



# MCSA-Windows Server 2016 实现和管理-实验篇

程尊华



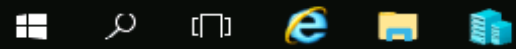


Recycle Bin

# LON-HOST1

Logged on user: lon-host\administrator

Microsoft Windows NT version 6.2 Datacenter Edition (Terminal server) (build 9200)



^ ENG



Hyper-V Manager

FileActionViewHelp

Hyper-V Manager

LON-HOST1

Virtual Machines

Name	State	CPU Usage	Assigned Memory	Uptime	Status
20740D-LON-DC1-0	Off				
20740B-LON-NVHOST2	Off				
20740B-LON-SVR1-B	Off				
LON-GUEST1					
LON-GUEST2					

Connect...  
Settings...  
Upgrade Configuration Version...  
Start  
Checkpoint  
Move...  
Export...  
Rename...  
Delete...  
Enable Replication...  
Help

Checkpoints

Checkpoints.

20740B-LON-SVR1-B

Created:

11/27/2016 11:32:03 AM

Configuration Version:

5.0

Generation:

1

Notes:

None

Clustered: No

SummaryMemoryNetworkingReplication

Actions

LON-HOST1

New

Import Virtual Mac...

Hyper-V Settings...

Virtual Switch Man...

Virtual SAN Manag...

Edit Disk...

Inspect Disk...

Stop Service

Remove Server

Refresh

View

Help

20740B LON SVR1 B

Connect...

Settings...

Upgrade Configura...

Start

Checkpoint

Move..

Export..

Rename...

Delete..

Enable Replication...

Starts the selected virtual machine.

Windows Taskbar

ENG



Hyper-V Manager  
LON-HOST1

Settings for 20740E-LON-SVR1-B on LON-HOST1

20740B-LON-SVR1-B

## Hardware

Add Hardware

BIOS

Boot from CD

Memory

32 MB

Processor

1 Virtual processor

IDE Controller 0

Hard Drive

20740B-LON-SVR1-B.vhdx

Hard Drive

20740B-LON-SVR1-B-AllFile...

IDE Controller 1

DVD Drive

None

SCSI Controller

Network Adaptor

1 Host Internal Network

COM 1

None

COM 2

None

Diskette Drive

None

## Management

Name

20740B-LON-SVR1-B

Integration Services

Some services offered

Checkpoints

Standard

Smart Paging File Location

C:\Program Files\Microsoft Lear...



## Hard Drive

You can change how this virtual hard disk is attached to the virtual machine. If an operating system is installed on this disk, changing the attachment might prevent the virtual machine from starting.

Controller:

IDE Controller 0

Location:

0 (in use)

## Media

You can compact, convert, expand, merge, reconnect or shrink a virtual hard disk by editing the associated file. Specify the full path to the file.

☒ Virtual hard disk:

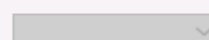
E:\Program Files\Microsoft Learning\20740\Drives\20740B-LON-SVR1-E\Virtual

View

Edit

Inspect

Browse...

☐ Physical hard disk:

If the physical hard disk you want to use is not listed, make sure that the disk is offline. Use Disk Management on the physical computer to manage physical hard disks.

To remove the virtual hard disk, click Remove. This disconnects the disk but does not delete the associated file.

Remove

OK

Cancel

Apply





Hyper-V Manager

LON-HOST1

Move "20740B-LCN-Svr1-B" Wizard



## Before You Begin

## Before You Begin

Choose Move Type  
Specify Destination  
Choose Move Options  
Summary

This wizard helps you move a virtual machine to a different computer, or move virtual machine storage from one location to another location.

☐ Do not show this page again

&lt; Previous

Next &gt;

Finish

Cancel

## Actions

J-HOST1

- New
- Import Virtual Mac..
- Hyper-V Settings...
- Virtual Switch Man..
- Virtual SAN Manag...
- Edit Disk...
- Inspect Disk...
- Stop Service
- Remove Server
- Refresh
- View
- Help

40B LON SVE1 B

- Connect...
- Settings...
- Upgrade Configura...
- Start
- Checkpoint
- Move..
- Export..
- Rename...
- Delete..
- Enable Replication...

Summary Memory Networking Replication



Elink Training





Hyper-V Manager

LON-HOST1

Move "20740B-LCN-Svr1-B" Wizard



## Choose Move Type

Before You Begin

Choose Move Type

Choose Move Options

Virtual Machine

Summary

What type of move do you want to perform?

☐ Move the virtual machine

Move the virtual machine and, optionally, its storage to another computer running Hyper-V.

☒ Move the virtual machine's storage

Move only the virtual machine's storage to another location, either on this server or on shared storage.

&lt; Previous

Next &gt;

Finish

Cancel

## Actions

- ×
- J-HOST1
- New
- Import Virtual Mac...
- Hyper-V Settings...
- Virtual Switch Man...
- Virtual SAN Manag...
- Edit Disk...
- Inspect Disk...
- Stop Service
- Remove Server
- Refresh
- View
- Help
- 40B LON SVR1 B
- Connect...
- Settings...
- Upgrade Configura...
- Start
- Checkpoint
- Move..
- Export..
- Rename...
- Delete..
- Enable Replication...

Summary

Memory

Networking

Replication





## Move "20740B-LCN-Svr1-B" Wizard



## Choose Options for Moving Storage

## Before You Begin

Choose Move Type

Choose Move Options

Select Items to Move

Unmanaged virtual hard disk

Attached virtual hard disk  
IDE Controller 0Attached virtual hard disk  
IDE Controller 0

Summary

## How do you want to move the storage?

☐ Move all of the virtual machine's data to a single location

This option allows you to specify one location to store all the virtual machine's items.

☐ Move the virtual machine's data to different locations

This option allows you to specify individual locations for each of the virtual machine's items.

☒ Move only the virtual machine's virtual hard disks

This option allows you to specify locations to move the virtual machine's virtual hard disks.

&lt; Previous

Next &gt;

Finish

Cancel

## Actions

J-HOST1

New

Import Virtual Mac...

Hyper-V Settings...

Virtual Switch Man...

Virtual SAN Manag...

Edit Disk...

Inspect Disk...

Stop Service

Remove Server

Refresh

View

Help

40B LON SVR1 B

Connect...

Settings...

Upgrade Configura...

Start

Checkpoint

Move...

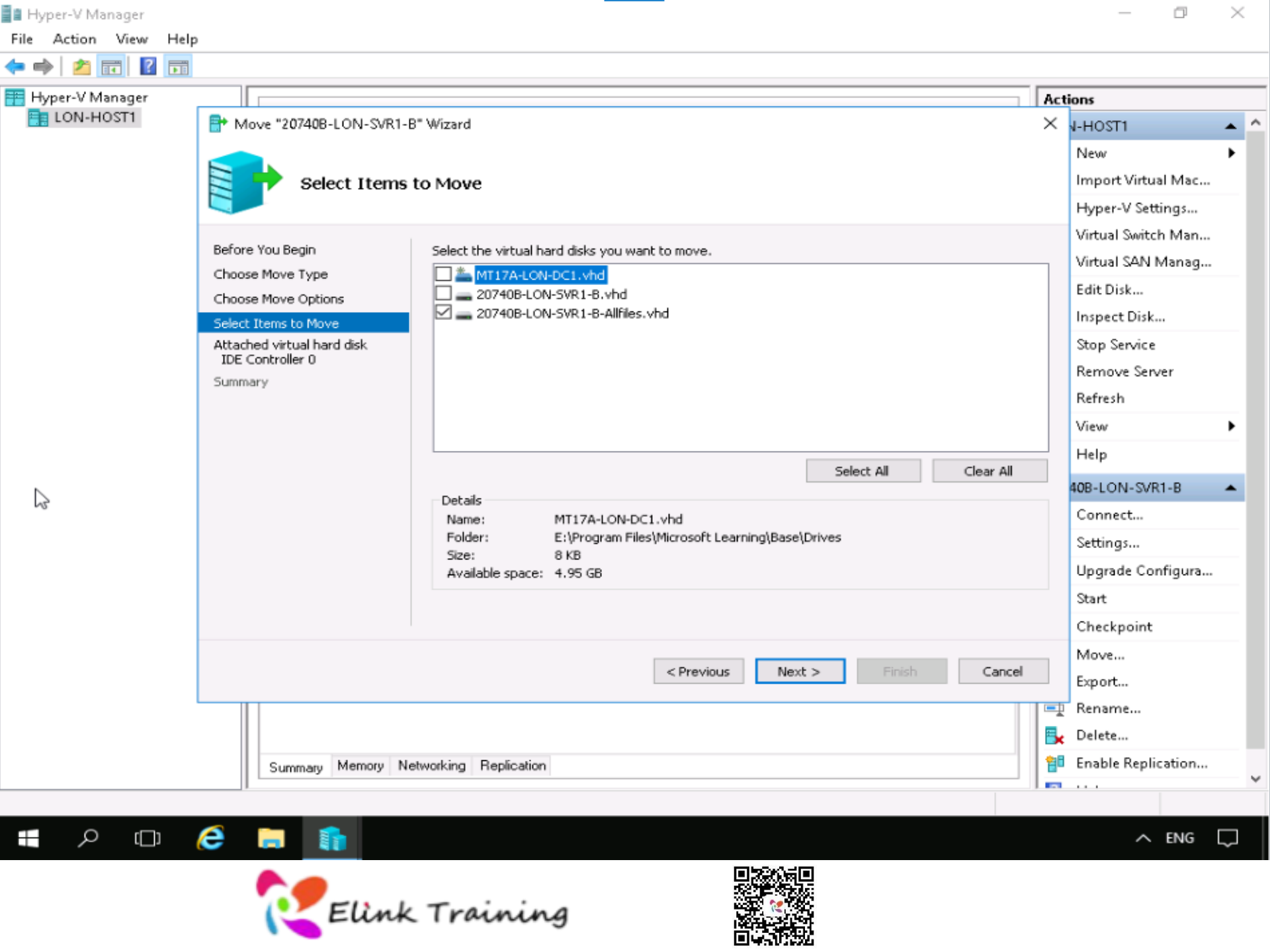
Export...

Rename...

Delete...

Enable Replication...





## Move "20740B-LON-SVR1-B" Wizard



## Select Items to Move

Before You Begin

Choose Move Type

Choose Move Options

Select Items to Move

Attached virtual hard disk  
IDE Controller 0

Summary

Select the virtual hard disks you want to move.

- ☐ MT17A-LON-DC1.vhd
- ☐ 20740B-LON-SVR1-B.vhd
- ☒ 20740B-LON-SVR1-B-Allfiles.vhd

Select All

Clear All

## Details

Name: MT17A-LON-DC1.vhd  
Folder: E:\Program Files\Microsoft Learning\Base\Drives  
Size: 8 KB  
Available space: 4.95 GB

&lt; Previous

Next &gt;

Finish

Cancel

LON-HOST1

New

Import Virtual Mac...

Hyper-V Settings...

Virtual Switch Man...

Virtual SAN Manag...

Edit Disk...

Inspect Disk...

Stop Service

Remove Server

Refresh

View

Help

20740B-LON-SVR1-B

Connect...

Settings...

Upgrade Configura...

Start

Checkpoint

Move...

Export...

Rename...

Delete...

Enable Replication...

...







Hyper-V Manager

LON-HOST1

Move "20740B-LON-SVR1-B" Wizard



## Choose a new location for attached virtual hard disk

Before You Begin

Choose Move Type

Choose Move Options

Select Items to Move

Attached virtual hard disk  
IDE Controller 0

Summary

Specify a location for the virtual machine's virtual hard disk.

New location

Folder: C:\VMs\Lon-svr1-b\

Browse...

Available space: 115.83 GB

Current location

Name: 20740B-LON-SVR1-B-Allfiles.vhd

Size: 8 KB

Folder: E:\Program Files\Microsoft Learning\20740\Drives\20740B-LON-SVR1-B\Virtual H

Available space: 4.95 GB

&lt; Previous

Next &gt;

Finish

Cancel

Actions

LON-HOST1

New

Import Virtual Mac...

Hyper-V Settings...

Virtual Switch Man...

Virtual SAN Manag...

Edit Disk...

Inspect Disk...

Stop Service

Remove Server

Refresh

View

Help

20740B-LON-SVR1-B

Connect...

Settings...

Upgrade Configura...

Start

Checkpoint

Move...

Export...

Rename...

Delete...

Enable Replication...



Elink Training



Hyper-V Manager

File Action View Help

Hyper-V Manager  
LON-HOST1

Virtual Machines

Disc Image Tools Lon-svr1-b

File Home Share View Manage

← → ↕ > This PC > Local Disk (C:) > VMs > Lon-svr1-b

Search Lon-svr1-b

Name	Date modified	Type	Size
20740B-LON-SVR1-B-Allfiles.vhd	3/9/2017 1:37 PM	Hard Disk Image F...	8 KB

1 item 1 item selected 8.00 KB

Internet Explorer

Windows taskbar: Start, Search, Task View, Internet Explorer, File Explorer, Hyper-V Manager

System tray: ^ ENG

Actions panel:

- Virtual Mac...
- Settings...
- Switch Man...
- AN Manag...
- ...
- Disk...
- vice
- Server
- ...
- SVR1-B
- ...
- ...
- Configura...
- ...
- int
- ...
- ...
- eplication...





Recycle Bin

# LON-NVHOST2

Logged on user: lon-nvhost2\administrator

Microsoft Windows NT version 6.2 Datacenter Edition (Terminal server) (build 9200)



ENG



Hyper-V Manager

File Action View Help

Hyper-V Manager

LON-NVHOST2

Virtual Machines

	State	CPU Usage	Assigned Memory	Uptime	Status
No virtual machines were found on this server.					

No virtual machine selected.

Details

No item selected.

Actions

LON-NVHOST2

- New
- Import Virtual Machine...
- Hyper-V Settings...
- Virtual Switch Manager...
- Virtual SAN Manager...
- Edit Disk...
- Inspect Disk...
- Stop Service
- Remove Server
- Refresh
- View
- Help

LON-NVHOST2: 0 virtual machines selected.





Hyper-V Manager

LON-NVHOST2

Hyper-V Settings for LON-NVHOST2

- Server**
  - Virtual Hard Disks  
C:\Users\Public\Documents\Hyper-...
  - Virtual Machines  
C:\ProgramData\Microsoft\Windo...
  - Physical GPUs  
Manage RemoteFX GPUs
  - NUMA Spanning  
Allow NUMA Spanning
  - Live Migrations  
No Live Migrations
  - Storage Migrations  
2 Simultaneous Migrations
  - Enhanced Session Mode Policy  
No Enhanced Session Mode
  - Replication Configuration**  
Not enabled as a Replica server
- User**
  - Keyboard  
Use on the virtual machine
  - Mouse Release Key  
CTRL+ALT+LEFT ARROW
  - Enhanced Session Mode  
Use it available
  - Reset Check Boxes  
Reset check boxes

## Replication Configuration

☐ Enable this computer as a Replica server.

## Authentication and ports

Specify the authentication types to allow for incoming replication traffic. Ensure that the ports you specify are open in the firewall.

☐ Use Kerberos (HTTP):

Data sent over the network will not be encrypted.

Specify the port: 80

☐ Use certificate-based Authentication (HTTPS):

Data sent over the network will be encrypted.

Specify the port: 443

Specify the certificate:

Issued To:  
Issued By:  
Expiration Date:  
Intended Purpose:

Select Certificate...

## Authorization and storage

Specify the servers that are allowed to replicate virtual machines to this computer.

☐ Allow replication from any authenticated server

Specify the default location to store Replica files:

C:\Users\Public\Documents\Hyper-V\Virtual Hard Disks

Browse...

☒ Allow replication from the specified servers:

Primary Server	Storage Location	Trust Group
----------------	------------------	-------------

OK

Cancel

Apply



# Hyper-V Settings for LON-NVHOST2

## Server

- Virtual Hard Disks  
C:\Users\Public\Documents\Hyper-...
- Virtual Machines  
C:\ProgramData\Microsoft\Windo...
- Physical GPUs  
Manage RemoteFX GPUs
- NUMA Spanning  
Allow NUMA Spanning
- Live Migrations  
No Live Migrations
- Storage Migrations  
2 Simultaneous Migrations
- Enhanced Session Mode Policy  
No Enhanced Session Mode
- Replication Configuration  
Enabled as a Replica server**

## User

- Keyboard  
Use on the virtual machine
- Mouse Release Key  
CTRL+ALT+LEFT ARROW
- Enhanced Session Mode  
Use if available
- Reset Check Boxes  
Reset check boxes

## Replication Configuration

☒ Enable this computer as a Replica server.

### Authentication and ports

Specify the authentication types to allow for incoming replication traffic. Ensure that the ports you specify are open in the firewall.

☒ Use Kerberos (HTTP):

Data sent over the network will not be encrypted.

Specify the port:

☐ Use certificate-based Authentication (HTTPS):

Data sent over the network will be encrypted.

Specify the port:

Specify the certificate:

Issued To:

Issued By:

Expiration Date:

Intended Purpose:

Select Certificate...

### Authorization and storage

Specify the servers that are allowed to replicate virtual machines to this computer.

☒ Allow replication from any authenticated server

Specify the default location to store Replica files:

C:\VMReplica\

Browse...

☐ Allow replication from the specified servers:

Primary Server

Storage Location

Trust Group

OK

Cancel

Apply



Server

- Virtual Hard Disks  
C:\Users\Public\Documents\Hyper-...
- Virtual Machines  
C:\ProgramData\Microsoft\Windo...
- Physical GPUs  
Manage RemoteFX GPUs
- NUMA Spanning  
Allow NUMA Spanning
- Live Migrations  
No Live Migrations
- Storage Migrations  
2 Simultaneous Migration
- Enhanced Session Mode  
No Enhanced Session Mo
- Replication Configuration  
Enabled as a Replica ser

User

- Keyboard  
Use on the virtual machin
- Mouse Release Key  
CTRL+ALT+LEFT ARROV
- Enhanced Session Mode  
Use if available
- Reset Check Boxes  
Reset check boxes

Replication Configuration

☒ Enable this computer as a Replica server.

Authentication and ports

Specify the authentication types to allow for incoming replication traffic. Ensure that the ports you specify are open in the firewall.

☒ Use Kerberos (HTTP):

Data sent over the network will not be encrypted.

Settings



Configure the firewall to allow inbound traffic.

Ensure the inbound TCP exception for port '80' is enabled in the firewall. If you are using Windows Firewall, enable "Hyper-V Replica HTTP Listener (TCP-In)" rule.

☐ Please don't show me this again

OK

Select Certificate...

Authorization and storage

Specify the servers that are allowed to replicate virtual machines to this computer.

☒ Allow replication from any authenticated server

Specify the default location to store Replica files:

C:\VMReplica\

Browse...

☐ Allow replication from the specified servers:

Primary Server

Storage Location

Trust Group

OK

Cancel

Apply



Windows Firewall with Advanced Security

File Action View Help

Windows Firewall with Advanced Security

- Inbound Rules
- Outbound Rules
- Connection Security Rules
- Monitoring

### Inbound Rules

Name	Group	Profile	Enabled	Action
Hyper-V (MIG-TCP-In)	Hyper-V	All	Yes	Allow
Hyper-V (REMOTE_DESKTOP_TCP_IN)	Hyper-V	All	Yes	Allow
Hyper-V (RPC)	Hyper-V	All	Yes	Allow
Hyper-V (RPC-EPMAP)	Hyper-V	All	Yes	Allow
Hyper-V Management Clients - WMI (As...	Hyper-V Management Clients	All	Yes	Allow
Hyper-V Management Clients - WMI (DC...	Hyper-V Management Clients	All	Yes	Allow
Hyper-V Management Clients - WMI (TC...	Hyper-V Management Clients	All	Yes	Allow
Hyper-V Replica HTTP Listener (TCP-In)	Hyper-V Replica HTTP	All	No	Allow
Hyper-V Replica HTTPS Listener (TCP-In)	Hyper-V Replica HTTPS	All	No	Allow
iSCSI Service (TCP-In)	iSCSI Service	All	No	Allow
Key Management Service (TCP-In)	Key Management Service	All	No	Allow
mDNS (UDP-In)	mDNS	All	Yes	Allow
Netlogon Service (NP-In)	Netlogon Service	All	No	Allow
Netlogon Service Authz (RPC)	Netlogon Service	All	No	Allow
Network Controller Host Agent (TCP-In)	Network Controller Host Ag...	All	No	Allow
Network Controller Host Agent WCF (TC...	Network Controller Host Ag...	All	No	Allow
Network Controller Host Agent WCF ove...	Network Controller Host Ag...	All	No	Allow
Network Discovery (LLMNR-UDP-In)	Network Discovery	All	No	Allow
Network Discovery (NB-Datagram-In)	Network Discovery	All	No	Allow
Network Discovery (NB-Name-In)	Network Discovery	All	No	Allow
Network Discovery (Pub-WSD-In)	Network Discovery	All	No	Allow
Network Discovery (SSDP-In)	Network Discovery	All	No	Allow
Network Discovery (UPnP-In)	Network Discovery	All	No	Allow
Network Discovery (WSD Events-In)	Network Discovery	All	No	Allow
Network Discovery (WSD EventsSecure-In)	Network Discovery	All	No	Allow
Network Discovery (WSD-In)	Network Discovery	All	No	Allow
Performance Logs and Alerts (DCOM-In)	Performance Logs and Alerts	Domain	No	Allow
Performance Logs and Alerts (DCOM-In)	Performance Logs and Alerts	Private...	No	Allow
Performance Logs and Alerts (TCP-In)	Performance Logs and Alerts	Domain	No	Allow

### Actions

- Inbound Rules
- New Rule...
- Filter by Profile
- Filter by State
- Filter by Group
- View
- Refresh
- Export List...
- Help
- Hyper-V Replica HTTP Liste...
- Enable Rule
- Cut
- Copy
- Delete
- Properties
- Help

Internet Explorer





Windows Firewall with Advanced Security

FileActionViewHelp

Windows Firewall with Advanced Security

Inbound Rules

Outbound Rules

Connection Security Rules

Monitoring

Inbound Rules

Name	Group	Profile	Enabled	Action
Hyper-V (MIG-TCP-In)	Hyper-V	All	Yes	Allow
Hyper-V (REMOTE_DESKTOP_TCP_IN)	Hyper-V	All	Yes	Allow
Hyper-V (RPC)	Hyper-V	All	Yes	Allow
Hyper-V (RPC-EPMAP)	Hyper-V	All	Yes	Allow
Hyper-V Management Clients - WMI (As...	Hyper-V Management Clients	All	Yes	Allow
Hyper-V Management Clients - WMI (DC...	Hyper-V Management Clients	All	Yes	Allow
Hyper-V Management Clients - WMI (TC...	Hyper-V Management Clients	All	Yes	Allow
Hyper-V Replica HTTP Listener (TCP-In)	Hyper-V Replica HTTP	All	No	Allow
Hyper-V Replica HTTPS Listener (TCP-In)	Hyper-V Replica HTTP	All	No	Allow
iSCSI Service (TCP-In)	iSCSI S	All	No	Allow
Key Management Service (TCP-In)	Key M	All	No	Allow
mDNS (UDP-In)	mDNS	All	Yes	Allow
Netlogon Service (NP-In)	Netlog	All	No	Allow
Netlogon Service Authz (RPC)	Netlog	All	No	Allow
Network Controller Host Agent (TCP-In)	Netwo	All	No	Allow
Network Controller Host Agent WCF (TC...	Netwo	All	No	Allow
Network Controller Host Agent WCF ove...	Network Controller Host Ag...	All	No	Allow
Network Discovery (LLMNR-UDP-In)	Network Discovery	All	No	Allow
Network Discovery (NB-Datagram-In)	Network Discovery	All	No	Allow
Network Discovery (NB-Name-In)	Network Discovery	All	No	Allow
Network Discovery (Pub-WSD-In)	Network Discovery	All	No	Allow
Network Discovery (SSDP-In)	Network Discovery	All	No	Allow
Network Discovery (UPnP-In)	Network Discovery	All	No	Allow
Network Discovery (WSD Events-In)	Network Discovery	All	No	Allow
Network Discovery (WSD EventsSecure-In)	Network Discovery	All	No	Allow
Network Discovery (WSD-In)	Network Discovery	All	No	Allow
Performance Logs and Alerts (DCOM-In)	Performance Logs and Alerts	Domain	No	Allow
Performance Logs and Alerts (DCOM-In)	Performance Logs and Alerts	Private...	No	Allow
Performance Logs and Alerts (TCP-In)	Performance Logs and Alerts	Domain	No	Allow

Actions

Inbound Rules

New Rule...

Filter by Profile

Filter by State

Filter by Group

View

Refresh

Export List...

Help

Hyper-V Replica HTTP Liste...

Enable Rule

Cut

Copy

Delete

Properties

Help

Search Windows



Windows Firewall with Advanced Security

File Action View Help

Windows Firewall with Advanced Security

- Inbound Rules
- Outbound Rules
- Connection Security Rules
- Monitoring

### Inbound Rules

Name	Group	Profile	Enabled	Action
Hyper-V (MIG-TCP-In)	Hyper-V	All	Yes	Allow
Hyper-V (REMOTE_DESKTOP_TCP_IN)	Hyper-V	All	Yes	Allow
Hyper-V (RPC)	Hyper-V	All	Yes	Allow
Hyper-V (RPC-EPMAP)	Hyper-V	All	Yes	Allow
Hyper-V Management Clients - WMI (As...	Hyper-V Management Clients	All	Yes	Allow
Hyper-V Management Clients - WMI (DC...	Hyper-V Management Clients	All	Yes	Allow
Hyper-V Management Clients - WMI (TC...	Hyper-V Management Clients	All	Yes	Allow
Hyper-V Replica HTTP Listener (TCP-In)	Hyper-V Replica HTTP	All	Yes	Allow
Hyper-V Replica HTTPS Listener (TCP-In)	Hyper-V Replica HTTPS	All	No	Allow
iSCSI Service (TCP-In)	iSCSI Service	All	No	Allow
Key Management Service (TCP-In)	Key Management Service	All	No	Allow
mDNS (UDP-In)	mDNS	All	Yes	Allow
Netlogon Service (NP-In)	Netlogon Service	All	No	Allow
Netlogon Service Authz (RPC)	Netlogon Service	All	No	Allow
Network Controller Host Agent (TCP-In)	Network Controller Host Ag...	All	No	Allow
Network Controller Host Agent WCF (TC...	Network Controller Host Ag...	All	No	Allow
Network Controller Host Agent WCF ove...	Network Controller Host Ag...	All	No	Allow
Network Discovery (LLMNR-UDP-In)	Network Discovery	All	No	Allow
Network Discovery (NB-Datagram-In)	Network Discovery	All	No	Allow
Network Discovery (NB-Name-In)	Network Discovery	All	No	Allow
Network Discovery (Pub-WSD-In)	Network Discovery	All	No	Allow
Network Discovery (SSDP-In)	Network Discovery	All	No	Allow
Network Discovery (UPnP-In)	Network Discovery	All	No	Allow
Network Discovery (WSD Events-In)	Network Discovery	All	No	Allow
Network Discovery (WSD EventsSecure-In)	Network Discovery	All	No	Allow
Network Discovery (WSD-In)	Network Discovery	All	No	Allow
Performance Logs and Alerts (DCOM-In)	Performance Logs and Alerts	Domain	No	Allow
Performance Logs and Alerts (DCOM-In)	Performance Logs and Alerts	Private...	No	Allow
Performance Logs and Alerts (TCP-In)	Performance Logs and Alerts	Domain	No	Allow

### Actions

- Inbound Rules
- New Rule...
- Filter by Profile
- Filter by State
- Filter by Group
- View
- Refresh
- Export List...
- Help
- Hyper-V Replica HTTP Liste...
- Disable Rule
- Cut
- Copy
- Delete
- Properties
- Help





Hyper-V Manager

LON-HOST1

## Virtual Machines

Name	State	CPU Usage	Assigned Memory	Uptime	Status
20740B-LON-DC1-B	Off				
20740B-LON-NVHOST2	Off				
20740B-LON-SVR1-B	Off				
LON-GUEST1	Off				
LON-GUEST2	Off				

- Connect...
- Settings...
- Upgrade Configuration Version...
- Start
- Checkpoint
- Move...
- Export...
- Rename...
- Delete...
- Enable Replication...
- Help

## Checkpoints

The selected virtual machine

## 20740B-LON-SVR1-B

**Created:** 11/2/2016 11:32:03 AM**Clustered:** No**Configuration Version:** 5.0**Generation:** 1**Notes:** None

Summary Memory Networking Replication

## Actions

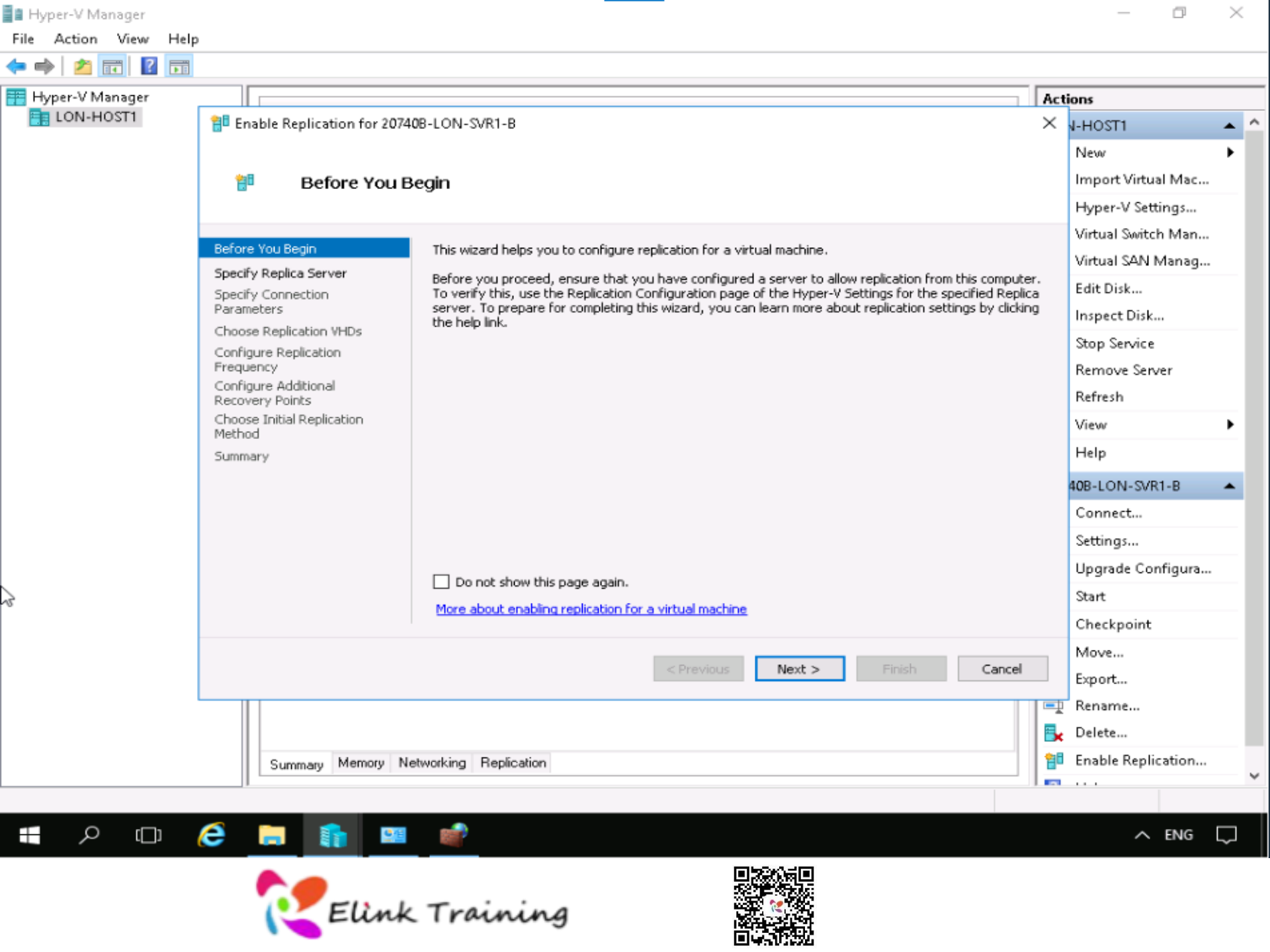
## LON-HOST1

- New
- Import Virtual Mac...
- Hyper-V Settings...
- Virtual Switch Man...
- Virtual SAN Manag...
- Edit Disk...
- Inspect Disk...
- Stop Service
- Remove Server
- Refresh
- View
- Help

## 20740B-LON-SVR1-B

- Connect...
- Settings...
- Upgrade Configura...
- Start
- Checkpoint
- Move...
- Export...
- Rename...
- Delete...
- Enable Replication...





Hyper-V Manager

File Action View Help

Hyper-V Manager

LON-HOST1

Enable Replication for 20740B-LON-SVR1-B

Before You Begin

Before You Begin

Specify Replica Server

Specify Connection Parameters

Choose Replication VHDs

Configure Replication Frequency

Configure Additional Recovery Points

Choose Initial Replication Method

Summary

This wizard helps you to configure replication for a virtual machine.

Before you proceed, ensure that you have configured a server to allow replication from this computer. To verify this, use the Replication Configuration page of the Hyper-V Settings for the specified Replica server. To prepare for completing this wizard, you can learn more about replication settings by clicking the help link.

☐ Do not show this page again.

[More about enabling replication for a virtual machine](#)

< Previous

Next >

Finish

Cancel

Actions

LON-HOST1

New

Import Virtual Mac...

Hyper-V Settings...

Virtual Switch Man...

Virtual SAN Manag...

Edit Disk...

Inspect Disk...

Stop Service

Remove Server

Refresh

View

Help

40B-LON-SVR1-B

Connect...

Settings...

Upgrade Configura...

Start

Checkpoint

Move...

Export...

Rename...

Delete...

Enable Replication...

Summary

Memory

Networking

Replication

Windows Taskbar

ENG

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QR Code



Hyper-V Manager

LON-HOST1

Enable Replication for 20740B-LON-SVR1-B

## Specify Replica Server

Before You Begin

Specify Replica Server

Specify Connection  
Parameters

Choose Replication VHDs

Configure Replication  
FrequencyConfigure Additional  
Recovery PointsChoose Initial Replication  
Method

Summary

Specify the Replica server name to use to replicate this virtual machine. If the Replica server is on a failover cluster, specify the name of the Hyper-V Replica Broker as the Replica server. Use the Failover Cluster Manager on the Replica server to find the name of the Replica Broker.

Replica server: lon-nvhost2

Browse...

&lt; Previous

Next &gt;

Finish

Cancel

## Actions

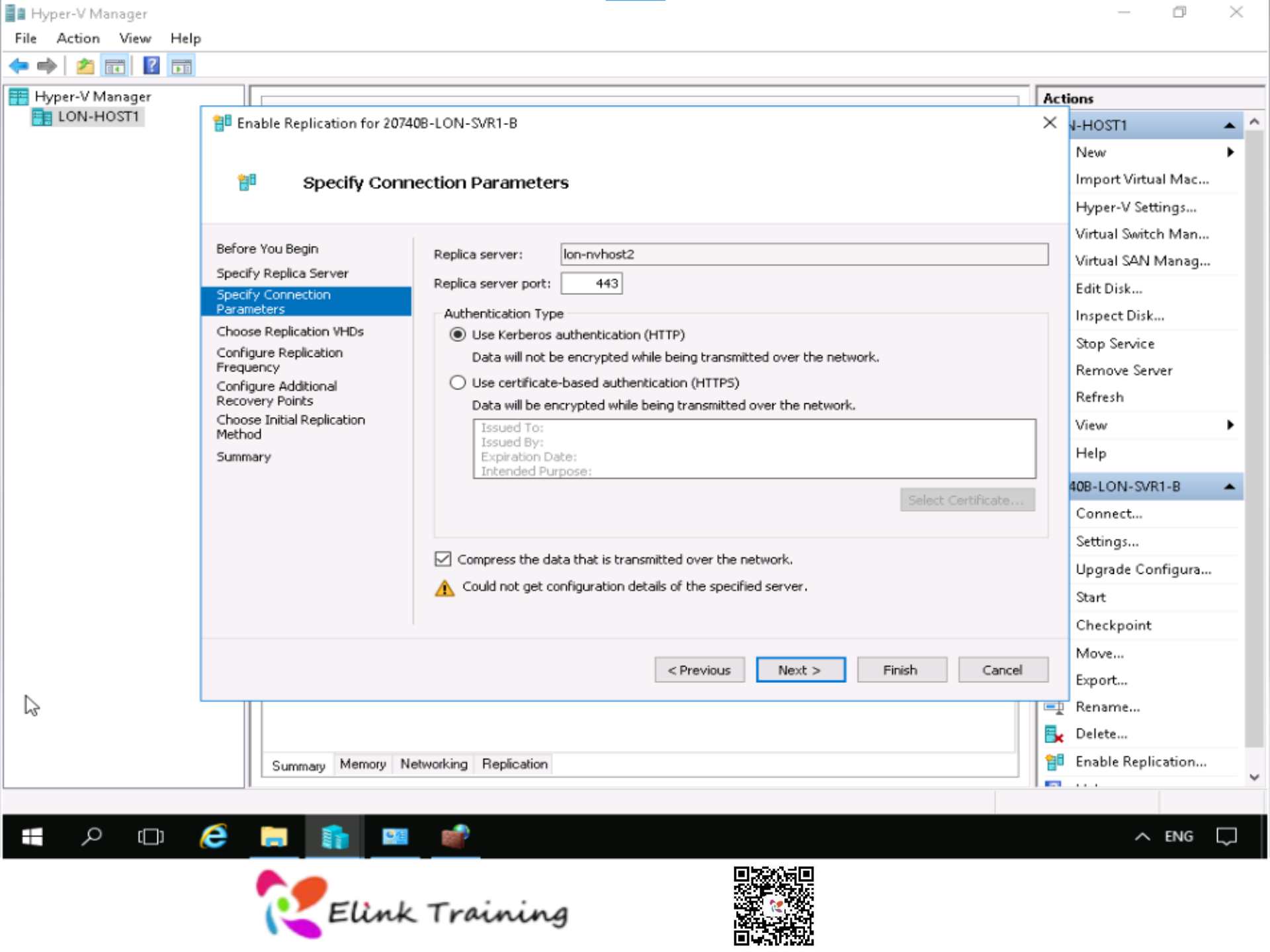
- ×
- LON-HOST1
  - New
  - Import Virtual Mac...
  - Hyper-V Settings...
  - Virtual Switch Man...
  - Virtual SAN Manag...
  - Edit Disk...
  - Inspect Disk...
  - Stop Service
  - Remove Server
  - Refresh
  - View
  - Help
- 40B-LON-SVR1-B
  - Connect...
  - Settings...
  - Upgrade Configura...
  - Start
  - Checkpoint
  - Move...
  - Export...
  - Rename...
  - Delete...
  - Enable Replication...

Task View



ENG





- Before You Begin
- Specify Replica Server
- Specify Connection Parameters**
- Choose Replication VHDs
- Configure Replication Frequency
- Configure Additional Recovery Points
- Choose Initial Replication Method
- Summary

Replica server:

Replica server port:

Authentication Type

☒ Use Kerberos authentication (HTTP)  
Data will not be encrypted while being transmitted over the network.

☐ Use certificate-based authentication (HTTPS)  
Data will be encrypted while being transmitted over the network.


Issued To:

Issued By:

Expiration Date:

Intended Purpose:

☒ Compress the data that is transmitted over the network.

 Could not get configuration details of the specified server.

- Actions
- LON-HOST1
    - New
    - Import Virtual Mac...
    - Hyper-V Settings...
    - Virtual Switch Man...
    - Virtual SAN Manag...
    - Edit Disk...
    - Inspect Disk...
    - Stop Service
    - Remove Server
    - Refresh
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    - Connect...
    - Settings...
    - Upgrade Configura...
    - Start
    - Checkpoint
    - Move...
    - Export...
    - Rename...
    - Delete...
    - Enable Replication...





Hyper-V Manager

LON-HOST1

Enable Replication for 20740B-LON-SVR1-B



## Choose Replication VHDs

Before You Begin

Specify Replica Server

Specify Connection  
Parameters

Choose Replication VHDs

Configure Replication  
FrequencyConfigure Additional  
Recovery PointsChoose Initial Replication  
Method

Summary

Clear the check boxes of any virtual hard disks (VHDs) that you do not want to replicate (for example, a VHD used for a dedicated paging file).

Not replicating certain VHDs, such as the operating system VHD, could result in the Replica virtual machine not starting up properly.

Virtual Hard Disks:

- ☒ E:\Program Files\Microsoft Learning\20740\Drives\20740B-LON-SVR1-B\Virtual Hard Disks\20740B-L
- ☒ C:\VMs\Lon-svr1-b\20740B-LON-SVR1-B-Allfiles.vhd

&lt; Previous

Next &gt;

Finish

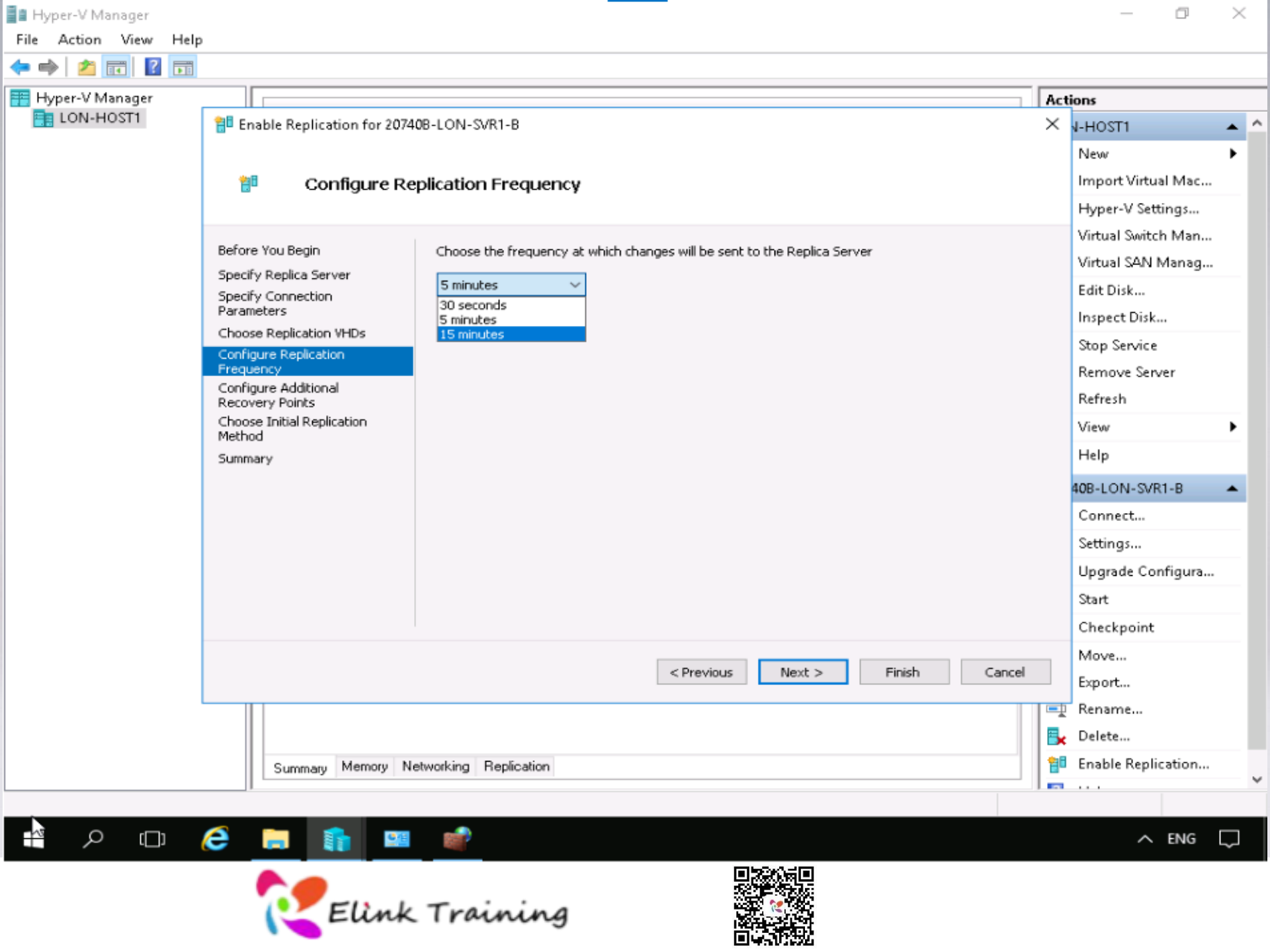
Cancel

## Actions

- LON-HOST1
  - New
  - Import Virtual Mac...
  - Hyper-V Settings...
  - Virtual Switch Man...
  - Virtual SAN Manag...
  - Edit Disk...
  - Inspect Disk...
  - Stop Service
  - Remove Server
  - Refresh
  - View
  - Help
- 40B-LON-SVR1-B
  - Connect...
  - Settings...
  - Upgrade Configura...
  - Start
  - Checkpoint
  - Move...
  - Export...
  - Rename...
  - Delete...
  - Enable Replication...

Summary Memory Networking Replication







Hyper-V Manager

File Action View Help

Hyper-V Manager

LON-HOST1

Enable Replication for 207403-LON-SVR1-B

Configure Replication Frequency

Before You Begin

Specify Replica Server

Specify Connection Parameters

Choose Replication VHDs

Configure Replication Frequency

Configure Additional Recovery Points

Choose Initial Replication Method

Summary

Choose the frequency at which changes will be sent to the Replica Server

30 seconds

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Next >

Finish

Cancel

Actions

LON-HOST1

New

Import Virtual Mac...

Hyper-V Settings...

Virtual Switch Man...

Virtual SAN Manag...

Edit Disk...

Inspect Disk...

Stop Service

Remove Server

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207403-LON-SVR1-B

Connect...

Settings...

Upgrade Configura...

Start

Checkpoint

Move...

Export...

Rename...

Delete...

Enable Replication...

Summary

Memory

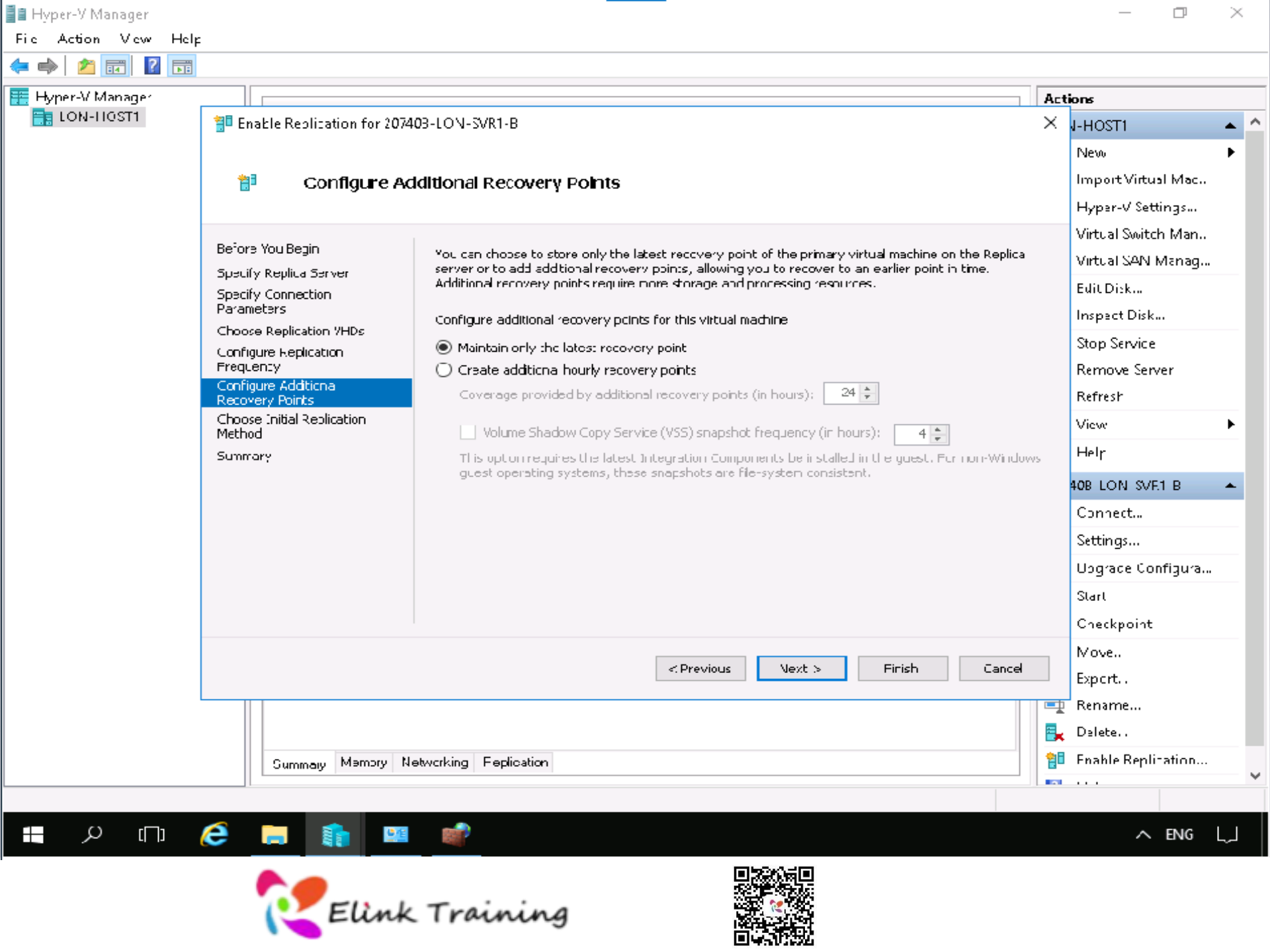
Networking

Replication

Windows Taskbar

ENG







Hyper-V Manager

LON-HOST1

Enable Replication for 207403-LON-SVR1-B



## Choose Initial Replication Method

## Before You Begin

Specify Replica Server

Specify Connection

Parameters

Choose Replication VHDs

Configure Replication

Frequency

Configure Additional

Recovery Points

Choose Initial Replication  
Method

Summary

Before replication can start, an initial copy of all virtual hard disks that you selected must be transferred to the Replica server.

Size of the initial copy of selected virtual hard disks: 96 KB

## Initial Replication Method

☒ Send initial copy over the network☐ Send initial copy using external media

Specify the location to export initial copy.

Browse...

☐ Use an existing virtual machine on the Replica server as the initial copy.

Choose this option if you have restored a copy of this virtual machine on the Replica server. The restored virtual machine will be used as the initial copy.

## Schedule Initial Replication

☒ Start replication immediately☐ Start replication on:

3/21/2017



8:00 PM



You can choose any time up to Tuesday, March 28, 2017.

&lt; Previous

Next &gt;

Finish

Cancel

## Actions

- ×
- LON-HOST1
- New
- Import Virtual Mac...
- Hyper-V Settings...
- Virtual Switch Man...
- Virtual SAN Manag...
- Edit Disk...
- Inspect Disk...
- Stop Service
- Remove Server
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- 207403-LON-SVR1-B
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- Rename...
- Delete...
- Enable Replication...

Summary

Memory

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Elink Training





Hyper-V Manager

LON-HOST1

Enable Replication for 207403-LON-SVR1-B



## Completing the Enable Replication wizard

Before You Begin

Specify Replica Server

Specify Connection  
Parameters

Choose Replication VHDs

Configure Replication  
FrequencyConfigure Additional  
Recovery PointsChoose Initial Replication  
Method

Summary

You have successfully completed the Enable Replication wizard. You are about to enable replication for '20740B-LON-SVR1-B' with the following settings:

Description:

Replica server:	lon-rvhost2
Replica server port:	443
Compress data:	Yes
Authentication type:	Kerberos authentication
VHDs not selected for replication:	None
Replication Frequency:	30 seconds
Store additional recovery points:	No
Initial replication method:	Using network, start immediately

To enable replication and close the wizard, click Finish.

&lt; Previous

Next &gt;

Finish

Cancel

Actions

LON-HOST1

New

Import Virtual Mac...

Hyper-V Settings...

Virtual Switch Man...

Virtual SAN Manag...

Edit Disk...

Inspect Disk...

Stop Service

Remove Server

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20740B LON SVR1 B

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Start

Checkpoint

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Export...

Rename...

Delete...

Enable Replication...



Hyper-V Manager

FileActionViewHelp

Hyper-V Manager

LON-HOST1

Enable Replication for 20740B-LON-SVR1-B

Completing the Enable Replication wizard

Before You Begin

Specify Replica Server

Specify Connection Parameters

Choose Replication VHDs

Configure Replication Frequency

Configure Additional Recovery Points

Choose Initial Replication Method

Summary

You have successfully completed the Enable Replication wizard. You are about to enable replication for "20740B-LON-SVR1-B" with the following settings:

Description:

Replica server:lon-nvhost2

Replica server port:443

Compress data:Yes

Automatic recovery:Yes

Enabling replication...

Recovery points:1

Store additional recovery points:no

Initial replication method:Using network, start immediately

To enable replication and close the wizard, click Finish.

< Previous

Next >

Finish

Cancel

Actions

LON-HOST1

New

Import Virtual Mac...

Hyper-V Settings...

Virtual Switch Man...

Virtual SAN Manag...

Edit Disk...

Inspect Disk...

Stop Service

Remove Server

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20740B-LON-SVR1-B

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Hyper-V Manager

LON-HOST1

Enable Replication for 20740B-LON-SVR1-B

Completing the Enable Replication wizard

Before You Begin

Specify Replica Server

Specify Connection Parameters

Choose Replication VHDs

Configure Replication Frequency

Configure Additional Recovery Points

Choose Initial Replication Method

Summary

Enable Replication for 20740B-LON-SVR1-B

Replication enabled successfully

Replica virtual machine 20740B-LON-SVR1-B was successfully created on the specified Replica server LON-NVHOST2.

The network adapters for the Replica virtual machine are not connected to any network. You can manually configure the network adapter settings for the Replica virtual machine.

Settings... Close

To enable replication and close the wizard, click Finish.

< Previous Next > Finish Cancel

Summary Memory Networking Replication

Actions

LON-HOST1

- New
- Import Virtual Mac...
- Hyper-V Settings...
- Virtual Switch Man...
- Virtual SAN Manag...
- Edit Disk...
- Inspect Disk...
- Stop Service
- Remove Server
- Refresh
- View
- Help

20740B-LON-SVR1-B

- Connect...
- Settings...
- Replication
- Upgrade Configura...
- Start
- Checkpoint
- Move...
- Export...
- Rename...
- Delete...

LON-HOST1: 1 Task View line selected.

ENG





Hyper-V Manager

LON-HOST1

## Virtual Machines

Name	State	CPU Usage	Assigned Memory	Uptime	Status
20740B-LON-DC1-B	Off				
20740B-LON-NVHOST2	Off				
20740B-LON-SVR1-B	Off				
LON-GUEST1	Off				
LON-GUEST2	Off				

## Checkpoints

The selected virtual machine has no checkpoints.

## 20740B-LON-SVR1-B

<b>Replication Mode:</b>	Primary	<b>Primary Server:</b>	LON-HOST1.Adatum.com
<b>Replication State:</b>	Replication enabled	<b>Replica Server:</b>	lon-nvhost2.Adatum.com
<b>Replication Health:</b>	Normal	<b>Last synchronized at:</b>	3/21/2017 7:07:58 PM

Summary Memory Networking Replication

## Actions

LON-HOST1

- New
- Import Virtual Mac...
- Hyper-V Settings...
- Virtual Switch Man...
- Virtual SAN Manag...
- Edit Disk...
- Inspect Disk...
- Stop Service
- Remove Server
- Refresh
- View
- Help
- 20740B-LON-SVR1-B
- Connect...
- Settings...
- Replication
- Upgrade Configura...
- Start
- Checkpoint
- Move...
- Export...
- Rename...
- Delete...

LON-HOST1: 1 virtual machine selected.



ENG





Hyper-V Manager

LON-NVHOST2

## Virtual Machines

Name	State	CPU Usage	Assigned Memory	Uptime	Status
------	-------	-----------	-----------------	--------	--------

20740B-LON-SVR1-B	Off				
-------------------	-----	--	--	--	--

## Checkpoints

The selected virtual machine has no checkpoints.

## 20740B-LON-SVR1-B

**Replication Mode:** Replica**Replication State:** Replication enabled**Replication Health:** Normal**Primary Server:** LON-HOST1.Adatum.com**Replica Server:** lon-nvhost2.Adatum.com**Last synchronized at:** 3/21/2017 7:10:28 PM

Summary	Memory	Networking	Replication
---------	--------	------------	-------------

## Actions

LON-NVHOST2

New

Import Virtual Mac...

Hyper-V Settings...

Virtual Switch Man...

Virtual SAN Manag...

Edit Disk...

Inspect Disk...

Stop Service

Remove Server

Refresh

View

Help

20740B-LON-SVR1-B

Connect...

Settings...

Replication

Upgrade Configura...

Start

Checkpoint

Move...

Export...

Rename...

Delete...

LON-NVHOST2: 1 virtual machine selected.



ENG





Hyper-V Manager

File Action View Help

Hyper-V Manager

LON-HOST1

### Virtual Machines

Name	State	CPU Usage	Assigned Memory	Uptime	Status
20740B-LON-DC1-B	Off				
20740B-LON-NVHOST2	Off				
LON-GUEST1	Off				
LON-GUEST2	Off				
20740B-LON-SVR1-B	Off				

Planned Failover...  
Pause Replication  
View Replication Health...  
Remove Replication

Connect...  
Settings...  
Replication  
Upgrade Configuration Version...  
Start  
Checkpoint  
Move...  
Export...  
Rename...  
Delete...  
Help

### 20740B-LON-SVR1-B

<b>Replication Mode:</b>	Primary	<b>Primary Server:</b>	LON-HOST1.Adatum.com
<b>Replication State:</b>	Replication enabled	<b>Replica Server:</b>	lon-nvhost2.Adatum.com
<b>Replication Health:</b>	Normal	<b>Last synchronized at:</b>	3/21/2017 7:11:58 PM

Summary Memory Networking Replication

### Actions

LON-HOST1

- New
- Import Virtual Mac...
- Hyper-V Settings...
- Virtual Switch Man...
- Virtual SAN Manag...
- Edit Disk...
- Inspect Disk...
- Stop Service
- Remove Server
- Refresh
- View
- Help

20740B-LON-SVR1-B

- Connect...
- Settings...
- Replication
- Upgrade Configura...
- Start
- Checkpoint
- Move...
- Export...
- Rename...
- Delete...

Contains commands for managing replication for the selected virtual machine.

ENG





Hyper-V Manager

LON-HOST1

## Virtual Machines

Name	State	CPU Usage	Assigned Memory	Uptime	Status
20740B-LON-DC1-B	Off				
20740B-LON-NVHOST2	Off				
LON-GUEST1	Off				

## Planned Failover

Click Fail Over to start the planned failover process for '20740B-LON-SVR1-B'. Any changes on the primary virtual machine that have not already been replicated will be replicated, and the Replica virtual machine will be prepared to start.

- ☐ Reverse the replication direction after failover.  
☒ Start the Replica virtual machine after failover.

## Prerequisite check

Check that virtual machine is turned off. Not Started

## Actions

Send data that has not been replicated to Replica server. Not Started  
Fail over to Replica server. Not Started  
Start the Replica virtual machine. Not Started

2074

**Replication Mode:** Primary  
**Replication State:** Replication enabled  
**Replication Health:** Normal

**Primary Server:** LON-HOST1.Adatum.com  
**Replica Server:** lon-nvhost2.Adatum.com  
**Last synchronized at:** 3/21/2017 7:12:28 PM

Summary Memory Networking Replication

## Actions

LON-HOST1

- New
- Import Virtual Mac...
- Hyper-V Settings...
- Virtual Switch Man...
- Virtual SAN Manag...
- Edit Disk...
- Inspect Disk...
- Stop Service
- Remove Server
- Refresh
- View
- Help
- 20740B-LON-SVR1-B
  - Connect...
  - Settings...
  - Replication
  - Upgrade Configura...
  - Start
  - Checkpoint
  - Move...
  - Export...
  - Rename...
  - Delete...



Hyper-V Manager

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LON-HOST1

Virtual Machines

Name	State	CPU Usage	Assigned Memory	Uptime	Status
20740B-LON-DC1-B	Off				
20740B-LON-NVHOST2	Off				
LON.GUEST1	Off				

Actions

LON-HOST1

New

Import Virtual Mac...

Hyper-V Settings...

Virtual Switch Man...

Virtual SAN Manag...

Edit Disk...

Inspect Disk...

Stop Service

Remove Server

Refresh

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20740B-LON-SVR1-B

Connect...

Settings...

Replication

Upgrade Configura...

Start

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Export...

Rename...

Delete...

Planned Failover

Click Fail Over to start the planned failover process for '20740B-LON-SVR1-B'. Any changes on the primary virtual machine that have not already been replicated will be replicated, and the Replica virtual machine will be prepared to start.

☐ Reverse the replication direction after failover.

☒ Start the Replica virtual machine after failover.

Prerequisite check

Check that virtual machine is turned off.

Successful

Actions

Send data that has not been replicated to Replica server.

Successful

Fail over to Replica server.

Successful

Start the Replica virtual machine.

Failed

Planned Failover

Access the virtual machine on lon-nvhost2.Adatum.com and start it manually.

See details

Close

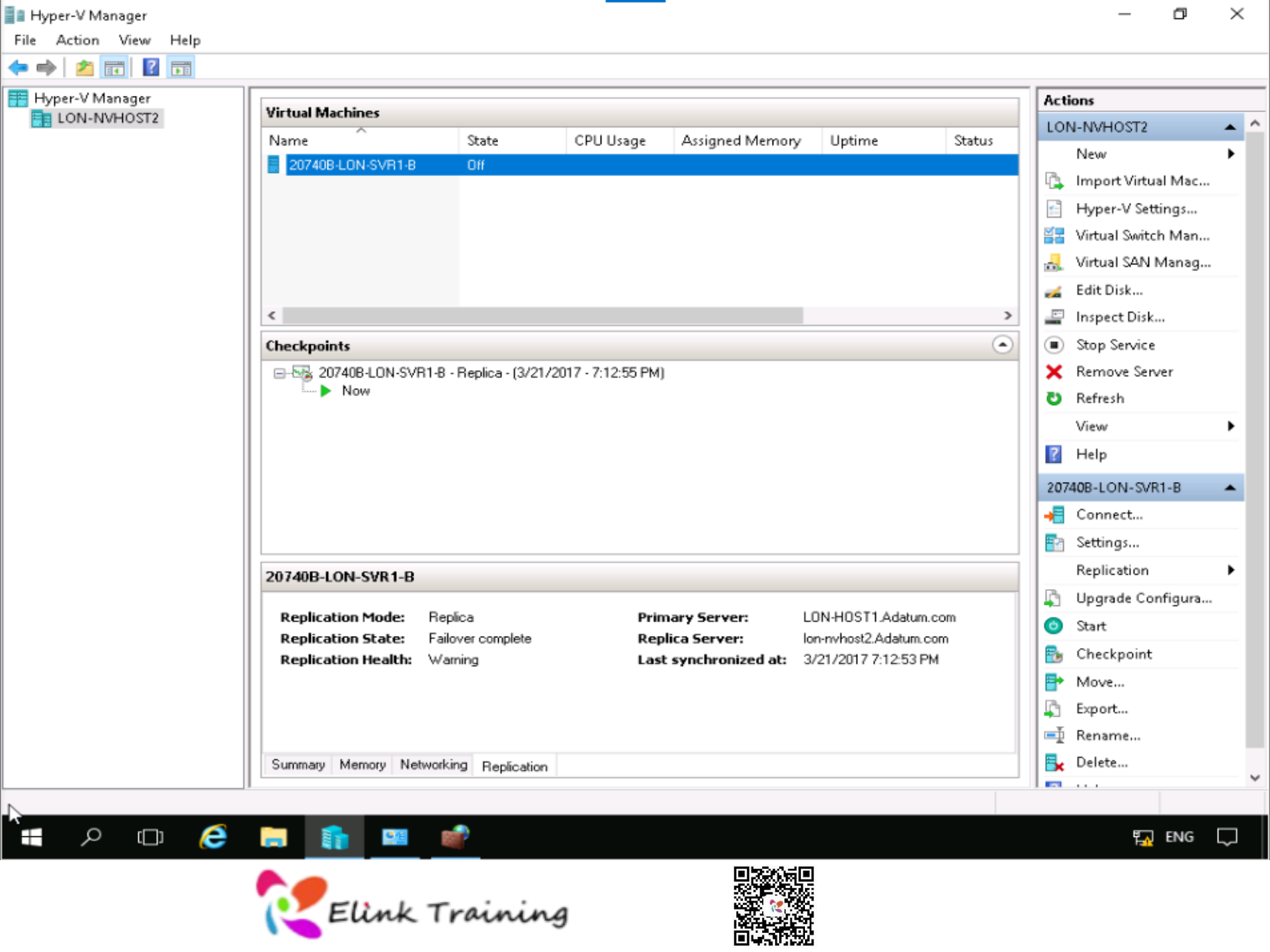
Summary

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也请大家关注我们的公众号！  
最后祝大家学习顺利！再次感谢！

