



# ACTIVE DIRECTORY DEPLOYMENT

*CASAS*  
*Technical*  
*Support*  
**800.255.1036**

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Version 031610



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## 1. INTRODUCTION

This document provides the necessary information and steps to deploy Active Directory for CASAS eTests LAN Client installation.

### 1.1 LAN Prerequisites

#### 1.1.1 LAN Server

A CASAS eTests LAN Server must be installed on one of the computers from the network and accessible from the client computer. The IP / name of the computer where the LAN Server is installed is used as a parameter in setting the Active Directory deployment. This is explained in Section 2.5, page 6.

#### 1.1.2 LAN Client

The prerequisites below must first be installed on the client computer before installing CASAS eTests LAN Client on the client computer.

- Microsoft .NET Framework 3.5 SP1.
- Microsoft Report Viewer Redistributable 2008 SP1.

You can download these prerequisites from the web links below:

- <http://www.microsoft.com/downloads/details.aspx?FamilyID=333325FD-AE52-4E35-B531-508D977D32A6&displaylang=en>
- <http://www.microsoft.com/downloads/details.aspx?familyid=CC96C246-61E5-4D9E-BB5F-416D75A1B9EF&displaylang=en>

### 1.2 Domain Controller Prerequisites

The following prerequisites must be installed and active on the Domain Controller before proceeding with creating/updating the deployment package.

- Active Directory Domain (must be set up)
- Microsoft Group Policy Management Console SP1
- Shared Folder (must contain the \*.MSI and \*.vbs files - currently named CBTSetupUSA.msi and LANConfig.vbs in the setup kit and script file).

The shared folder is a normal Windows OS folder with the property of being shared on the network (full sharing of this folder is not required). It must be accessible to users installing CASAS eTests (the users must be allowed to have reading rights on the shared folder).

**NOTE!** The two files, “CBTSetupUSA.msi” and “LANConfig.vbs” represent the package needed for eTests installation. See chapter 2.4 for details on how to use them.

You can download the Microsoft Group Policy Management Console SP1 from the link below:

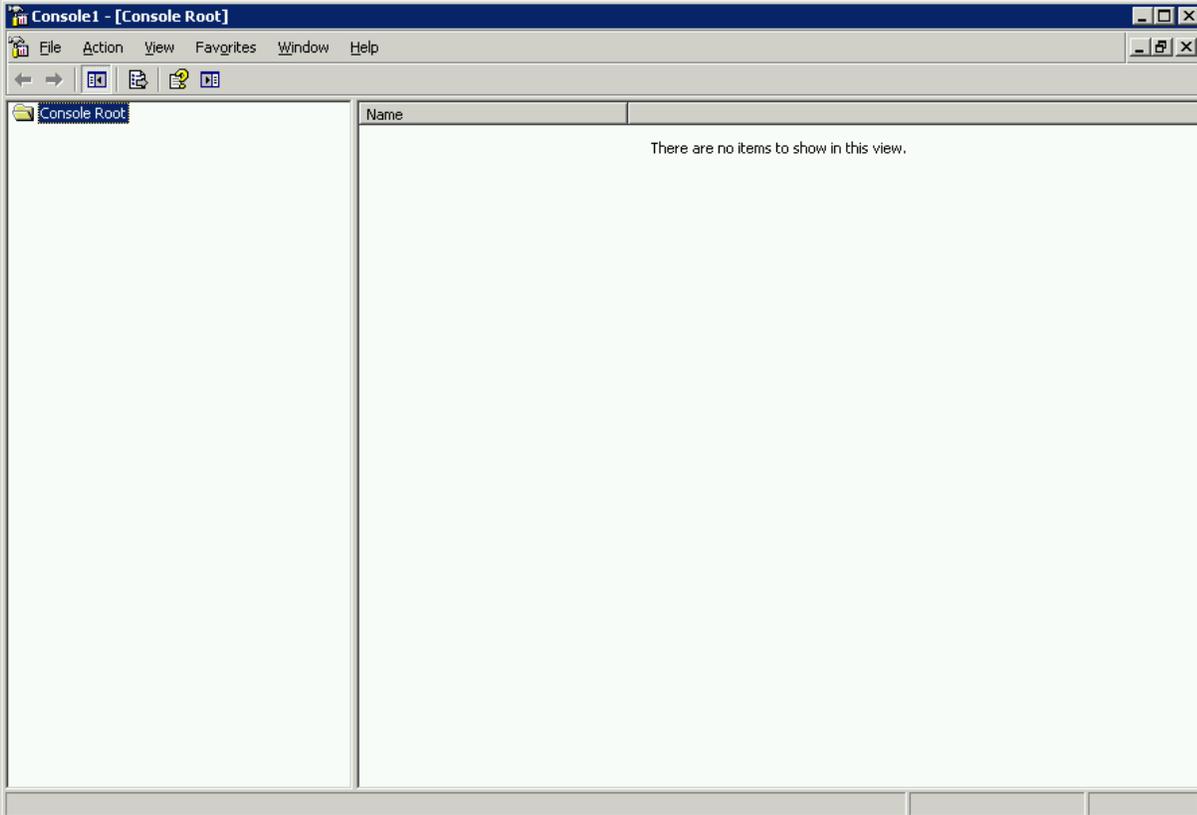
- <http://www.microsoft.com/downloads/details.aspx?FamilyId=0A6D4C24-8CBD-4B35-9272-DD3CBFC81887&displaylang=en>

These prerequisites must be installed and active on the Domain Controller before proceeding with creating and/or updating the deployment package.

## 2. DEPLOYMENT PACKAGE SETUP

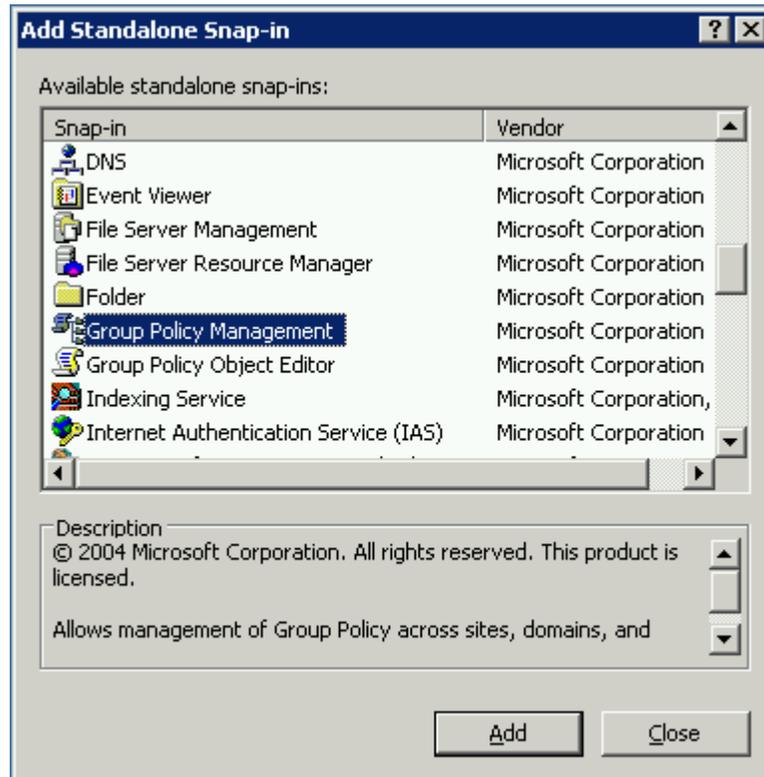
### 2.1 Open Management Console

Click on Start -> Run, and type in “mmc.exe”. Click Ok.



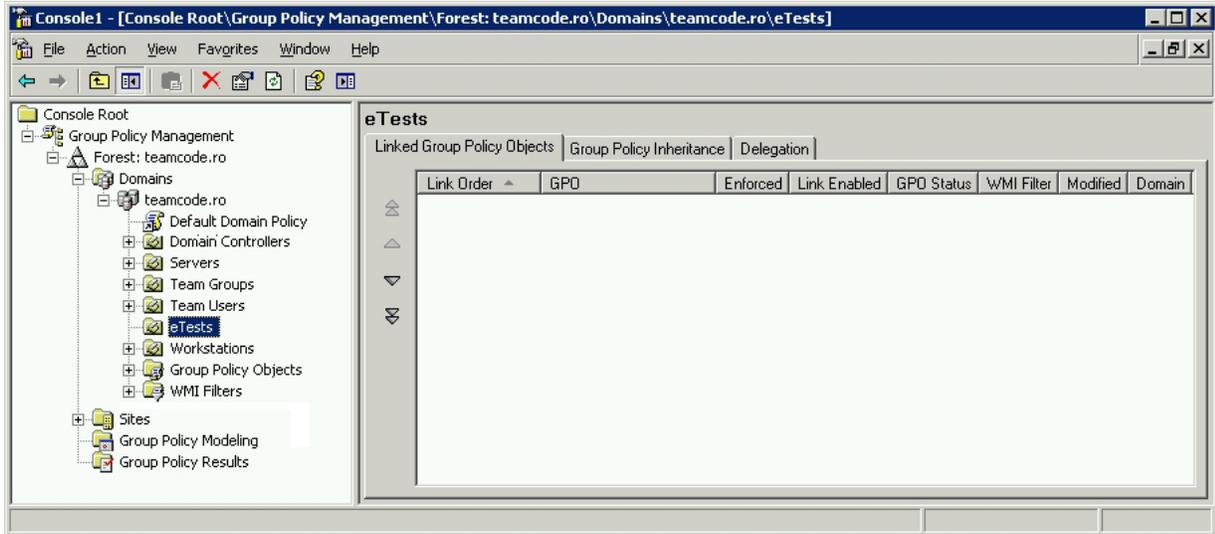
## 2.2 Open Group Policy Manager

In the Management Console, click File -> Add/Remove Snap-in. A new window will open. In the 'Standalone' tab, click "Add" and a list of snap-ins will be displayed in a window as shown below. Select "Group Policy Management" and click "Add". Notice that the list window remains open, in case you want to add another snap-in. Click "Close" and then, in the "Add/Remove Snap-in" window, click Ok. The Group Policy Management Console is now ready.



## 2.3 Create New Organizational Unit

Expand the Group Policy Manager, then the Forest and then the domains by clicking on the “+” sign in front. Select the domain name and right-click. From the menu displayed, select “*New Organizational Unit*” and enter a name when prompted. (In the example below, the name is ‘eTests’).



### 2.3.1 Move Computer Objects

Using the ‘Active Directory Users and Computers’ console (can be found here: Start -> Programs -> Administrative Tools -> Active Directory Users and Computers), move the required ‘Computer’ objects to the new Organizational Unit by drag & drop. These are the computers on which the new Group Policy for CASAS eTests Deployment will be created and applied. This step allows installation to proceed on the selected computers.

### 2.3.2 Create and Link Group Policy Object

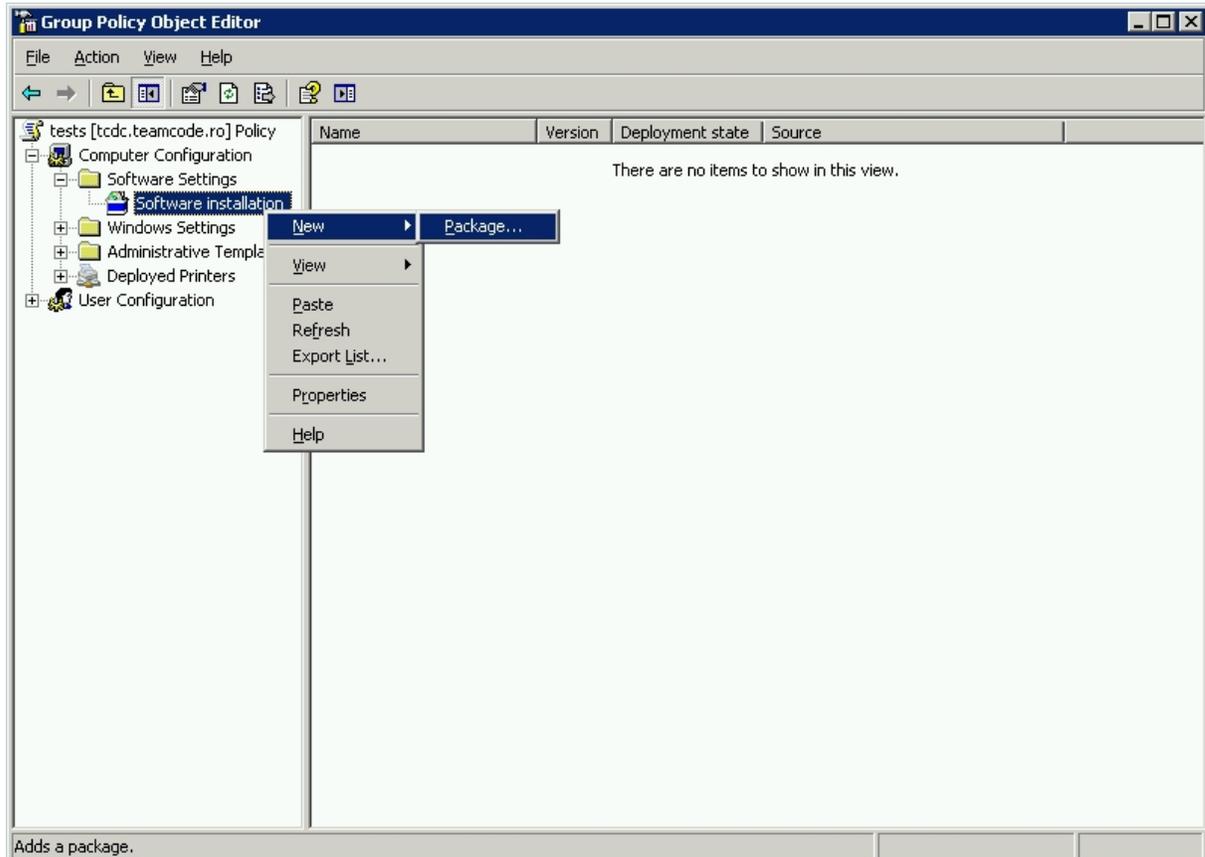
Right-click on ‘eTests’ Organizational Unit and, from the menu displayed, select “*Create and Link a GPO Here*”. Enter a name for the Group Policy Object when prompted (in this example, the name ‘tests’ is used). The Group Policy Object can be restricted only to some computers, users or groups using “Security Filtering” control.

## 2.4 Add Deployment Package

Right-click on the Group Policy Object and select “Edit”. The Group Policy Object Editor is now open in a new window.

### 2.4.1 Computer Configuration and Software Settings

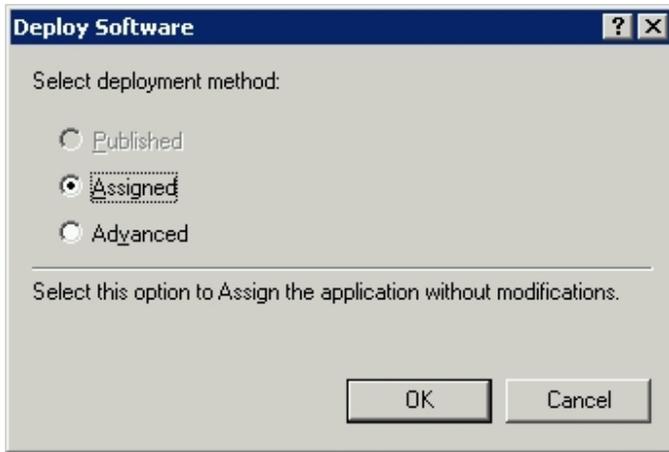
Right-click on ‘Software installation’ and select “New” then “Package” (see below).



Browse to CASAS eTests’ \*.MSI location using the network path. The network path starts with the standard symbol “\\” which means the following is a network address (example: “\\Domain\_Controller\_name\shared\_folder\_name\MSI\_filename”).

**NOTE!** An easy way to browse for the network address is to click on “My Network Places” and continue from there, instead of selecting “My Computer” which leads to local addresses.

Select “Assigned” as deployment method. Wait for the package list to display (this may take several minutes).

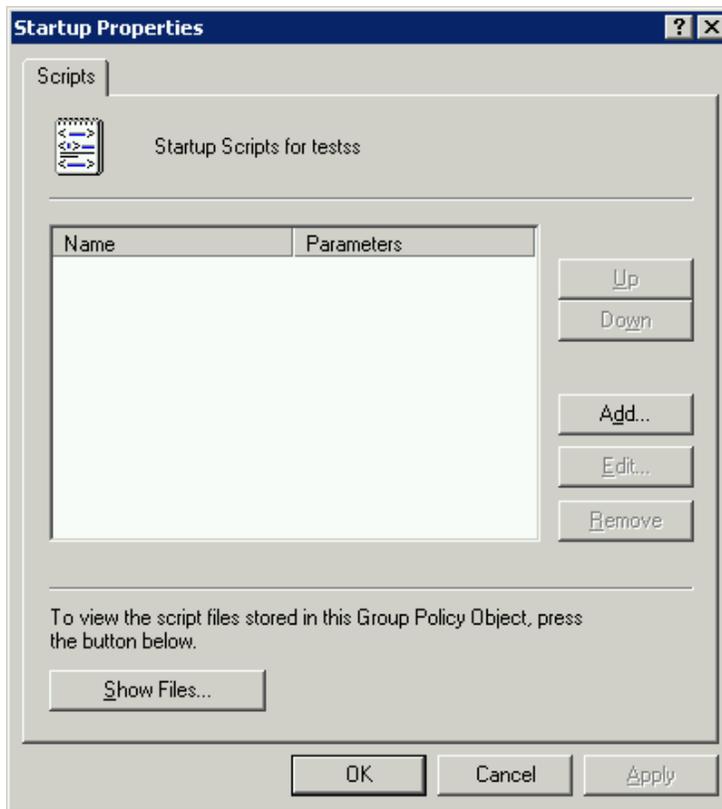


## 2.5 Add Deployment Script (Startup Properties)

Expand 'Windows Settings'. Click on 'Scripts' and double-click on 'Startup', in the right panel. The 'Startup Properties' window (below) opens. Click "Add" to add a new script and browse to CASAS eTests' LAN configuration script using the same network path as for the MSI file. (see section 2.4)

**NOTE:** In the parameter field, add the CASAS eTests LAN server's name or IP.

Click OK in the last two open windows to close them.



### **2.5.1 Enable Startup Scripts:**

Expand 'Administrative Templates', then 'System' and click on Scripts. Double-click on "Run startup scripts visible" and choose "Enabled".

### **2.5.2 Refresh Group Policies**

Group Policies are now set. Close all windows. Click Start -> Run and type "cmd" to open Command Prompt. Type in "gpupdate /force" command to enforce the refreshing of the Group Policies There is no need to restart the computer so choose "N" when prompted.

## **2.6 Verify Installation and Settings**

To verify that Group Policy is correctly set, restart the client's computer. At one point during start-up (but before the user can log in to that computer) a window displays the message "Installing managed software CASAS eTests ...". After the message displays, the script will run.

- If the installation is not correctly set the script displays an error, stops the installation and continues with the login.
- If the installation works without errors, the login process will continue. It takes about 10-20 minutes for the installation of CASAS eTests LAN Client to complete.

Verify that the LAN Client can connect to the Server's database by launching the Admin Module.

### **2.6.1 KEYLOK and Dongle Management**

KEYLOK is a third party application related to dongle management. The KEYLOK installer starts automatically. (Its kit is not local. It is built into the kit of CASAS eTests.) The operating system does not display the KEYLOK installer window. It displays a message informing the user a window was not displayed. The user can click the message / button in this display. A background screen displays with the KEYLOK installer. The user can choose to install the application or cancel it, and then return to desktop.

KEYLOK might try to install after you complete the installation of CASAS eTests and a user is logging on.



Follow these steps to complete the installation:

1. Press "Next" to start the installation.
2. Wait until the installer finishes copying the required dongle drivers.
3. When the installation is complete, press the "Finish" button to exit the installer.



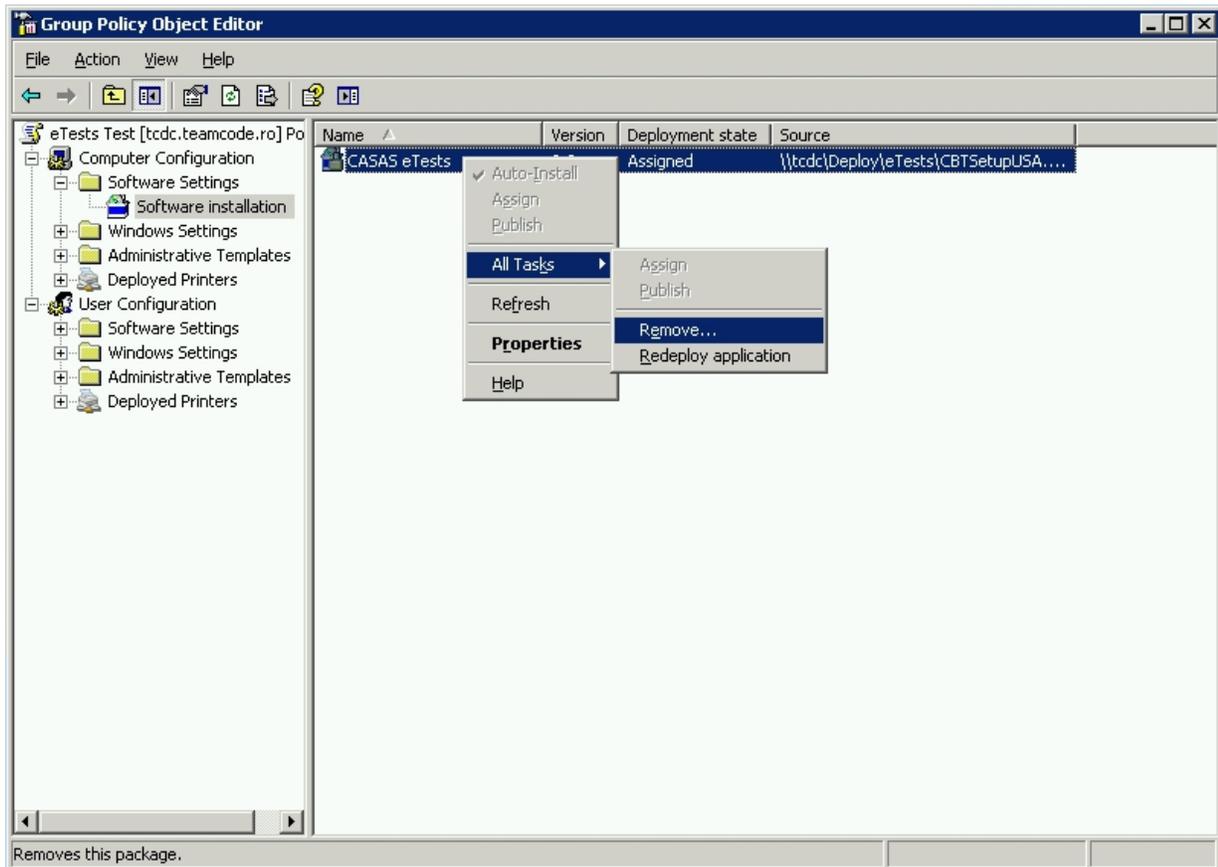
## 2.7 Uninstall CASAS eTests

Because you used Active Directory as the install method, you cannot uninstall CASAS eTests from Control Panel -> Add/Remove Programs. Trying this will lead to some Windows Registry keys left undeleted which will prevent any future CASAS eTests installing and will generate errors.

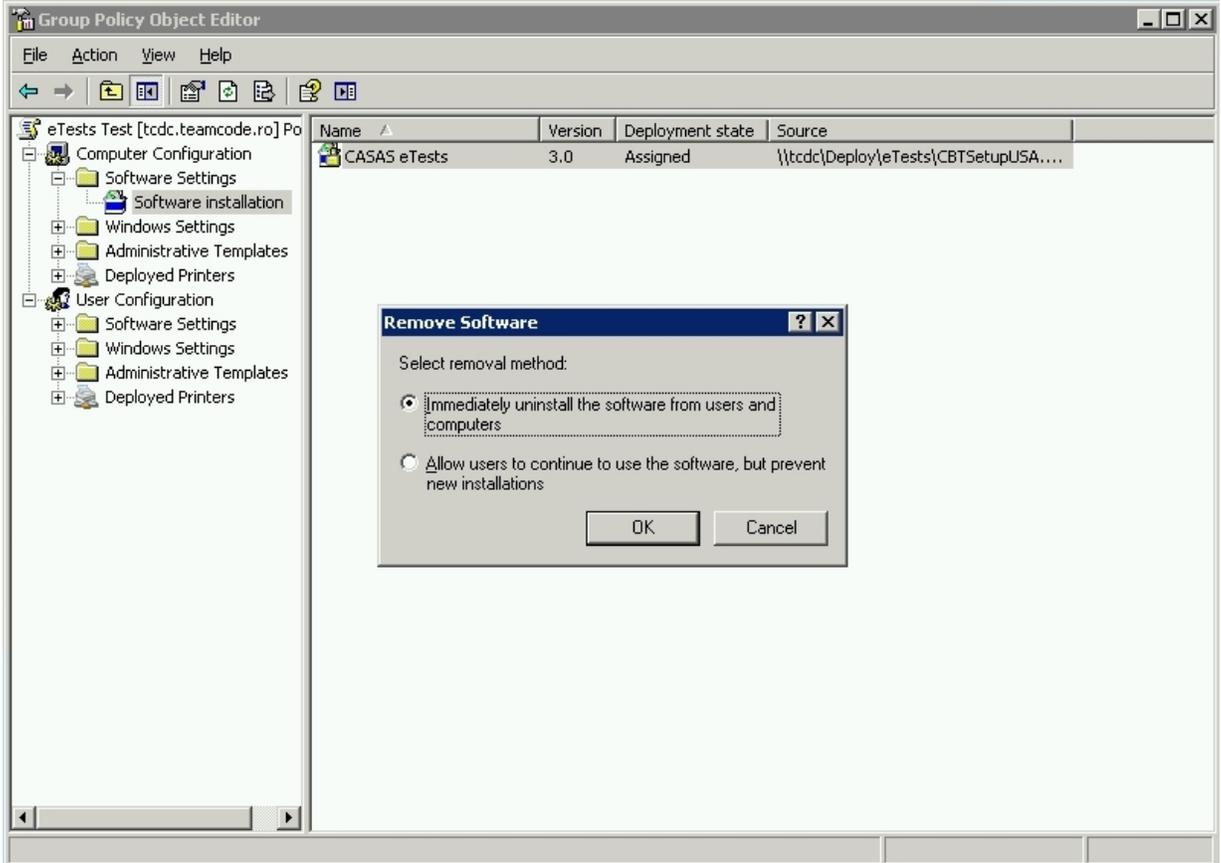
Instead, use Active Directory as the uninstalling method also.

### 2.7.1 Remove the package

Open the Group Policy Object Editor (see chapter 2.4 for details regarding the Group Policy Object). Select 'Software Settings' and click on 'Software installation'. The CASAS eTests package is now displayed. Right click on the package and select to remove it (see below)



The next window will ask for the removal method. Click on “Immediately uninstall the software from users and computers”.



**NOTE!** The second option should be used only when upgrading CASAS eTests. It will allow the users to continue using the application even if the package was removed from the Group Policy’s software installation list.

## 2.7.2 Refresh Group Policies

Group Policies are now set. Close all windows. Click Start -> Run and type “cmd” to open Command Prompt. Type in “gpupdate /force” command to enforce the refreshing of the Group Policies There is no need to restart the computer so choose “N” when prompted.

## 2.7.3 Finish the uninstall

Restart the client computer. At one point during start-up (but before the user can log in to that computer) a window displays the message “Removing managed software CASAS eTests ...” If the installation works without errors, the log process will continue in a minute.

## 2.8 Troubleshooting

If the CASAS eTests application fails to install correctly (displays an error message or simply continues to Windows login page without displaying any message), follow these steps to try to determine where the problem lies:

1. Check the LAN Server's name / IP address. Make sure it is entered correctly in the parameter field for the startup script.
2. Check for any residual files if you previously uninstalled CASAS eTests from that system. Be sure to delete the CASAS eTests installation folder before installing the latest version.
3. Upgrade the LAN Server to the latest version of CASAS eTests before installing the LAN Clients.
4. Read the log files created during installation. In case of errors or warning messages, a log file is created and can be found in the CASAS eTests installation folder. The second log file can be found by opening the Windows Event Viewer -> Application (if the operating system is Windows Vista, the path is this: Event Viewer -> Windows Logs -> Application).

If for some reason installation stalls and the user cannot login, follow these steps:

1. Go to the Domain Controller.
2. Disable the Group Policy (remove the package, for instance).
3. Refresh the policy (see Section 2.5.2 from setting the deployment).
4. Restart the client computer.