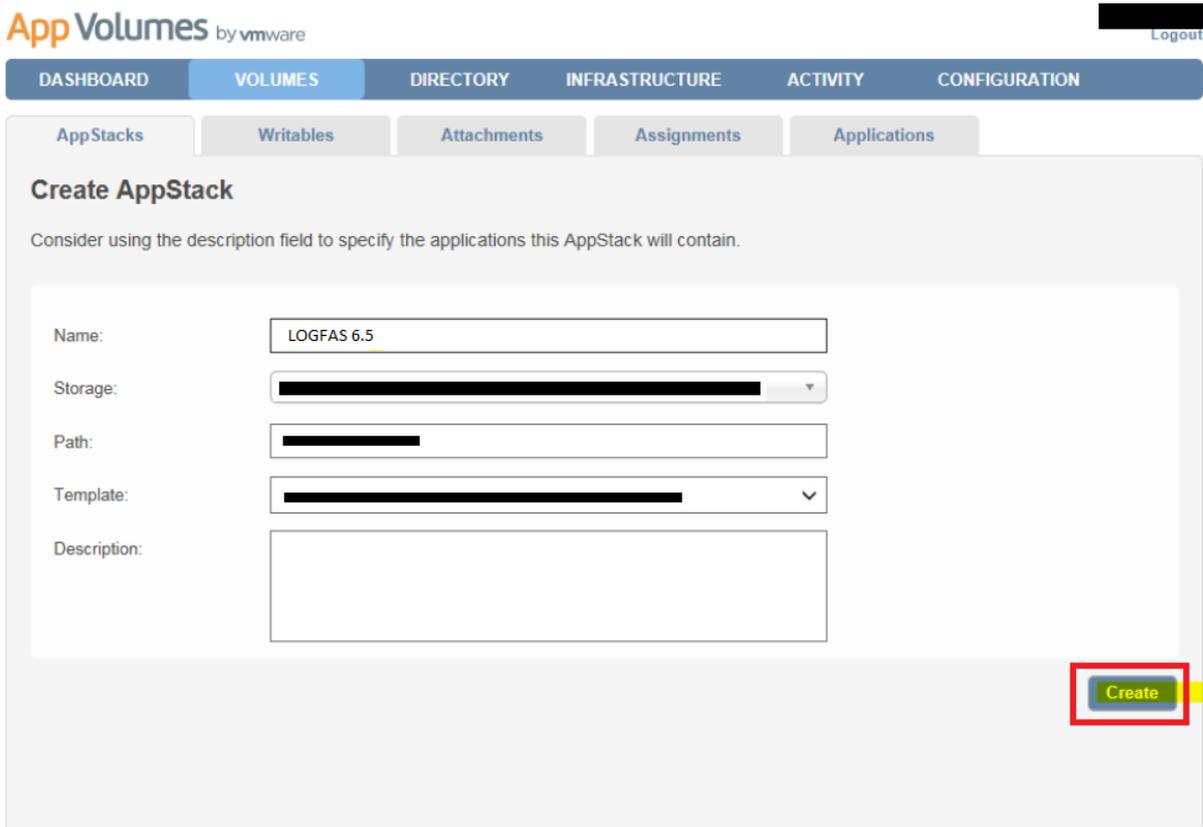
Figure 1 - App Volumes dashboard

Step 2. Click on “Volumes” -> “AppStack” -> “Create”.



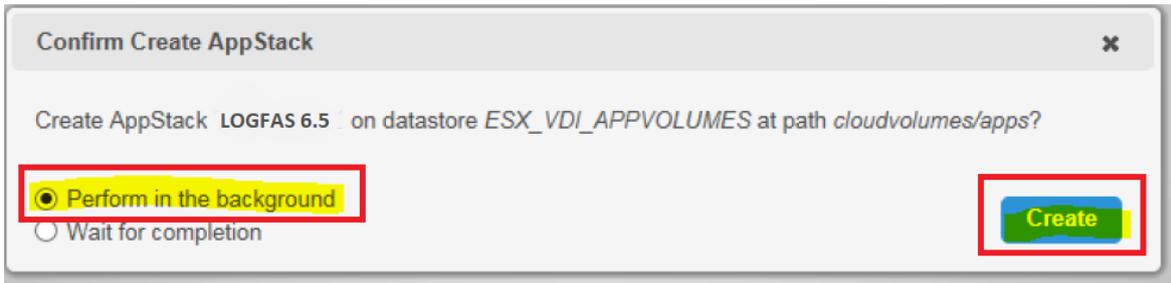
The screenshot shows the 'App Volumes by vmware' interface. The top navigation bar includes 'DASHBOARD', 'VOLUMES', 'DIRECTORY', 'INFRASTRUCTURE', 'ACTIVITY', and 'CONFIGURATION'. Below this, there are tabs for 'AppStacks', 'Writables', 'Attachments', 'Assignments', and 'Applications'. The 'AppStacks' section is active, displaying a table with one entry: 'vSphere_Clients' with status 'Enabled' and creation date 'Oct 13 2017'. A 'Create' button is highlighted with a red box in the top right corner of the AppStacks section.

Step 3. Enter the required details for the AppStack and click “Create”.



The screenshot shows the 'Create AppStack' form. The form fields are: 'Name' (LOGFAS 6.5), 'Storage' (redacted), 'Path' (redacted), 'Template' (redacted), and 'Description' (empty). A 'Create' button is highlighted with a red box in the bottom right corner of the form.

Step 4. Select “Perform in the background” and click “Create”

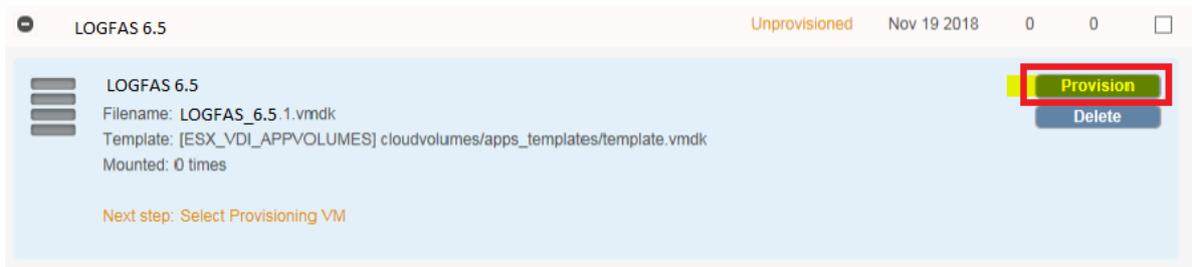


2.3 Provision an AppStack

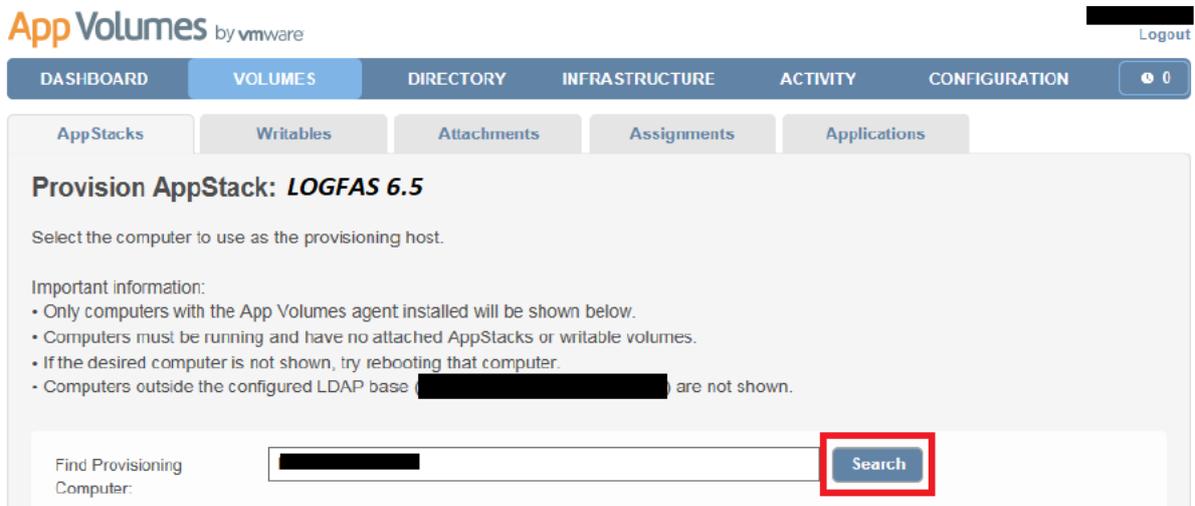
Step 5. From the App Volumes Manager console, click “Volumes” -> “AppStacks”.



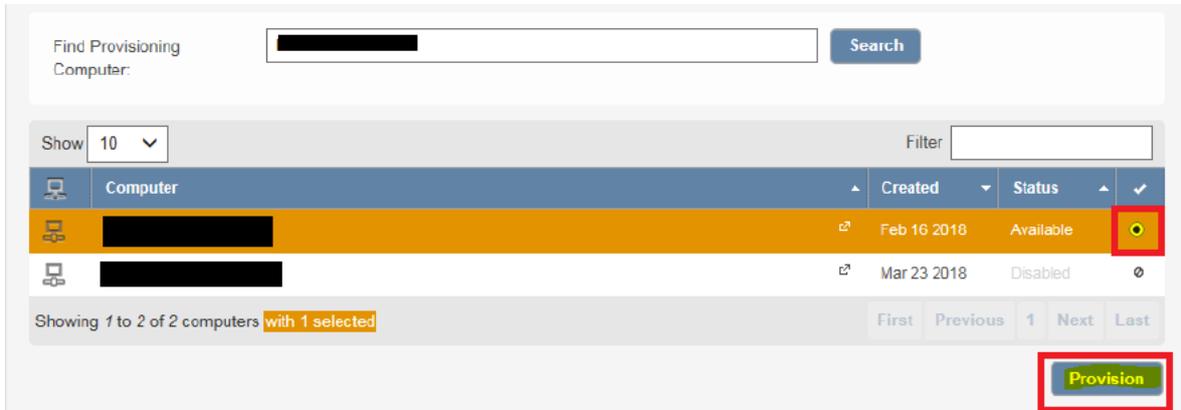
Step 6. Select the AppStack you want to provision (e.g. LOGFAS 6.5 created previously), and click “Provision”.



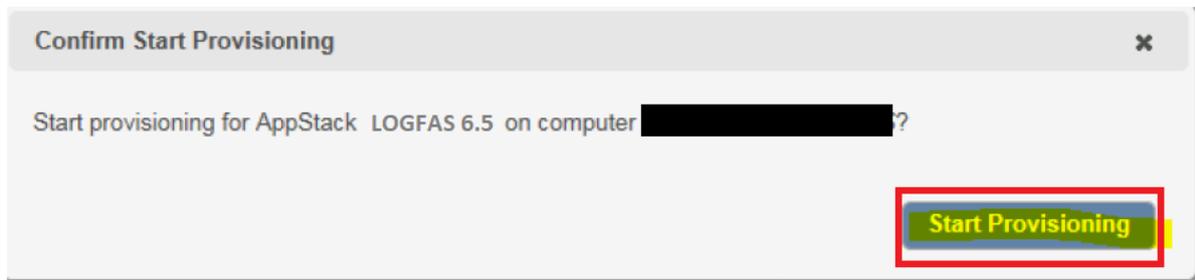
Step 7. Enter the provisioning VM name and select “Search”.



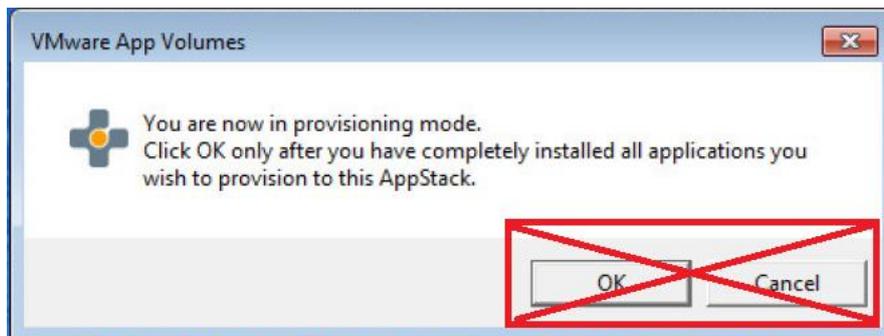
Step 8. Select the VM in the result list and click “Provision”.



Step 9. Confirm the provisioning by selecting “Start Provisioning”.



Step 10. Log in to the provisioned computer and install the applications into AppStack to complete the provisioning process. **DO NOT** click “OK” until **after** LOGFAS has been installed. See the section “Installing LOGFAS in AppStack” below.



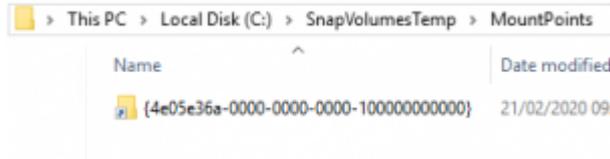
4.1 Installing LOGFAS in AppStack

Step 11. Log in to the provisioning computer.

Step 12. Copy the LOGFAS installation files including “ISSetupPrerequisites” to a temporary folder (e.g. C:\Temp)

Step 13. Switch the VM to provisioning mode.

Step 14. Navigate to C:\SnapVolumesTemp



Step 15. Double-Click on the GUID Folder to open

Step 16. Edit the "Snapvol.cfg" file.

Step 17. Navigate to the "Registry" settings area and add the following entries:

```
#LOGFAS
virtualize_registry=\MACHINE\Software\Wow6432Node\NATO
virtualize_to=\MACHINE\Software\Wow6432Node\NATO
```

Step 18. Find the script called "startup_postsvc".

Step 19. Paste the following:

```
@echo off
setlocal enabledelayedexpansion
set SCRIPT_PATH=%~dp0

if exist "%SCRIPT_PATH%has_iis.txt" (
    rem echo Restarting IIS >> %SystemRoot%\CloudVolumes-IIS.txt
    iisreset
)

if exist "%SCRIPT_PATH%svoffice.xml" (
    rem svoffice.xml was created by an svoffice.exe call in prov_post.bat
    "%SCRIPT_PATH%svoffice.exe" Logon %SCRIPT_PATH% "%SCRIPT_PATH%svoffice.xml"
)

regedit /S "C:\Program Files\NATO\LOGFAS6\logfas.reg"
```

The script will run when the AppStack is mounted as a SYSTEM user context.

NOTE

The file logfas.reg will be created after the installation and contains the registry link from:

[HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\NATO]

To:

[HKEY_LOCAL_MACHINE\SOFTWARE\NATO]

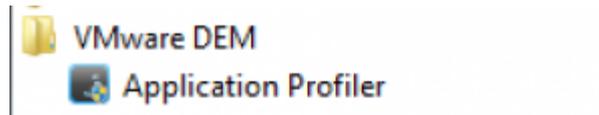
Step 20. Install Crystal Reports Runtime Engine:

- a. Open a command prompt as administrator, and change directory to the LOGFAS installation folder (e.g. C:\Temp).
- b. Run the following commands to install both 32-bit and 64-bit Crystal Reports components:

```
C:\Temp> msiexec /i "ISSetupPrerequisites\{6B3BA13D-31A5-4DEB-BE1C-C0F9C28A8FFF}\CRRuntime_64bit_13_0_24.msi" INSTALLDIR=c:\
C:\Temp> msiexec /i "ISSetupPrerequisites\{7C0C5FDF-1EB0-49EF-BE8B-726DFD0F0323}\CRRuntime_32bit_13_0_24.msi" INSTALLDIR=c:\
```

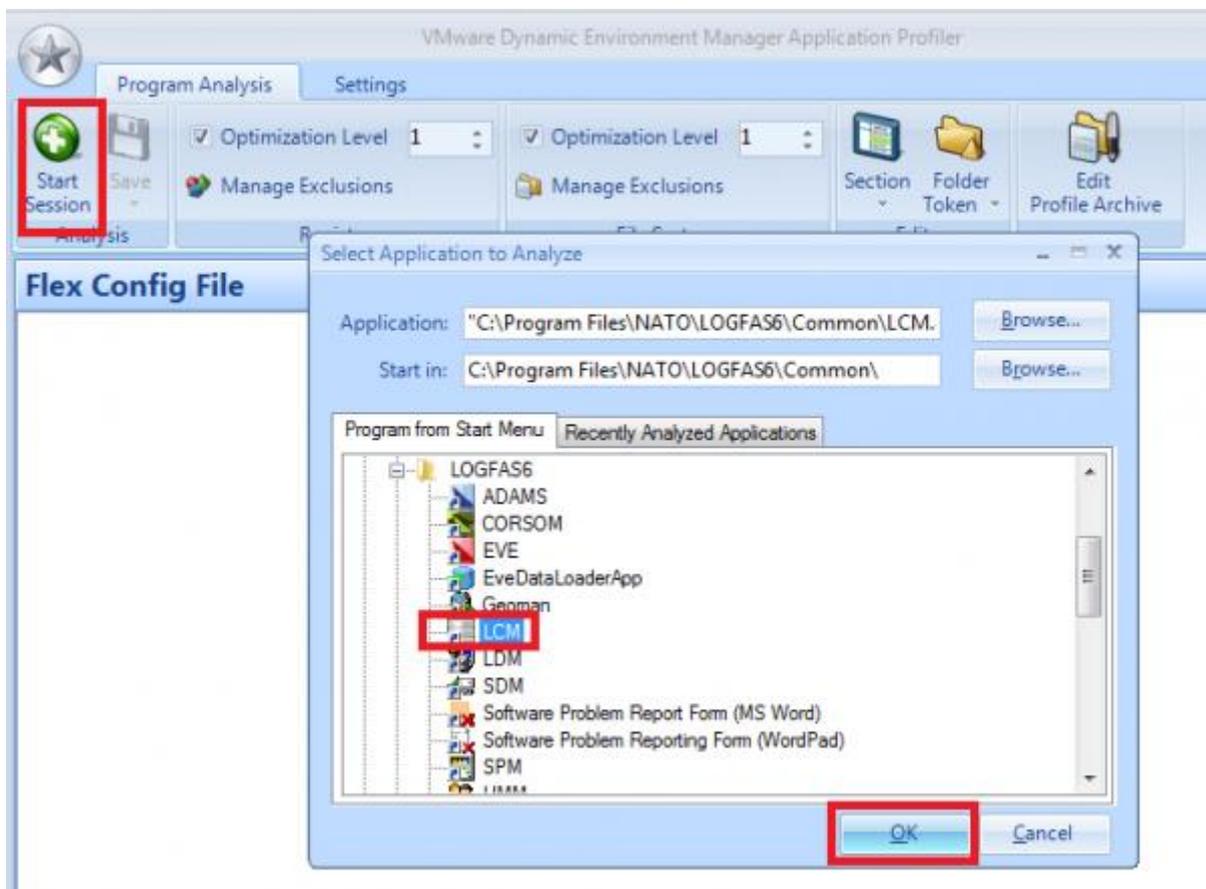
Step 21. Install LOGFAS normally as per the instruction in the Installation Manual.

Step 22. When the Installation has completed, start the “VMware Application Profiler”



Step 23. Start a “Capture Session” and select “LCM”.

The Application will check where the LOGFAS will save its’ preferences.



Step 24. Create a test database in LCM:

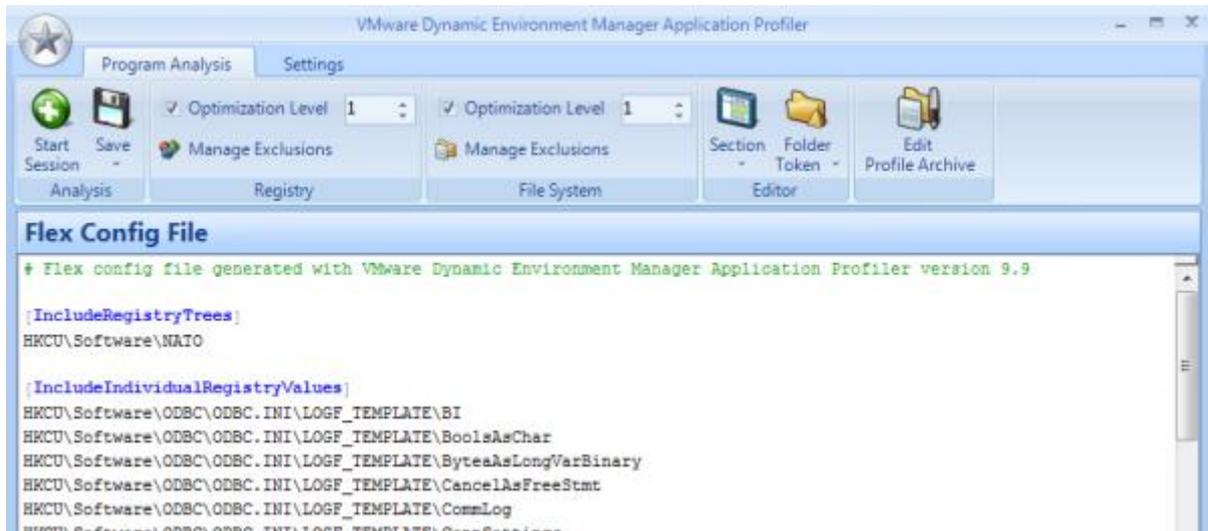
- a. Click on “+” (New)
- b. Enter a name for the database (ODBC Name)
- c. Set the Owner
- d. Select the security classification

Step 25. After the database is created and visible in LCM, delete the database.

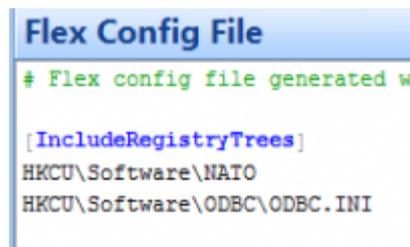
- a. Right Click on the Database and select “Delete”

Step 26. Close LCM

Step 27. The Profiler Program Analysis window will open.



Step 28. Consolidate all the entries to their main trees



Step 29. Save the resulting files to the UEM Temp folder and then include them into DEM by copying them to the config share.

Step 30. Open “regedit.exe”

Step 31. Navigate to and export the following registry hive:

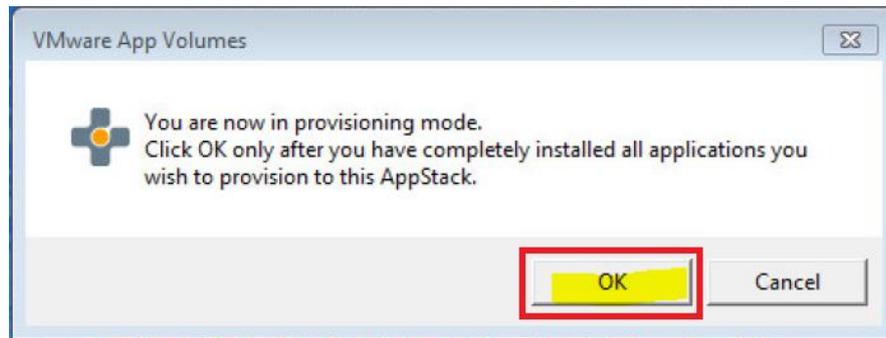
[HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\NATO]

Step 32. Save the file as “logfas.reg” as specified in the script above to the following location:

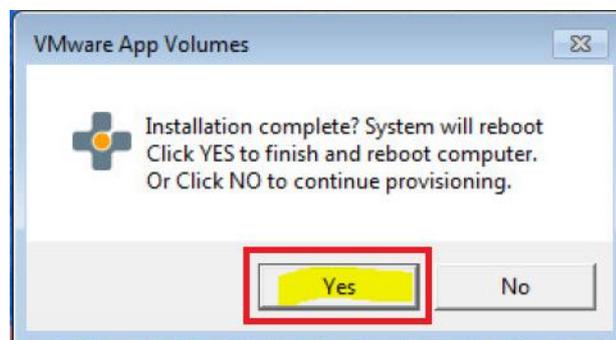
C:\Program Files\NATO\LOGFAS6\

Step 33. This will allow the previously mentioned script to find the REG file and import the settings.

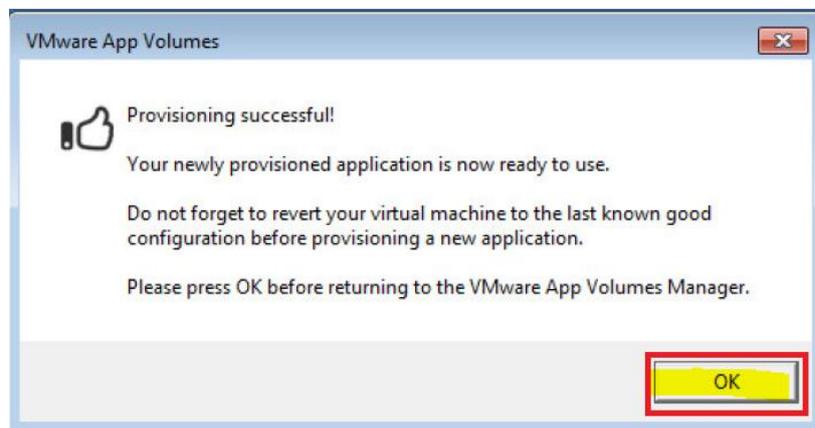
Step 34. Finish the capture Process by clicking “OK” on the “VMWare App Volumes” pop up window.



Step 35. Confirm the completed installation in order to reboot the computer for the AppStack to become available by clicking “Yes”.



Step 36. After rebooting the computer, “VMWare App Volumes” shows that the provisioning process was successful. Click “OK” to accept.

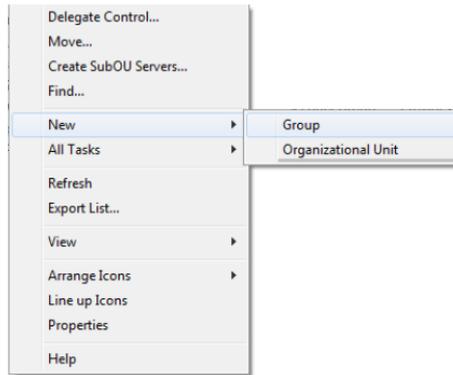


4.2 Create AppStack AD Group for LOGFAS

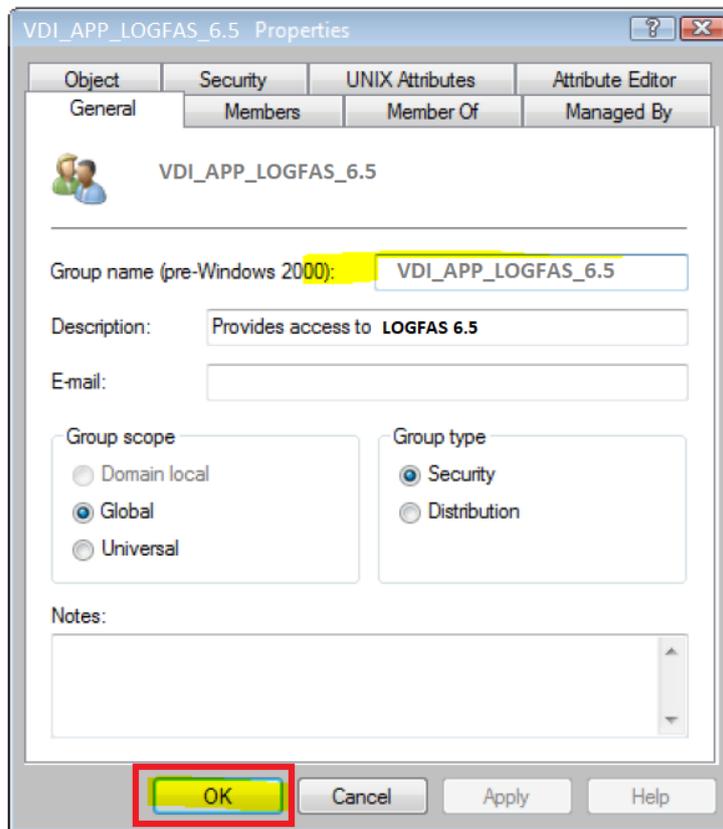
Step 37. For each LOGFAS version, it is recommended to create a new AD group for S/W entitlement.

Step 38. Open the “Active Directory Users and Computers” Snap-In and navigate to “VDI Security Groups/Application Groups”.

Step 39. Create a “New Group”.



Step 40. Enter the new group name.



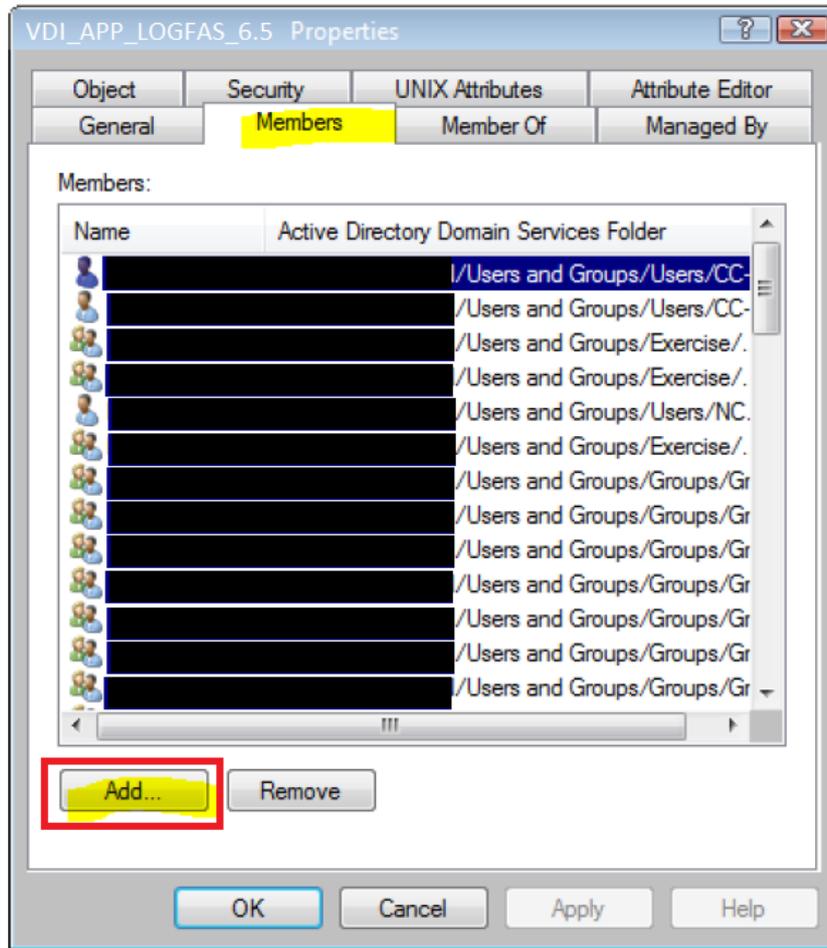
Step 41. Click “OK” to complete the group creation.

4.3 Adding users to the AppStack AD Group for LOGFAS

Step 42. Open the “Active Directory Users and Computers” Snap-In and navigate to “VDI Security Groups/Application Groups”.

Step 43. Find the LOGFAS AD group you wish to add members to (e.g. VD_APP_LOGFAS_6.5 from above).

Step 44. Add the authorized users and groups in the “Members” pane by clicking “Add...”.



Step 45. Click “OK” to complete the group creation.

Step 46. From the App Volumes Manager console, click “Volumes” -> “AppStacks”.



Step 47. Select the AppStack you want to assign the AD Group to and click “Assign”.



LOGFAS 6.5

Filename: LOGFAS_6.5.vmdk (1156 MB)

Template: [ESX_VDI_APPVOLUMES] cloudvolumes/apps_templates/template.vmdk (2.13.2.6)

Mounted: 1 times

Volume GUID: {31a65c29-97d8-456e-815f-cad501060aad}

Versions: 2.13.2.5U (agent), 2.13.2.5 (capture)

Provisioned: 16 minutes on Windows 7 (x64)

- 1 Locations
- 0 Assignments
- 0 Attachments
- 1 Applications

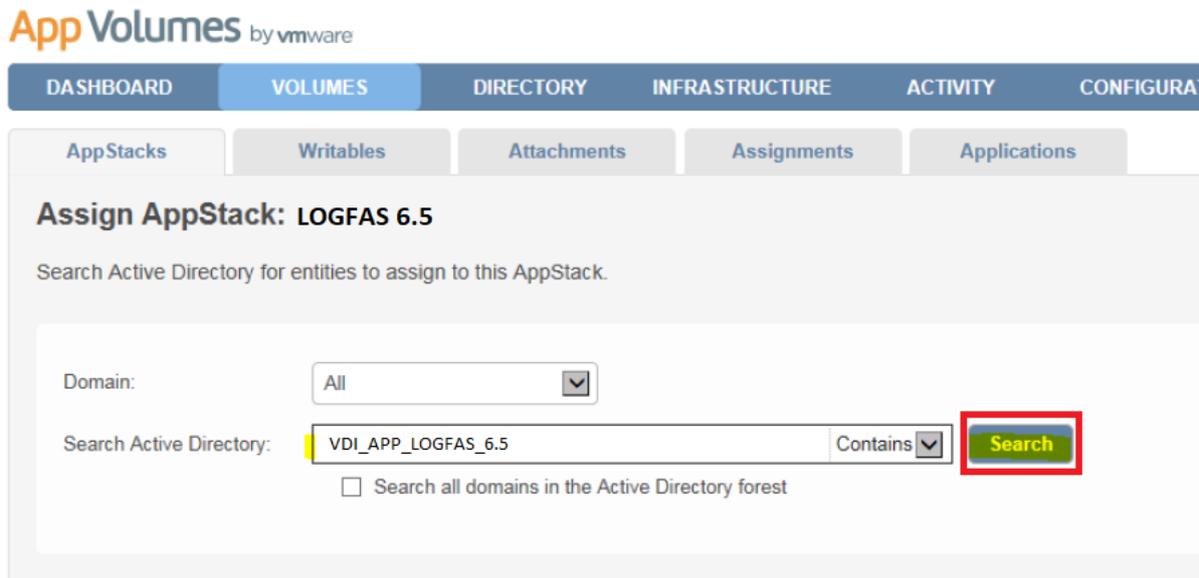
Assign (highlighted)

Update

Edit

Delete

Step 48. Enter the AD Group you want to assign and click “Search”.



App Volumes by vmware

DASHBOARD VOLUMES DIRECTORY INFRASTRUCTURE ACTIVITY CONFIGURATION

AppStacks Writables Attachments Assignments Applications

Assign AppStack: LOGFAS 6.5

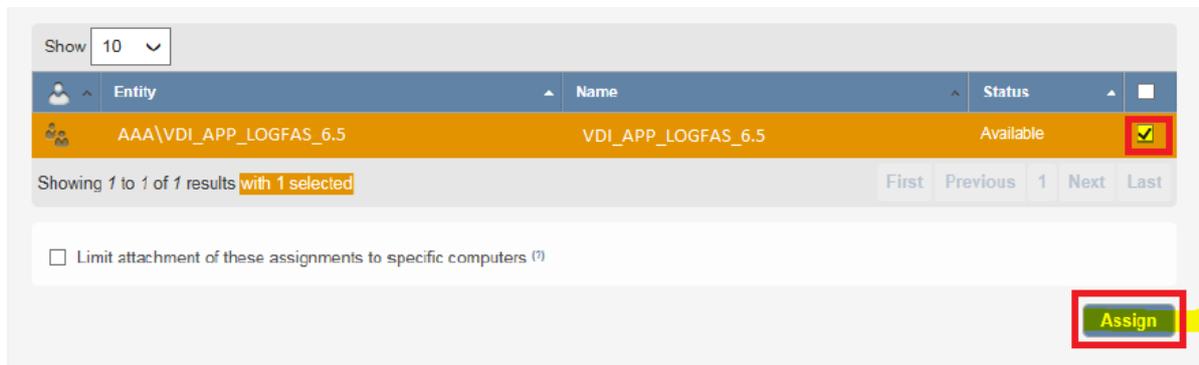
Search Active Directory for entities to assign to this AppStack.

Domain: All

Search Active Directory: VDI_APP_LOGFAS_6.5 Contains **Search** (highlighted)

Search all domains in the Active Directory forest

Step 49. In the results pane check the correct AD group to assign and click on “Assign”.



Show 10

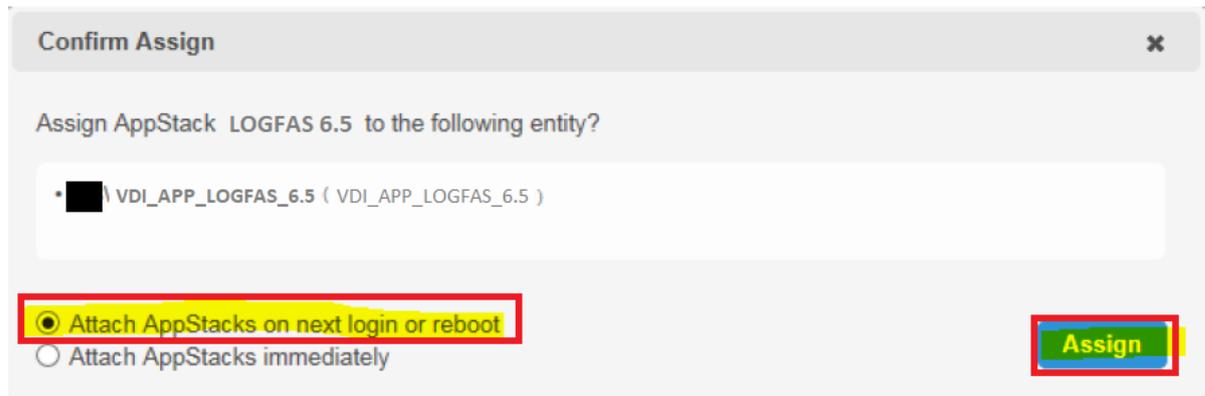
Entity	Name	Status	
AAA\VDI_APP_LOGFAS_6.5	VDI_APP_LOGFAS_6.5	Available	<input checked="" type="checkbox"/>

Showing 1 to 1 of 1 results with 1 selected

Limit attachment of these assignments to specific computers (?)

Assign (highlighted)

Step 50. Select “Attach AppStacks on next login or reboot” and click “Assign”.



Confirm Assign [X]

Assign AppStack LOGFAS 6.5 to the following entity?

• [REDACTED] \ VDI_APP_LOGFAS_6.5 (VDI_APP_LOGFAS_6.5)

Attach AppStacks on next login or reboot

Attach AppStacks immediately

Assign

Step 51. From the “App Volumes Manager” console, click “Volumes” -> “AppStacks”.



Step 52. Select the AppStack you want to assign the AD Group to and click “Assign”.

Step 53. Navigate to the “Writables” and add the LOGFAS AD Group (e.g. VDI_APP_LOGFAS_6.5).

This concludes the installation and configuration of LOGFAS for VMWare AppVolumes AppStack.

3 TROUBLESHOOTING

There have been issues reported in creating LOGFAS VDI solutions in a VMWare AppStack environment. The most common symptoms:

3.1 Crystal Reports

Various LOGFAS components use Crystal Reports to present LOGFAS Reports, such as in LDM.

The LOGFAS installer will attempt to install Crystal Reports Runtime Engine during normal installation.

In some cases, an error message or crash occurs when the user tries to generate any reports. This happens because the Crystal Reports component was not properly installed, or the wrong version was installed.

With application virtualization, an error can occur when the total path length is too long. This is due to path lengths being exceeded and causing the Crystal Reports Runtime Engine to fail. As a work-around, the instructions in this document show how to install Crystal Reports in the root of the C drive. See Step 20.

For other issues after a LOGFAS upgrade, see the KB article “20200324 KB 2020-03 Crystal Reports Problems after upgrade”.

3.2 LCM

The LCM module of LOGFAS is used to show available database connections, and to switch between connections

When opening LCM, the user may be shown the message “LCM needs to close. Could not find the Data key in the registries.” This happens when a registry key is not in place, notably the registry symbolic link in the Wow6432Node area is missing in this case. See Step 17 and related.

Users may find that their list of connections have disappeared after logoff and logon. The Current User’s Registry ODBC keys record all database connections shown in LCM. If these are not persisted in each user session or login, then LOGFAS will not work correctly. See Step 28.

3.3 Local databases

In LOGFAS, a user can work with local databases that he can create on his workstation.

If a user works on a local database in LOGFAS, the user may find that after logoff and logon (starts a new VDI session), then his work has disappeared. This happens when the local database files are not persisted. For this, you must include the LOGFAS user’s group in the “Writables” area to ensure that data and the databases are persisted in between VDI sessions.

If, when LCM is launched, all local databases show “?” across the database details area. This typically means that the local PostgreSQL database engine service is not running nor able to start automatically during start-up.

All these considerations are taken into account in the steps described in the following section.