

CNT 4603: System Administration Spring 2015

Project Six – Managing The `savn.local` Domain

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Project Six

- **Title:** “Project Six: Managing The `savn.local` Domain”
- **Points:** 30 points
- **Due Date:** Sunday April 5, 2015 by 11:59 pm WebCourses time.
- **Objectives:** The completion of Project Five left you with a completely configured `savn.local` network. With this project we now begin basic system administration activities on the network. This project will focus on `Mark-Server1` and `Mark-Server2`.
- **Deliverables:** Five screen shots as shown on pages 8, 20, 27, 28, and 29.



Project Six – Background

- You may recall from our earlier discussions of domains/trees/forests that an organizational unit (OU) offers a way to achieve more flexibility in managing the resources associated with a business unit, department, or division than is possible through domain administration alone.
- An OU is a grouping of related objects within a domain, similar to the idea of having sub-directories within a directory.
- OUs are typically used to reflect the structure of the organization without having to completely restructure the domains with the that structure changes.
- OUs allow the grouping of objects so that they can be administered using the same group policies, such as security.



Project Six – Background

- The first step in Project Six will be to create some basic OUs for our `savn.local` domain.
- We'll consider our organization to be made up of three basic units: `administration`, `research`, and `sales`.
- The next couple of pages step you through setting up these three OUs.

The pages that follow explain the details of the project, stepping you through the actions. In the various callouts, the items that appear in **bold green** text require you to do screen captures and/or answer questions. These screen captures and answers will constitute your submission for this project.



Project Six – Creating OUs

- Start Mark-Server1 (the domain controller for `savn.local`) domain.
- Click on Administrative Tools.
- Click Active Directory Users and Computers.
- Right-click the `savn.local` link in the left pane.
- Point to New and select Organizational Unit.
- When the new window appears, enter the name: `Administration`.
- Repeat these steps for: `Research` and `Sales`.
- After completing this task, get a screen shot of the Active Directory Users and Computers window showing the three new OUs, like page 8.



The screenshot shows the 'Active Directory Users and Computers' console. The left pane displays a tree view with 'Active Directory Users and Computers' expanded, showing 'Saved Queries', 'savn.local', and 'Built-in'. The 'New' menu option is selected, opening a sub-menu. In this sub-menu, 'Organizational Unit' is highlighted with a red arrow pointing to it from a text box that says 'Select Organizational Unit'. The main pane shows a list of built-in containers with columns for Name, Type, and Description.

Name	Type	Description
builtinDomain	Container	Default container for upgraded computer accounts
Container	Organizational Unit	Default container for domain controllers
Container	Container	Default container for security identifiers (SID...)
Container	Container	Default container for upgraded user accounts

Select Organizational Unit


12:10 PM

Mark - Server 1 - VMware Player File Virtual Machine Help

Active Directory Users and Computers

New Object - Organizational Unit

Create in: savn.local/

Name:
Administration

☒ Protect container from accidental deletion

OK Cancel Help

Name	Description
Administrative	
Domain	
Container	Default container for upgraded computer ac...
Organizational Unit	Default container for domain controllers
Container	Default container for security identifiers (SID...
Container	Default container for upgraded user accounts

Enter "Administration", followed by "Research", then "Sales", clicking OK after each entry

Start | Active Directory User... | 12:11 PM

To direct input to this virtual machine, press Ctrl+G.

vmware



Mark - Server 1 - VMware Player File Virtual Machine Help

Active Directory Users and Computers

File Action View Help

Active Directory Users and Computers

Left pane: Active Directory Users and Computers, Saved Queries, savn.local, Built-in, Computers, Domain Controllers, ForeignSecurityPrincipals, Users, Administration, Research, Sales

Name	Type	Description
Builtin	builtinDomain	
Computers	Container	Default container for upgraded computer accounts
Domain Controllers	Organizational Unit	Default container for domain controllers
ForeignSecurityPrincipals	Container	Default container for security identifiers (SIDs)
Users	Container	Default container for upgraded user accounts
Administration	Organizational Unit	
Research	Organizational Unit	
Sales	Organizational Unit	

Do a screen capture of this page illustrating the three new OUs.

Label it: "1: New Organizational Units In savn.local"

Start | Active Directory User... | 12:13 PM

To direct input to this virtual machine, press Ctrl+G.

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Project Six – User Account Management

- We'll use the OUs you just created a bit later (and also in subsequent projects), but the next thing that I want to give you some experience handling is the creation and manipulation of user accounts on the servers.
- While `Mark-Server2` is a member of the `savn.local` domain it is also a stand-alone server (in that it is not a domain controller). Hence, on `Mark-Server2` we can create a local, non-domain oriented account. We'll do this first, before we create any domain oriented accounts from inside AD on `Mark-Server1`.

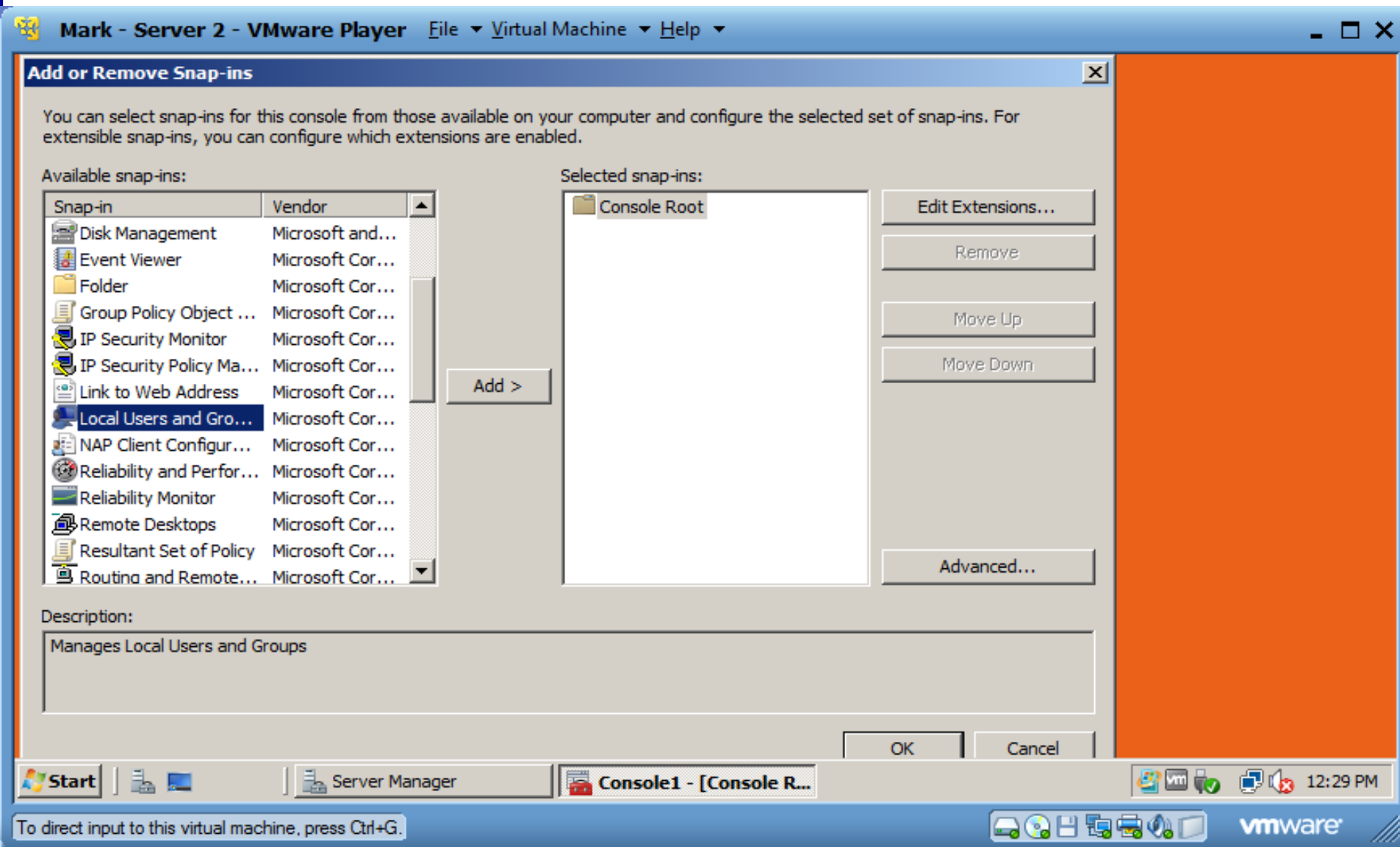


Generating a Local User Account on Mark-Server2

- On a server where AD is not installed, new user accounts are created by first installing the Local Users and Groups MMC (Microsoft Management Console) snap-in for standalone servers.
- The steps for doing this are:
 - Start Mark-Server2 running.
 - Click Start, click Run, enter mmc at the prompt, and click OK.
 - Click the File menu option, and click Add/Remove Snap
 - Under Available snap-ins, find and click Local Users and Groups. See next page for a screen shot of this.

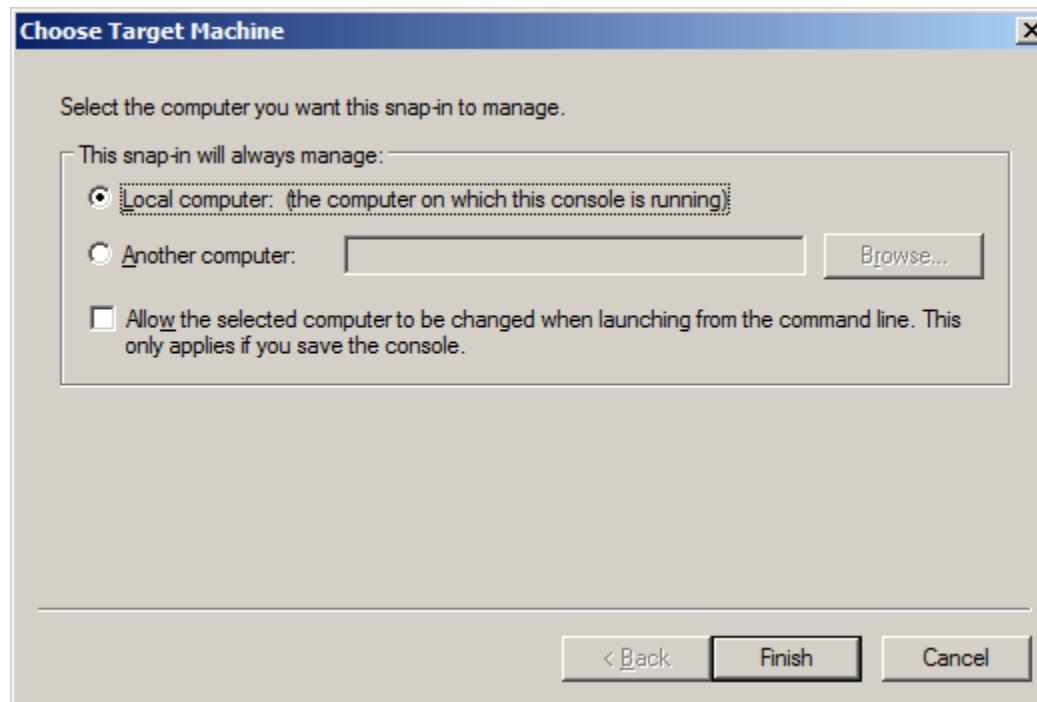


Generating a Local User Account on Mark-Server2

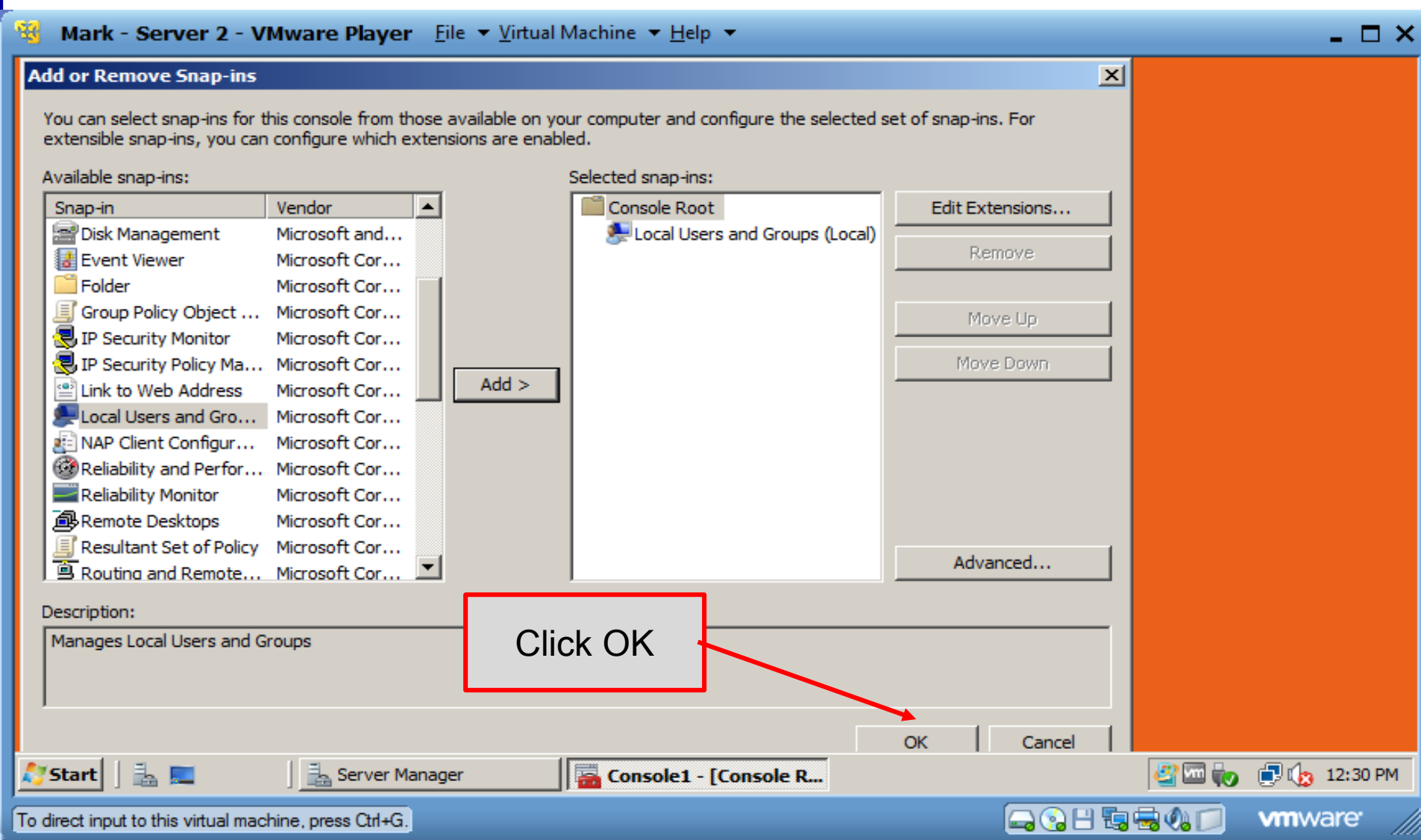


Generating a Local User Account on Mark-Server2

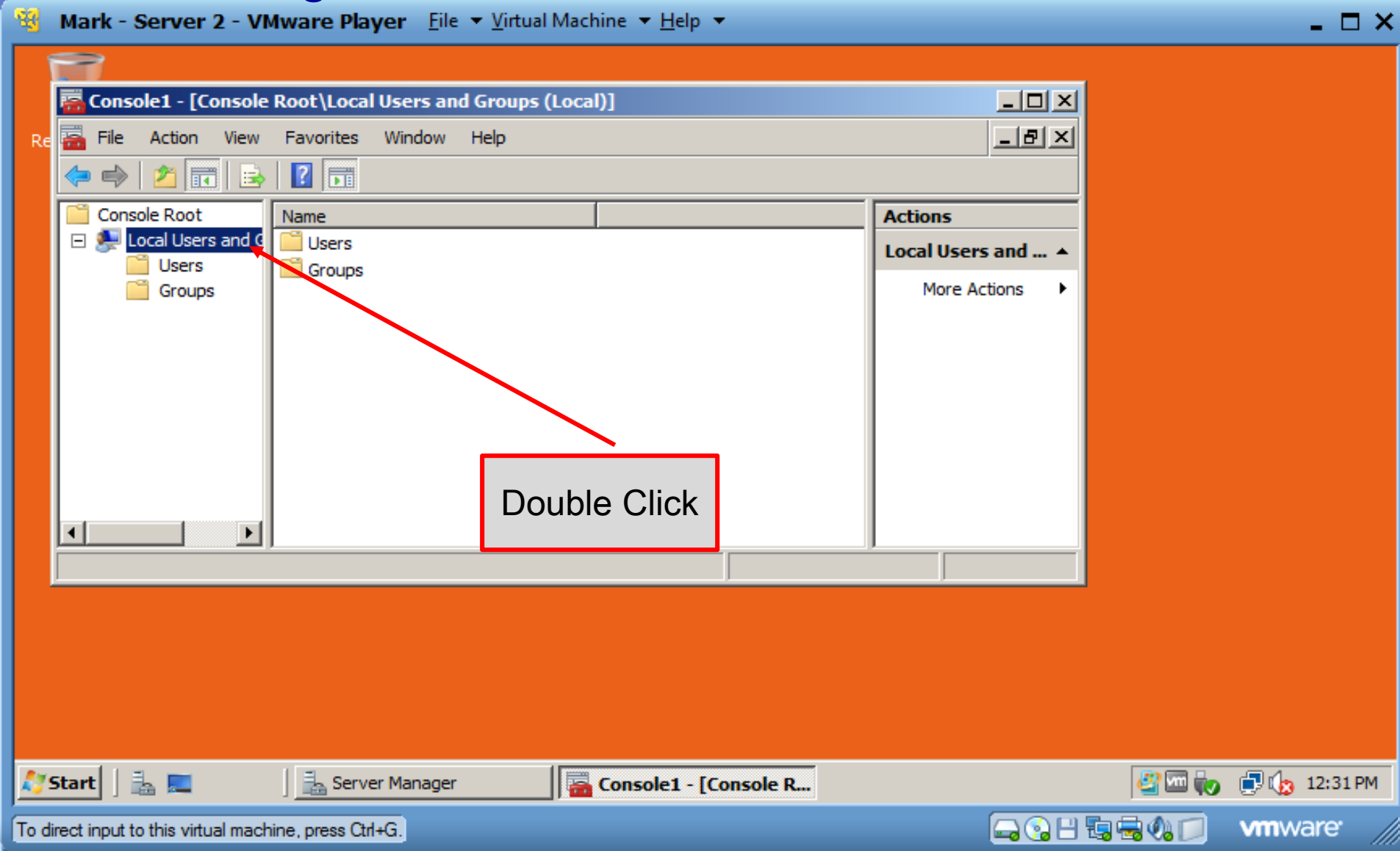
- Click the Add button to make this a selected snap-in.
- In the Choose Target Machine dialog box, leave Local computer (the computer on which this console is running) selected and click Finish.



Generating a Local User Account on Mark-Server2



Generating a Local User Account on Mark-Server2



Generating a Local User Account on Mark-Server2

Mark - Server 2 - VMware Player File Virtual Machine Help

Console1 - [Console Root\Local Users and Groups (Local)]

File Action View Favorites Window Help

1. Double click Users

2. Click the Action menu item

When you click the Action menu item a drop down list containing several options appears. The first of these options is New User... , click on this option and the New User dialog box as shown below appears:

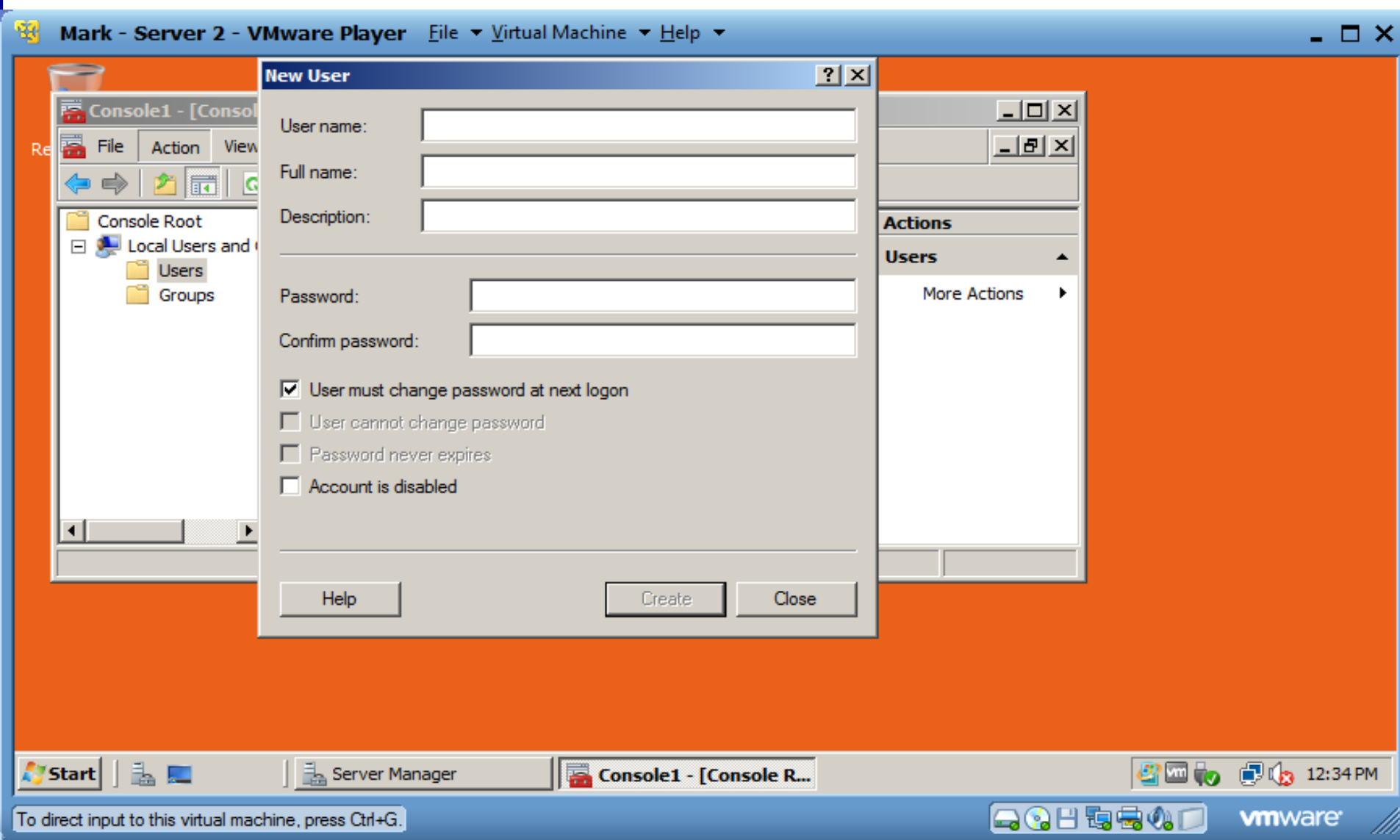
Start Server Manager Console1 - [Console R...

To direct input to this virtual machine, press Ctrl+G.

vmware



Generating a Local User Account on Mark-Server2



Generating a Local User Account on Mark-Server2

New User

User name: localuser01

Full name: local user 01

Description:

Password:

Confirm password:

☐ User must change password at next login

☐ User cannot change password

☒ Password never expires

☐ Account is disabled

Help Create Close

Assign this new user the username: localuser01

Assign this new user a password that fits the requirements that you can remember or write it down.

Since we don't have any security concerns on our little network, set the password to never expire. Note: the default is set so that the user must change this password at the next login.

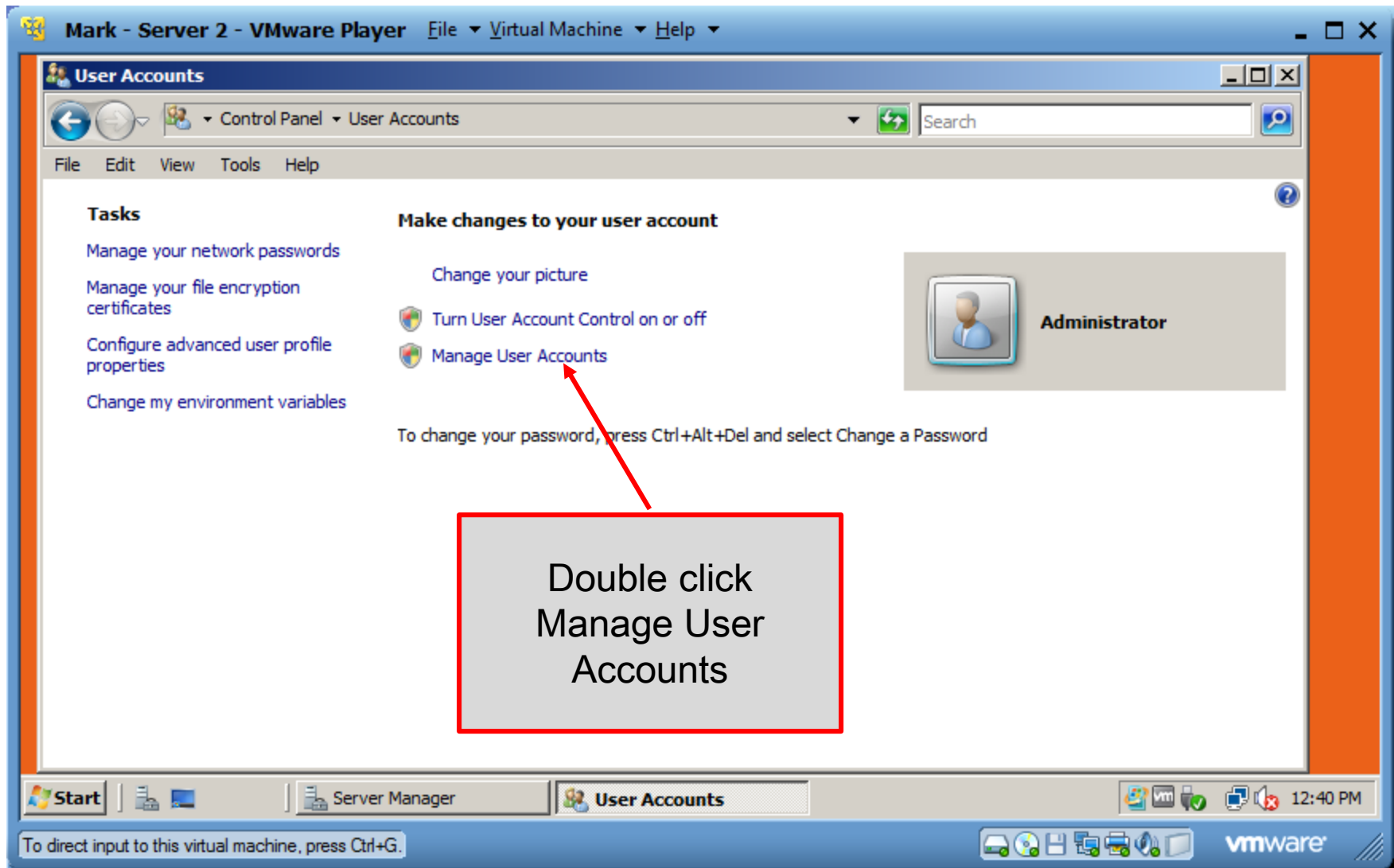


Generating a Local User Account on Mark-Server2

- When you complete this task, save the changes when prompted and you will have successfully created a local user account on Mark-Server2.
- Note that `localuser01` is not a domain user and is known only locally to Mark-Server2.
- From the Control Panel in Mark-Server2, select the User Accounts option as shown on the next page.



Generating a Local User Account on Mark-Server2



Generating a Local User Account on Mark-Server2

Mark - Server 2 - VMware Player File Virtual Machine Help

User Accounts

Users Advanced

Use the list below to grant or deny users access to your computer, and to change passwords and other settings.

Users for this computer:

User Name	Domain	Group
Administrator	MARK-SERVER2	Administrators
localuser01	MARK-SERVER2	Users
Mark Llewellyn	MARK-SERVER2	Administrators; Us...

Add... Remove Properties

Password for Administrator

To change your password, press Ctrl-Alt-Del and select Change Password.

Reset Password...

Change a Password

Administrator

Do a screen capture of this page which shows that the new user account has been created.

Label it: "2- Local user account created".

Start Server Manager User Accounts User Accounts 12:41 PM

To direct input to this virtual machine, press Ctrl+G.

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Generating a Domain User Account on Mark-Server1

- Management and access to resources through Active Directory begins through user accounts. On a server where AD is installed, new user accounts are created by first installing the Active Directory Users and Computers snap-in. We've already installed this snap-in in an earlier project. It is accessible from Administrative Tools.
- To create a user in the `savn.local` domain the steps are:
 - Start Mark-Server1 running.
 - Click Administrative Tools, Select Active Directory Users and Computers from the list.
 - In the left pane, click the plus sign in front of the `savn.local` domain entry (it may already be expanded depending on what you've done here previously).



Generating a Domain User Account on Mark-Server1

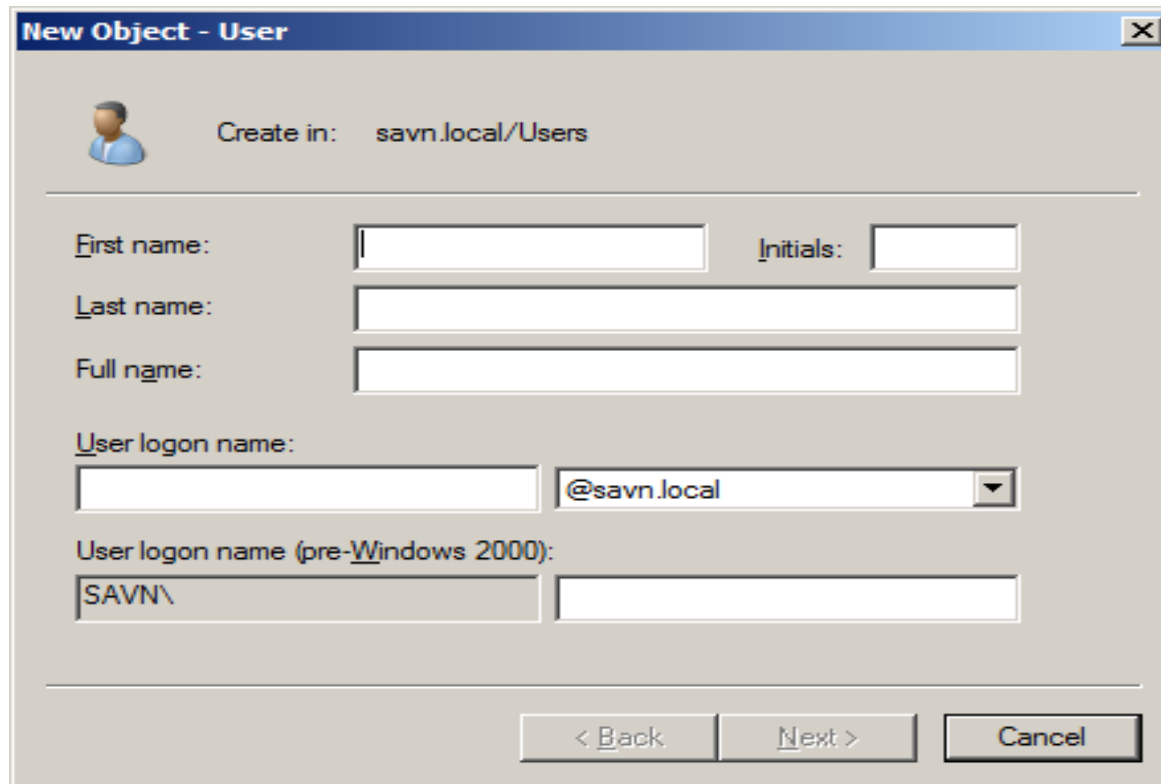
The screenshot shows the 'Active Directory Users and Computers' console window. The left pane displays a tree view of the directory structure. The 'Users' folder is selected and highlighted. A red arrow points from a callout box labeled 'Click User' to the 'Users' folder. The right pane shows a list of users and groups with columns for Name, Type, and Description.

Name	Type	Description
Administrator	User	Built-in account for admini...
Allowed RODC Password Replication Group	Security Group - Domain Local	Members in this group can...
Cert Publishers	Security Group - Domain Local	Members of this group are...
Denied RODC Password Replication Group	Security Group - Domain Local	Members in this group can...
DnsAdmins	Security Group - Domain Local	DNS Administrators Group
DnsUpdateProxy	Security Group - Global	DNS clients who are permi...
Domain Admins	Security Group - Global	Designated administrators...
Domain Computers	Security Group - Global	All workstations and serve...
Domain Controllers	Security Group - Global	All domain controllers in th...
Domain Guests	Security Group - Global	All domain guests
Domain Users	Security Group - Global	All domain users
Enterprise Admins	Security Group - Universal	Designated administrators...
Enterprise Read-only Domain Controllers	Security Group - Universal	Members of this group are...
Group Policy Creator Owners	Security Group - Global	Members in this group can...
Guest	User	Built-in account for guest ...
krbtgt	User	Key Distribution Center Se...
RAS and IAS Servers	Security Group - Domain Local	Servers in this group can ...
Read-only Domain Controllers	Security Group - Global	Members of this group are...
Schema Admins	Security Group - Universal	Designated administrators...



Generating a Domain User Account on Mark-Server1

- Once you have the Users screen open, either right click on Users in the left pane or click on the Action menu item at the top and from the drop-down list select New, then select User. You should see the dialog box as shown below.



The image shows a Windows-style dialog box titled "New Object - User". It features a user icon and the text "Create in: savn.local/Users". The form contains several input fields: "First name:" and "Initials:" (smaller field), "Last name:", "Full name:", "User login name:" (with a dropdown menu showing "@savn.local"), and "User login name (pre-Windows 2000):" (with a dropdown menu showing "SAVN\"). At the bottom are three buttons: "< Back", "Next >", and "Cancel".



Generating a Domain User Account on Mark-Server1

- Enter your name into the new user dialog box and give the user the login name of domainUser01.

New Object - User

Create in: savn.local/Users

First name: Initials:

Last name:

Full name:

User login name: @savn.local

User login name (pre-Windows 2000):

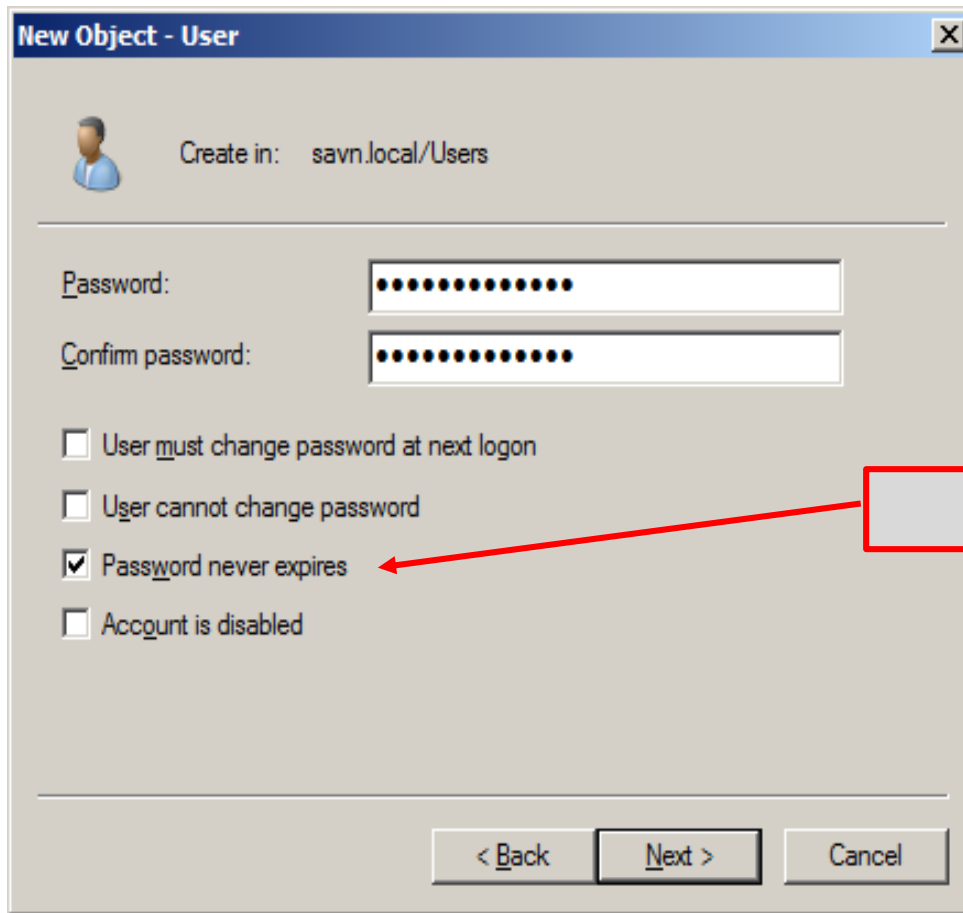
< Back Next > Cancel

Set username to: domainUser01



Generating a Domain User Account on Mark-Server1

- The password setting dialog box appears next. Give the user a password and set it to never expire.



New Object - User

Create in: savn.local/Users

Password: [masked]

Confirm password: [masked]

☐ User must change password at next logon

☐ User cannot change password

☒ Password never expires

☐ Account is disabled

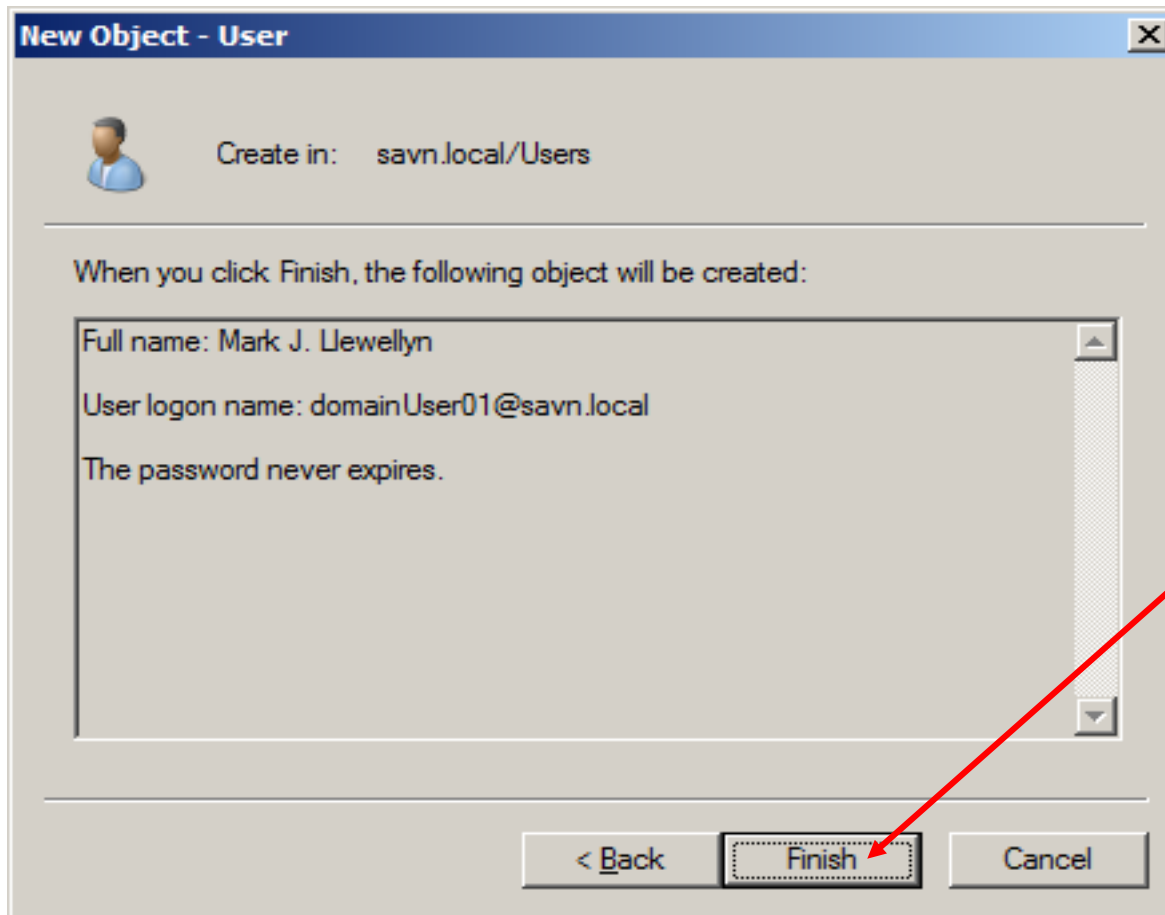
< Back Next > Cancel

Set password to never expire



Generating a Domain User Account on Mark-Server1

- The final dialog box appears next with a summary of information for the new user



Click Finish



Mark - Server 1 - VMware Player File Virtual Machine Help

Active Directory Users and Computers

File Action View Help

Active Directory Users and Comput

Save Queries

save.local

Built

Computers

Domain Controllers

ForeignSecurityPrincipals

Users

Administration

Research

Sales

Name	Type	Description
Administrator	User	
Allowed RODC Password Replication Group	Security G	
Cert Publishers	Security G	
Denied RODC Password Replication Group	Security G	
DnsAdmins	Security G	
DnsUpdateProxy	Security G	
Domain Admins	Security G	
Domain Computers	Security G	
Domain Controllers	Security G	
Domain Guests	Security G	
Domain Users	Security Group - Global	All domain users
Enterprise Admins	Security Group - Universal	Designated administrators of the enterprise
Enterprise Read-only Domain Controllers	Security Group - Universal	Members of this group are Read-Only Domai...
Group Policy Creator Owners	Security Group - Global	Members in this group can modify group polic...
Guest	User	Built-in account for guest access to the comp...
Mark J. Llewellyn	User	
RAS and IAS Servers	Security Group - Domain Local	Servers in this group can access remote acc...
Read-only Domain Controllers	Security Group - Global	Members of this group are Read-Only Domai...
Schema Admins	Security Group - Universal	Designated administrators of the schema

Return to the Users screen and do a screen capture that clearly shows the newly created domain user.

Label it: "3 – New domain user account created."

Start

Active Directory User...

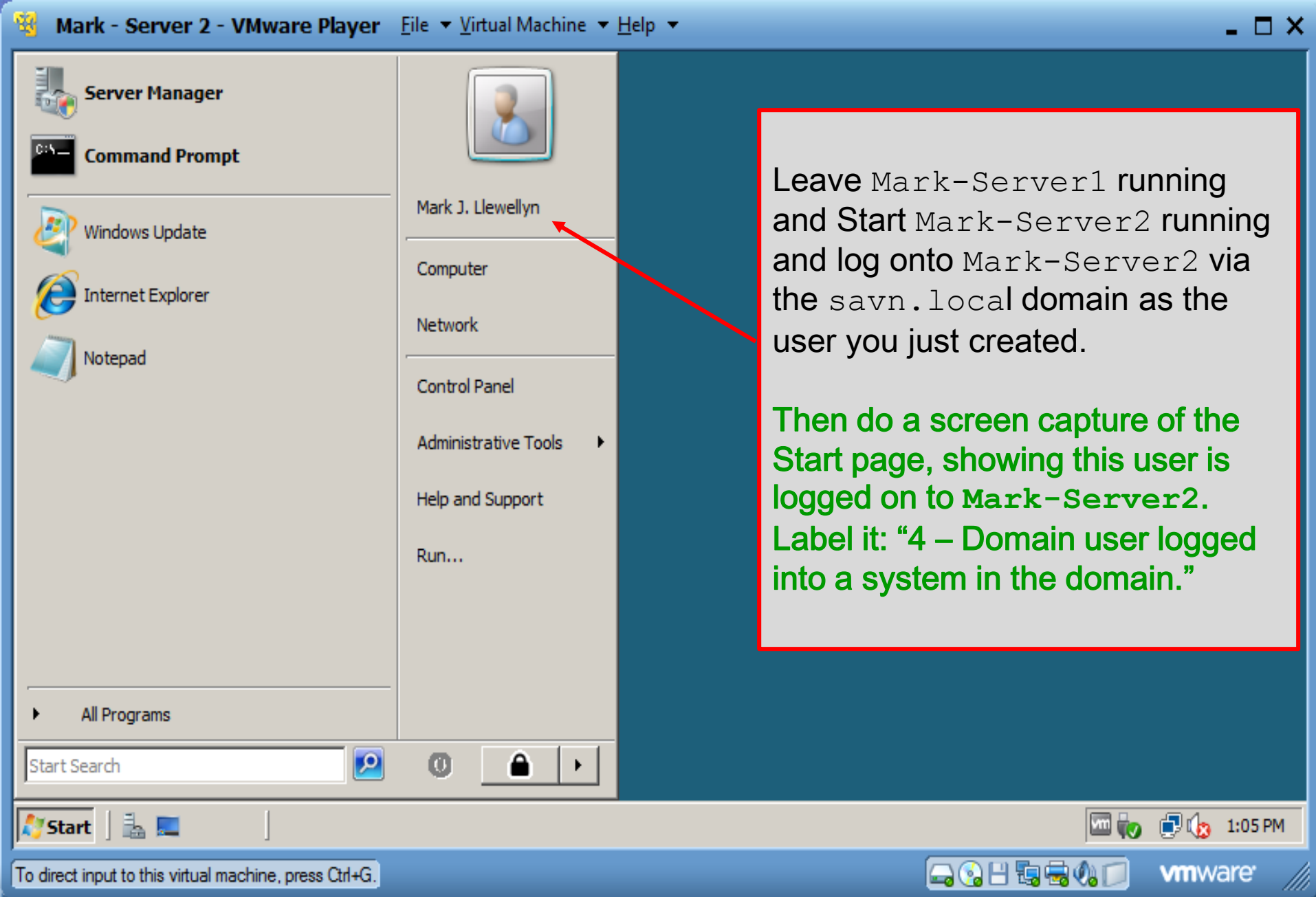
To direct input to this virtual machine, press Ctrl+G.

vmware

12:53 PM



Mark - Server 2 - VMware Player File Virtual Machine Help



Server Manager

Command Prompt

Windows Update

Internet Explorer

Notepad

Mark J. Llewellyn

Computer

Network

Control Panel

Administrative Tools

Help and Support

Run...

All Programs

Start Search

Start

To direct input to this virtual machine, press Ctrl+G.

vmware

1:05 PM

Leave Mark-Server1 running and Start Mark-Server2 running and log onto Mark-Server2 via the `savn.local` domain as the user you just created.

Then do a screen capture of the Start page, showing this user is logged on to Mark-Server2. Label it: "4 – Domain user logged into a system in the domain."





Shut down both Mark-Server1 and Mark-Server2. Start Mark-Client1 running and attempt to log in as the new savn.local domain user you just created. The attempt to log in to Mark-Client1 as domainUser01 will fail since the domain controller Mark-Server1 is off-line. You should see this screen.

Take a screenshot of this page. Label it: "5: Attempted domain login when domain server is unavailable."



There are currently no logon servers available to service the logon request.

OK



Windows Vista Business

To direct input to this virtual machine, press Ctrl+G.



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