

Data Deduplication Lab

Data deduplication

- identifies and removes duplications within data without compromising the integrity of the data.
- You can schedule when Data deduplication should run, specify the resources to deduplicate

Data Duplication Lab steps

- Add the Data Duplication Role
- Enable Data Deduplication
- Test Data deduplication

Adding the Data Deduplication role

WELCOME TO SERVER MANAGER

Add Roles and Features Wizard

DESTINATION SERVER
Server2012r2.Servermain.com

Select server roles

Before You Begin
Installation Type
Server Selection
Server Roles
Features
Confirmation
Results

Select one or more roles to install on the selected server.

Roles	Description
<input type="checkbox"/> Active Directory Certificate Services (1 of 6 installed)	
<input checked="" type="checkbox"/> Active Directory Domain Services (Installed)	
<input checked="" type="checkbox"/> Active Directory Federation Services (Installed)	
<input type="checkbox"/> Active Directory Lightweight Directory Services	
<input type="checkbox"/> Active Directory Rights Management Services (1 of 2 installed)	
<input type="checkbox"/> Application Server	
<input checked="" type="checkbox"/> DHCP Server (Installed)	
<input checked="" type="checkbox"/> DNS Server (Installed)	
<input type="checkbox"/> Fax Server	
<input checked="" type="checkbox"/> File and Storage Services (7 of 12 installed)	
<input checked="" type="checkbox"/> File and iSCSI Services (6 of 11 installed)	
<input checked="" type="checkbox"/> File Server (Installed)	
<input checked="" type="checkbox"/> BranchCache for Network Files (Installed)	
<input checked="" type="checkbox"/> Data Deduplication (Installed)	Data Deduplication saves disk space by storing a single copy of identical data on the volume.

< Previous Next > Install Cancel

Click on file and storage services

Server Manager ▸ Dashboard

Dashboard

- Local Server
- All Servers
- AD CS
- AD DS
- AD FS
- AD RMS
- DHCP
- DNS
- File and Storage Services ▸
- Hyper-V
- IIS
- Remote Access
- WDS
- WSUS

WELCOME TO SERVER MANAGER

QUICK START

- 1 Configure this local server
- 2 Add roles and features
- 3 Add other servers to manage
- 4 Create a server group
- 5 Connect this server to cloud services

WHAT'S NEW

LEARN MORE

ROLES AND SERVER GROUPS

Roles: 12 | Server groups: 1 | Servers total: 1

- Servers
- Volumes**
- Disks
- Storage Pools
- Shares
- iSCSI
- Work Folders



VOLUMES
All volumes | 5 total

Filter

Volume	Status	File System Label	Provisioning
Server2012r2 (5)			
\\?\Volume{30...	Recovery		Fixed
C:	Acer		Fixed
F:	Extravolume		Fixed
E:	2012r2		Fixed
\\?\Volume{78...	Push Button Reset		Fixed

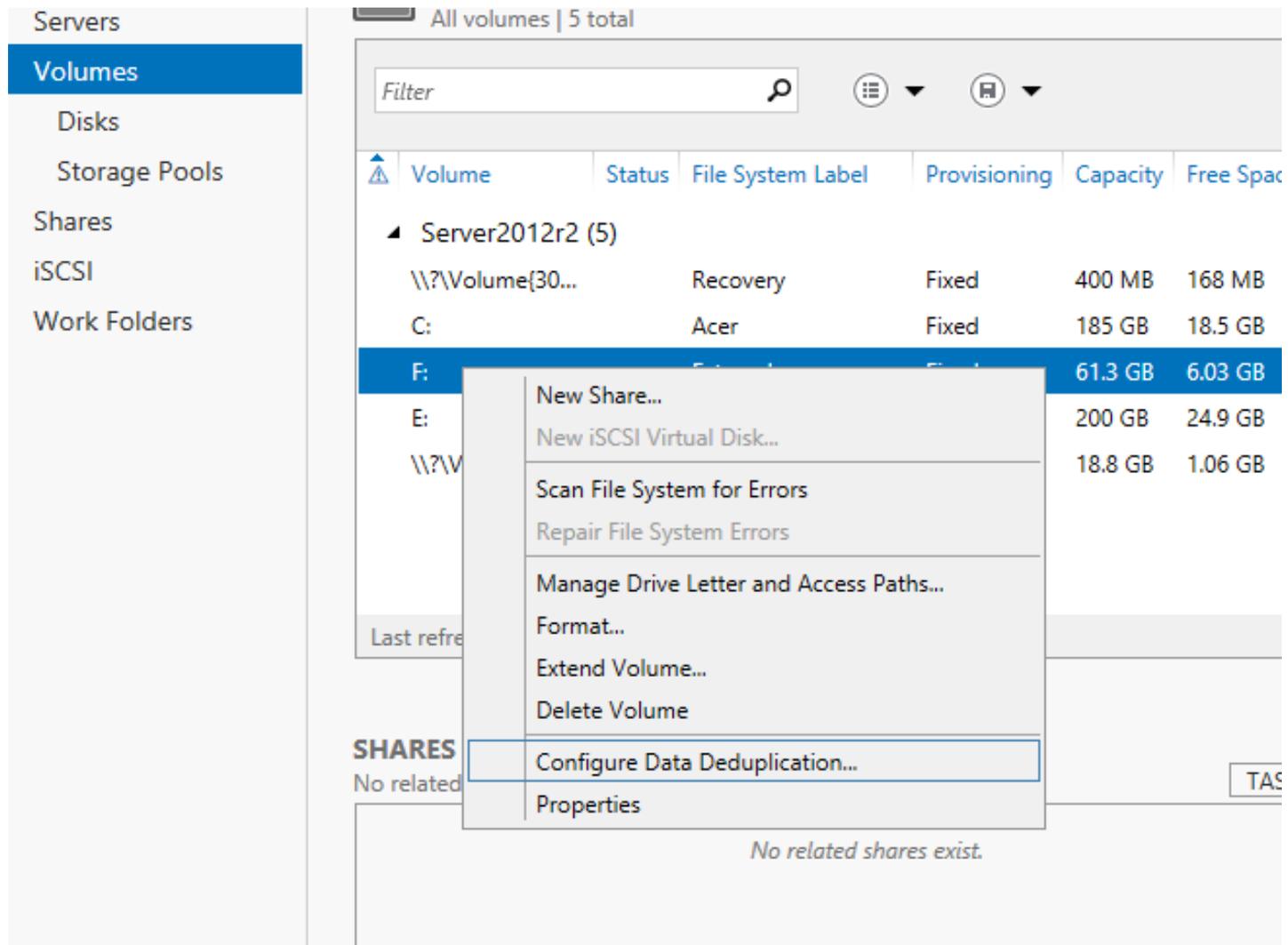
Last refreshed on 6/19/2016 9:47:50 AM

SHARES

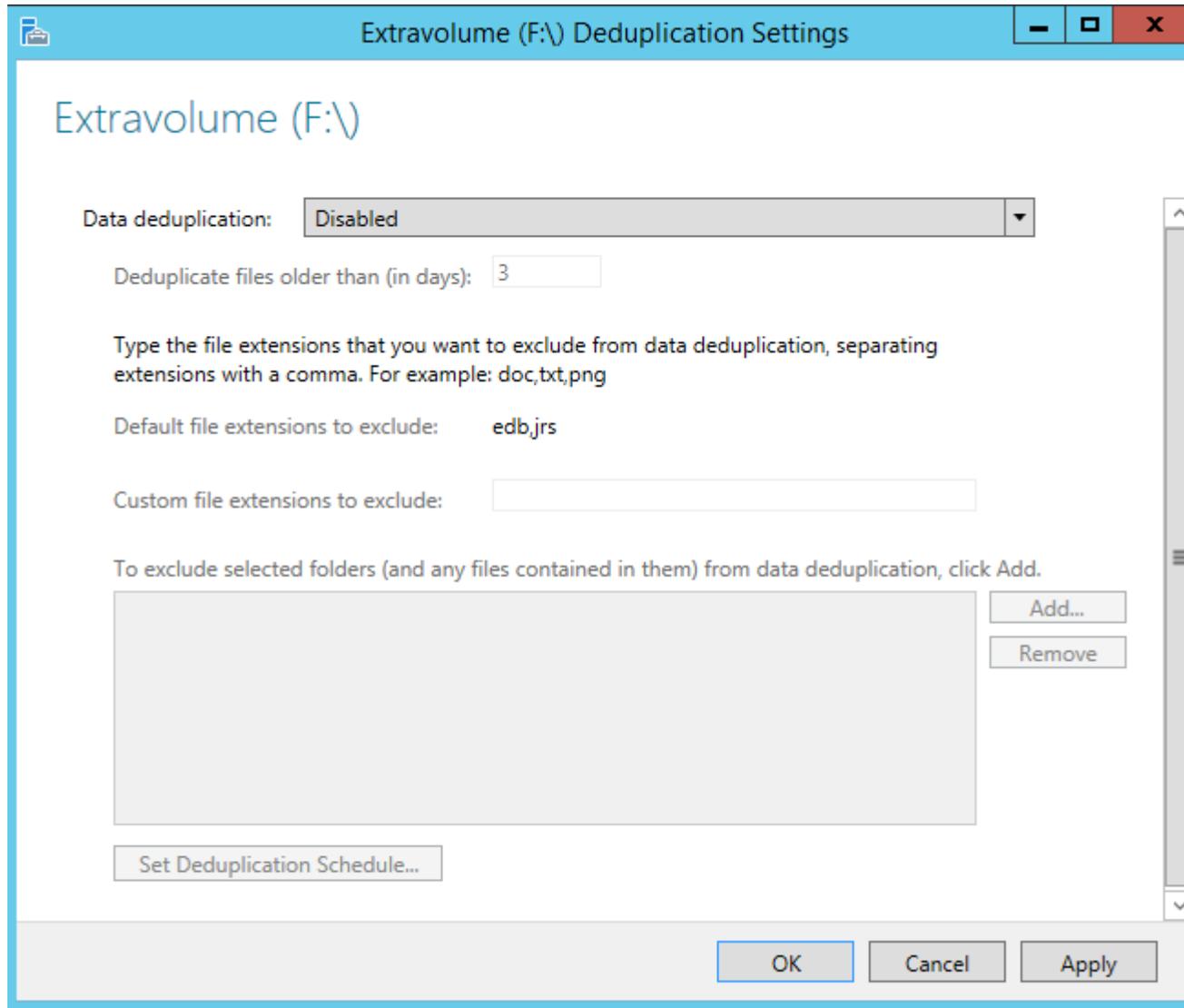
No volume is selected.

Select a volume to display the related shares

Right click your drive and click Configure data Deduplication



Disabled by default



Extravolume (F:\)

Data deduplication: Disabled

Deduplicate files older than: Disabled

Type the file extensions that you want to exclude from data deduplication, separating extensions with a comma. For example: doc,txt,png

Default file extensions to exclude: edb,jrs

Custom file extensions to exclude:

To exclude selected folders (and any files contained in them) from data deduplication, click Add.

Extravolume (F:\)

Data deduplication:

General purpose file server

Deduplicate files older than (in days):

3

Type the file extensions that you want to exclude from data deduplication, separating extensions with a comma. For example: doc,txt,png

Default file extensions to exclude:

edb,jrs

Custom file extensions to exclude:

To exclude selected folders (and any files contained in them) from data deduplication, click Add.

Add...

Remove

Set Deduplication Schedule...

OK

Cancel

Apply



Server2012r2.Servermain.com

 Enable background optimization

Regularly run data deduplication at low priority and pause data deduplication when the system is busy to minimize the impact on system performance.

 Enable throughput optimization ^

During the specified hours, run data deduplication at normal priority and consume the resources required to maximize performance.

Days of the week: Sunday Monday Tuesday Wednesday
 Thursday Friday Saturday

Start time: 1:45 AM ▼

Duration (in hours): 6

 Create a second schedule for throughput optimization ^

During the specified hours, run data deduplication at normal priority and consume the resources required to maximize performance.

Days of the week: Sunday Monday Tuesday Wednesday
 Thursday Friday Saturday

Start time: 9:00 AM ▼

Duration (in hours): 8

OK

Cancel

Apply

Test Data Deduplication

On your server, copy a **file** file from the root folder of the f: drive to the **folder of the f: drive**.

In Windows PowerShell, on the server, type the following cmdlet to start the deduplication job in optimization mode:

```
Start-DedupJob –Type Optimization –Volume F:
```

When the job completes, verify the size of the file on the root folder in drive f:.

In the **Properties** dialog box of the file, note the values for **Size** and **Size on Disk**. The size on the disk should be much smaller than it was previously.