

DELL ECS

ECS SYNC INSTALLATION

Bern, April 2023

www.backup.ch

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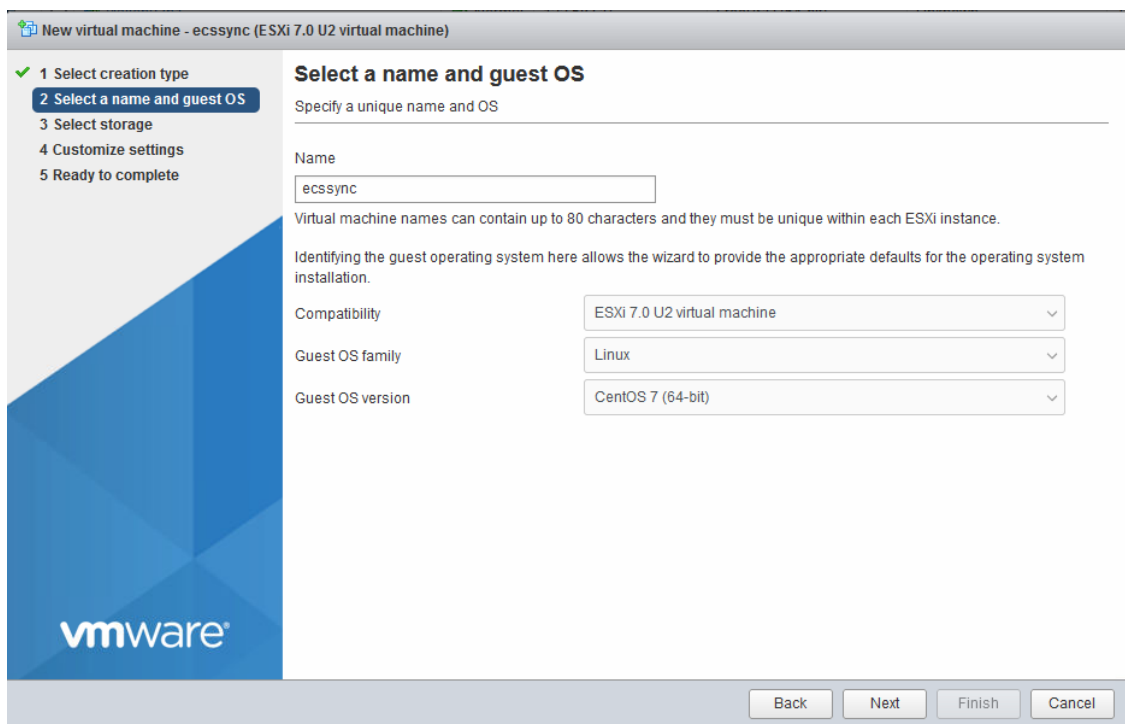
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1. ECS Sync Installation

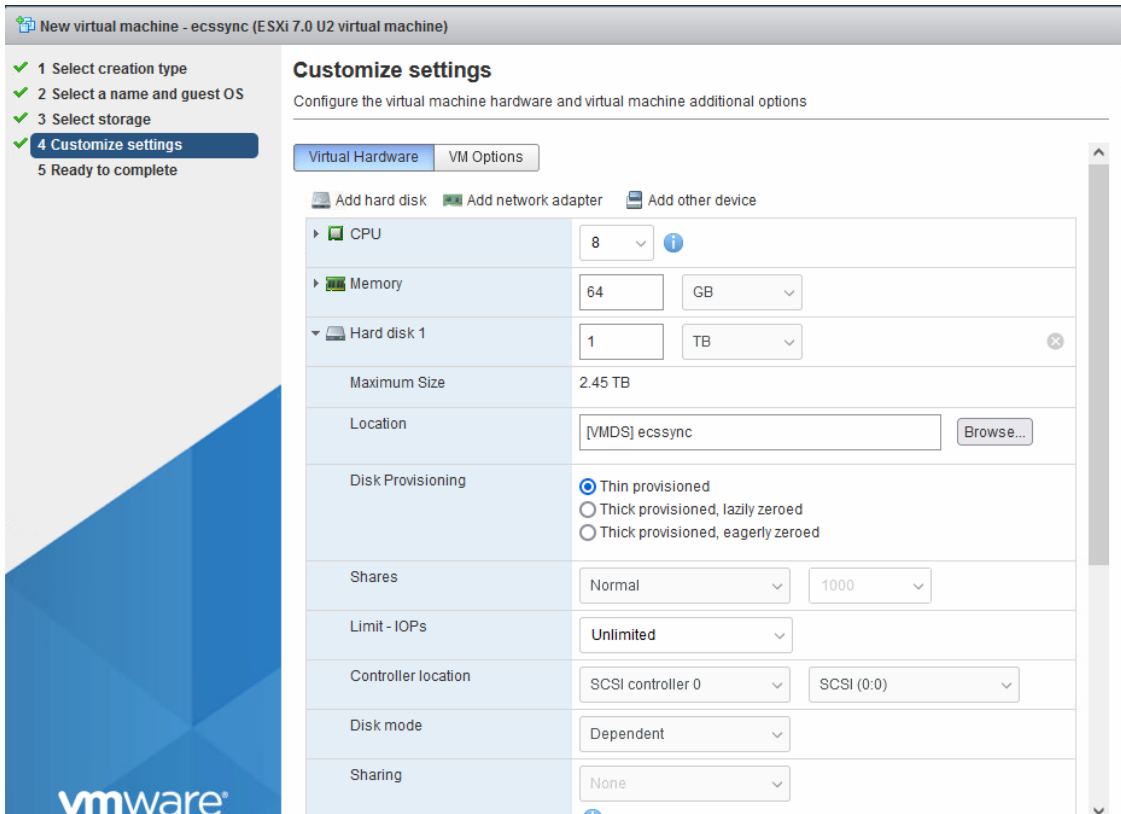
1.1. Getting help

In case of any questions, inability to access or find any of the required files or if you simply want an up-to-date OVF File that you can deploy, contact dellsupport@backup.ch.

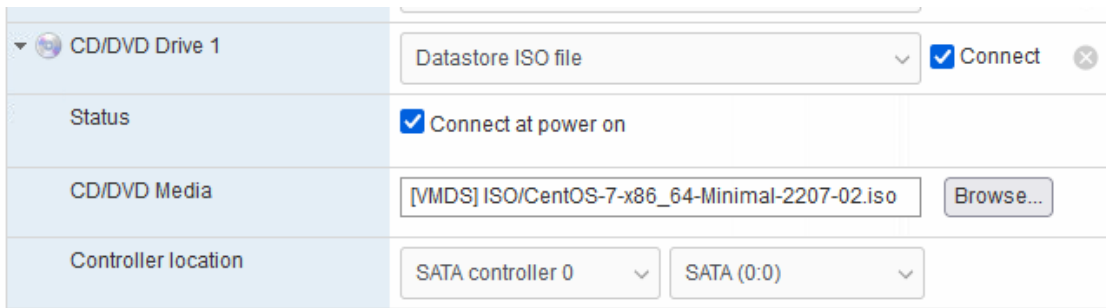
1.2. Create a new virtual machine



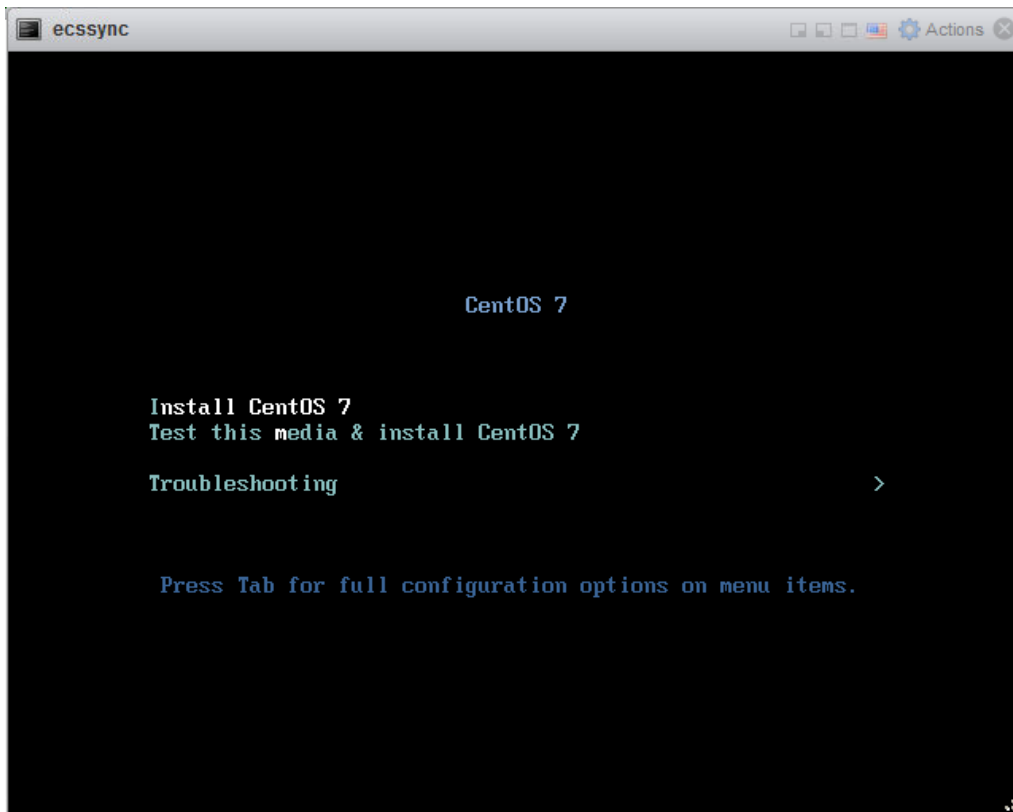
Choose a Datastore and customize the settings: Choose 8 CPUs, 64 GB of Memory, 1 TB of Disk and make it thin provisioned.



Attach the CentOS 7 minimal ISO file from [CentOS Linux](#)



Start the machine and install CentOS 7



Choose Language, Keyboard, Date & Time, Installation Destination and Network as requested.

Set the root user password and create the ecssync user as admin (sudo enabled).

Complete the installation and reboot the machine.

After the reboot:

Optionally install the VMWare Tools

```
sudo yum install perl
```

Install the VMWare Tools as shown in [Installing VMware Tools in a Linux virtual machine using a Compiler \(1018414\)](#)

Optionally configure the network

```
Nmtui
```

1.3. ECS Sync Installation

IMPORTANT: Ensure the VM has internet connectivity!

Install ECS Sync

```
copy ecs-sync-3.5.2.zip to /usr/local
yum install unzip
cd /usr/local
unzip ecs-sync-3.5.2.zip
delete ecs-sync-3.5.2.zip in /usr/local
copy ecs-sync-ui-3.5.2.jar to /usr/local/ecs-sync-3.5.2
sudo yum update
```

```
umask 022
cd ecs-sync-3.5.2
ova/configure-centos.sh
Initially choose enter for none for the MariaDB password.
set mariadb password
remove anonymous user
disallow root from remote
remove test database
reload privilege tables
ova/install.sh
sudo yum update
```

Configure ECSSync to use 64 GB of memory

```
sudo vi /etc/init.d/ecs-sync and set the -Xmx argument passed to java (4GB less than
physical RAM, JAVA_OPS line)
systemctl daemon-reload

sudo systemctl restart ecs-sync
```

Install Centera SDK

In order to install the Centera SDK Version 3.4 do the following as root:

```
copy Centera_SDK_Linux-gcc4.tgz to /usr/tmp
```

```
cd /usr/tmp
```

```
gzip -d Centera_SDK_Linux-gcc4.tgz
```

```
tar -xvf Centera_SDK_Linux-gcc4.tar
```

```
cd Centera_SDK/install
```

```
./install
```

```
echo "export PATH=${PATH}:/usr/local/Centera_SDK/lib/64" > /etc/profile.d/CenteraSDK-  
path.sh && chmod 755 /etc/profile.d/CenteraSDK-path.sh
```

```
echo "export LD_LIBRARY_PATH=/usr/local/Centera_SDK/lib/64" >
```

```
/etc/profile.d/CenteraLIB-path.sh && chmod 755 /etc/profile.d/CenteraLIB-path.sh
```

```
./etc/profile
```

Install JCASScript

```
copy JCASScript_Linux_x86_64_0.02.tar_prm_en_US_1.gz to /var/
```

```
cd /var
```

```
tar -xvf JCASScript-Linux_x86_64-0.02-GCC3.3-3.2.35.tar
```

```
mv JCASScript_x86_64/ JCASScript/
```

```
rm mv JCASScript_x86_64/ JCASScript/
```

```
cd JCASScript
```

Finishing the installation

```
sudo yum update
```

```
sudo reboot
```

1.4. Running ECSSync Migrations

Running JCAScript

```
sudo -i java -jar /var/JCASScript/JCASScript.jar
```

Running ECSSync Migrations

Connect to VM IP Address

If logging in for the first time, click Save and Write Configuration to Storage one

Go to the status website and create a new sync job.

1.5. Backup ONE best practices for migrations

Create `/home/ecssync/centerapea/source` and `/home/ecssync/centerapea/target` directories to store the pea files. These can be referenced in the job using `sourceip?/home/ecssync/centerapea/source/somefile.pea`.

Give a meaningful name for the job. This helps to find them again in the history if you want to re-use the job configuration. Re-running a job or creating an incremental job from an initial complete sync.

Make sure to choose a db table name. This prevents the table from being deleted when the job is archived.

Ensure Verify is selected to get the job to read the migrated objects and calculate their target MD5 values which ensures a proper verification of the migrated content.

Start with a thread count of 4. Check the load on the source and target system and then start increasing the tread count in the running job ui.

1.6. ECSSync VM Settings

Enabled Network with DHCP

Passwords chosen for image distributed:

Linux User: root / Ecs\$ync0va

Linux User: ecssync / ecs-sync-ova

GUI login: admin / ecs-sync

MariaDB: ecssync / ecs-sync-db

1.7. Generating Migration Output Files

Use putty to connect to the vm
 mysql -u ecssync -pecs-sync-db
 use ecs_sync;

List available tables
 show tables;

Get all fields from table:

```
MariaDB [ecs_sync]> describe test_job;
```

Field	Type	Null	Key	Default	Extra
source_id	varchar(750)	NO	PRI	NULL	
target_id	varchar(750)	YES		NULL	
is_directory	int(11)	NO		NULL	
size	bigint(20)	YES		NULL	
mtime	datetime	YES		NULL	
status	varchar(32)	NO	MUL	NULL	
transfer_start	datetime	YES		NULL	
transfer_complete	datetime	YES		NULL	
verify_start	datetime	YES		NULL	
verify_complete	datetime	YES		NULL	
retry_count	int(11)	YES		NULL	
error_message	varchar(2048)	YES		NULL	
is_source_deleted	int(11)	YES		NULL	

13 rows in set (0.00 sec)

Get the status of a migration of one table:
 select status,count(*) from <table> group by status;

```
MariaDB [ecs_sync]> select status,count(*) from test_job group by status;
```

status	count(*)
Verified	10

1 row in set (0.00 sec)

Get e.g some fields based on status:
 select <field>,<field>,<field>,from <table> where status='Verified';

```
MariaDB [ecs_sync]> select source_id,error_message,verify_start from test_job where status='Verified';
```

source_id	error_message	verify_start
0SBH2TOMKV2DIeD6S8835MC3N5GG41GSP9JJ020P300RQF7NMQVPJ	NULL	2023-04-05 09:43:10
0VL0D9D4KQ5VBe7KSCMAUQDF44G41GSP9JT060E4JT9J1RRF8FF8	NULL	2023-04-05 09:43:10
3G5CI TCLV01JNeCM6R698C7EM9VG41GSP9JC00038JF0680DOCD03	NULL	2023-04-05 09:43:10
43BSDQH8QEVtBeC5R9IFTV871S7G41GSP9JO040J5ED8TFEU4UAV4	NULL	2023-04-05 09:43:10
6A6N1BEJFC81KeBCUNBCC6V6B GAG41GSP9JR05073LGI RPMNT GUSG	NULL	2023-04-05 09:43:10
8CSG77UTH56SCe9TN50I DUDD SRG41GSP9K2080RA8NDNCF44 FMIP	NULL	2023-04-05 09:43:10
8FHKO7UO7N1FOe2QQH81O3M8DTQG41GSP9K5090U76K8TGBQLNTOJ	NULL	2023-04-05 09:43:10
DRTHB0T2SMSJDe64A146JL4F7CGG41GSP9JG010U709ECUSQECK6S	NULL	2023-04-05 09:43:10
EVVSH3F5HJ3e0DDA1HCS9LTJ3G41GSP9JM030E4TKGBD6S758SO	NULL	2023-04-05 09:43:10
ELAIGRTHP6VBCe616P3AP2COT5AG41GSP9K00704563UFOSPH P209	NULL	2023-04-05 09:43:10

10 rows in set (0.00 sec)