

Save money by using Azure Automation to deallocate VMs.

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Document information

History

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Review

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Remarks - Using script or functions explained in this guide is considered to be at your own risk.
Coretech A/S cannot be held reliable for any errors or misconfigurations.

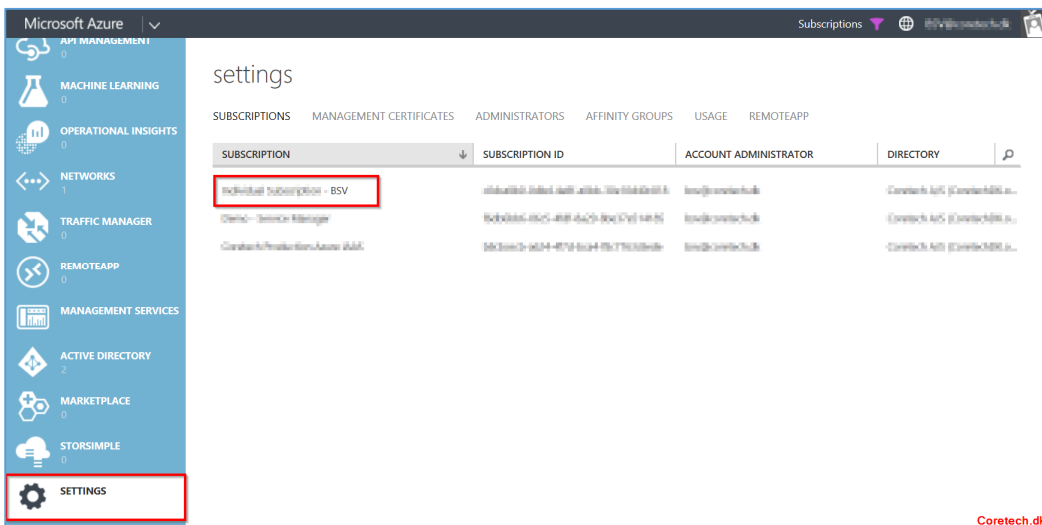
Please use with caution and never run scripts or programs, if you don't have the complete understanding of what is being executed.

We recommend that all scripts are tested in a closed environment before being used in any production environments.

Requirements.

Following information are needed to complete this guide.

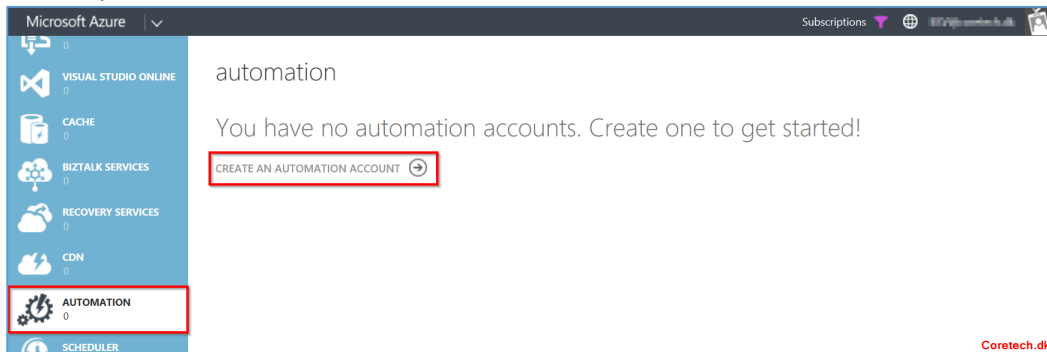
- Identify Azure Subscription Name.
- Name of CloudService containing VMs.
(Guide will not explain how to identify this, should be self-explanatory)
- Names of VMs that should be automatically deallocated.
(Guide will not explain how to identify this, should be self-explanatory)



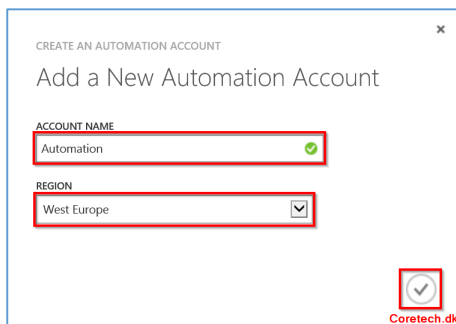
Azure Subscription Name can be found on the SETTINGS page.

Create Azure Automation account.

First step is to create an Automation account.



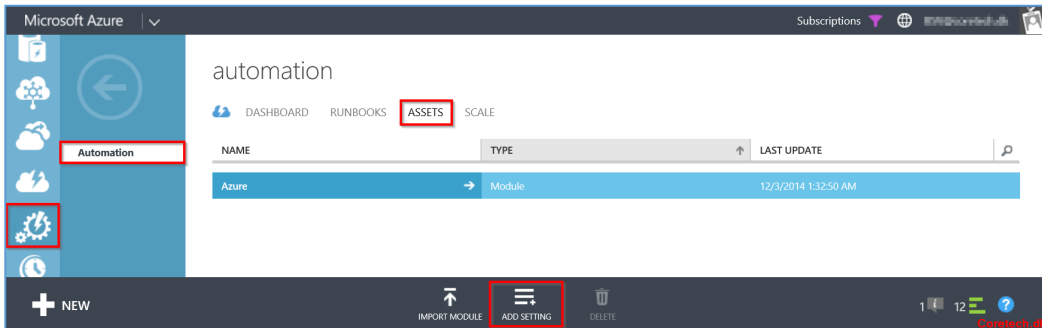
Choose “AUTOMATION” page and “CREATE AN AUTOMATION ACCOUNT”.



Type “Automation” in the ACCOUNT NAME.
Choose your closest region (Currently only 3 available).

Create PowerShell Login Credentials.

PowerShell login is needed to provide Azure access for the runbook.

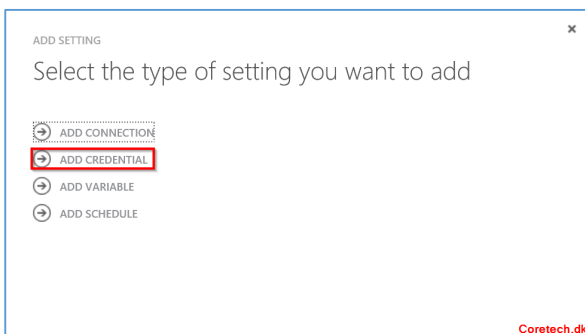


Go to “Automation” Page.

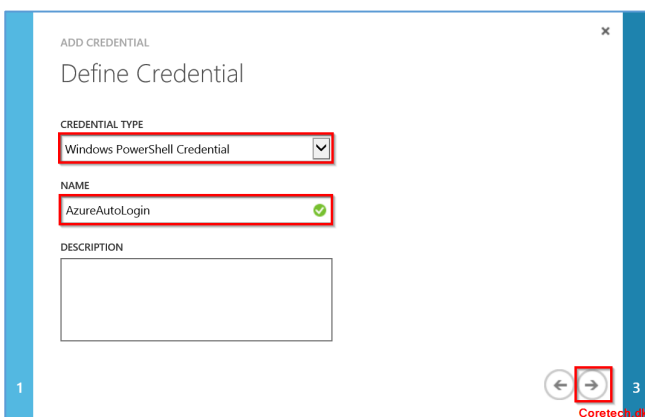
Choose account “Automation”.

Choose “ASSETS”.

Choose “ADD SETTINGS”.

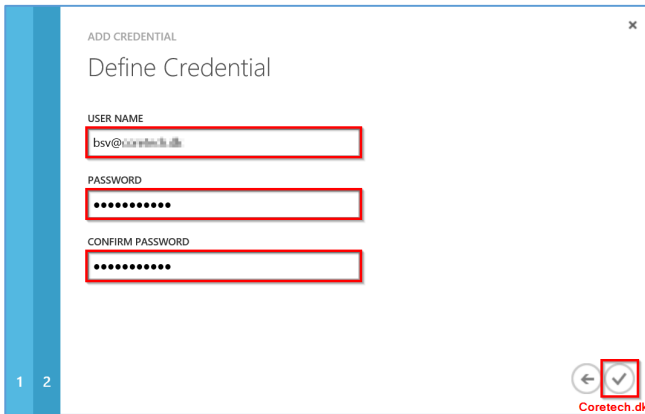


Choose “ADD CREDENTIAL”.



Choose “Windows PowerShell Credential” in CREDENTIAL TYPE.

Enter “AzureAutoLogin” in NAME and press “->”.



Enter Azure Subscription login in USER NAME.
Enter Password in PASSWORD and press complete.

(Remark, best practice might in some organizations dictate that a dedicated Azure Service Account should be used instead)

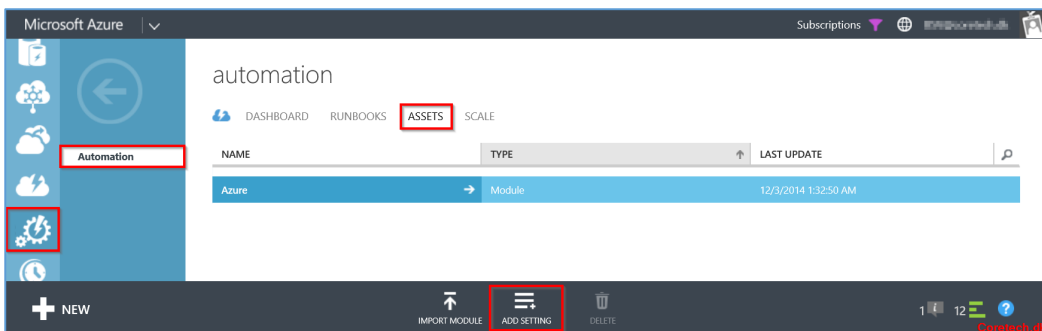
Create PowerShell Variables.

Azure Automation stores variables in ASSETS. This gives the flexibility to reuse them in multiple runbooks.

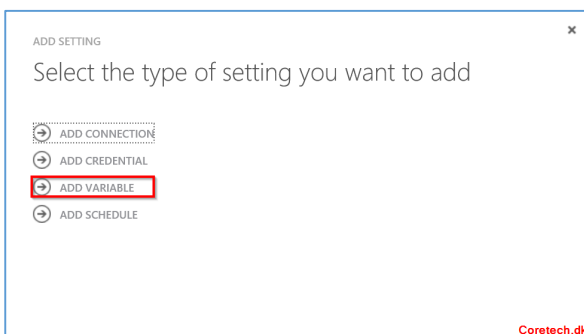
As mentioned in requirements. 3 variables are needed in this automation. (Variables should be named as shown below)

- “**SubscriptionName**”
Name of your subscription.
- “**CloudServiceName**”
Name of your cloudservice.
- “**VMNames**”
Name of your VMs.

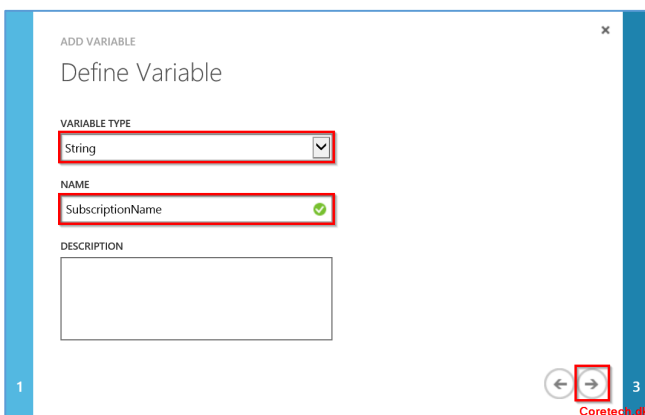
How to create a variable



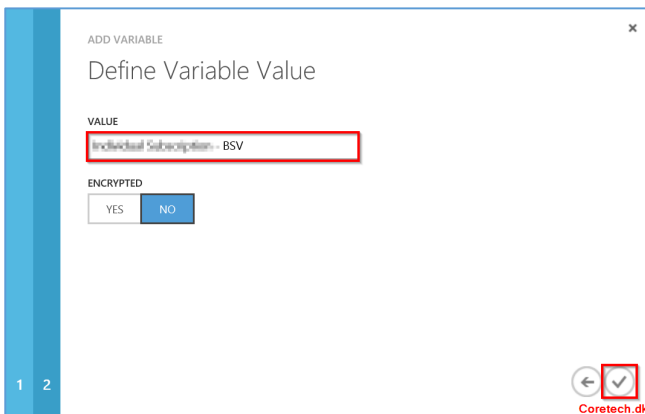
1- Again choose “**ADD SETTINGS**”



2- Choose “**ADD VARIABLE**”.



- 3- Choose “String” in VARIABLE TYPE.
- 4- Type “SubscriptionName” in NAME and press “->”



- 5- Type in “*Your subscription name” in VALUE and press complete.

Repeat step 1-5 with the following parameters

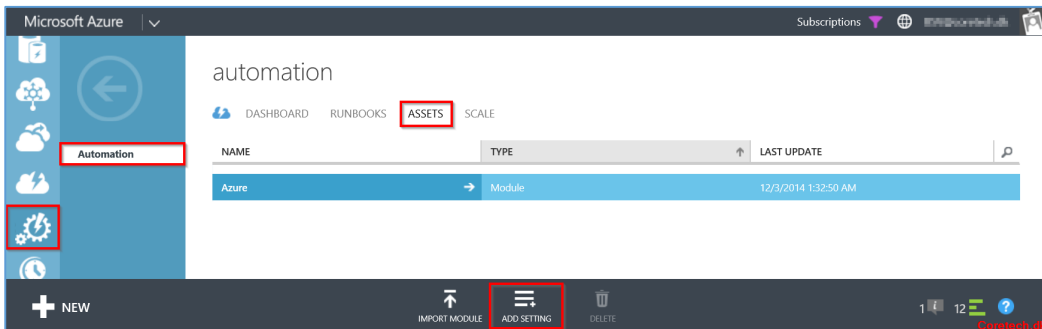
- In Step 4 type “CloudServiceName” and press “->”.
- In Step 5 use “*Name of your cloud service” and press complete.
Example “BSV-Cloud”

Repeat step 1-5 with the following parameters

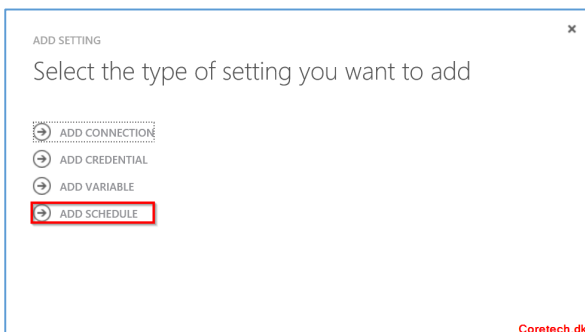
- In Step 4 type “VMNames” and press “->”.
- In Step 5 use “*Name of your Azure VMs” and press complete.
Example “Server0*”. * can be used as wildcard to shutdown multiple machines. In this Azure subscription all machines are sequentially numbered. (Server01, Server02, Server03, Server04)

Create Daily Schedule.

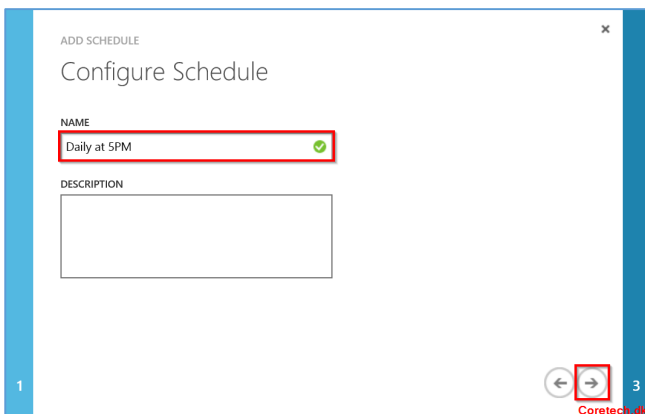
Create a schedule



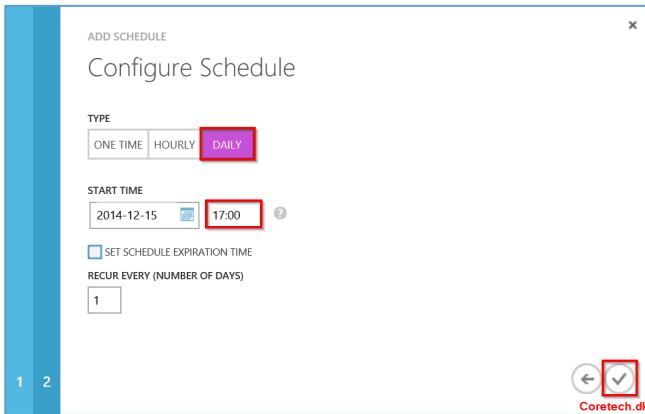
Again choose “ADD SETTINGS”



Choose “ADD SCHEDULE”.

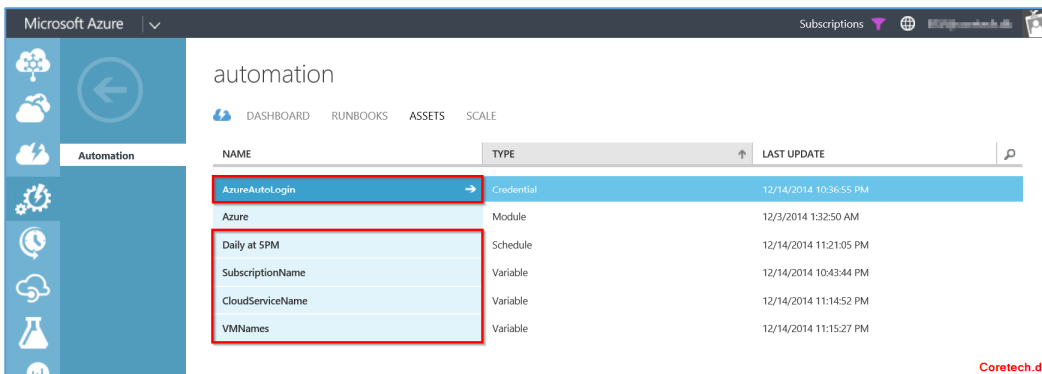


Type “Daily at 5PM” in NAME and press “->”.



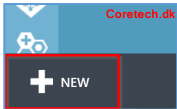
Choose “DAILY” in TYPE.
 Type “17:00” in START TIME and press complete.
 (Remark - Automation uses 24 hour clock for timing)

ASSETS should look similar to the screenshot below.

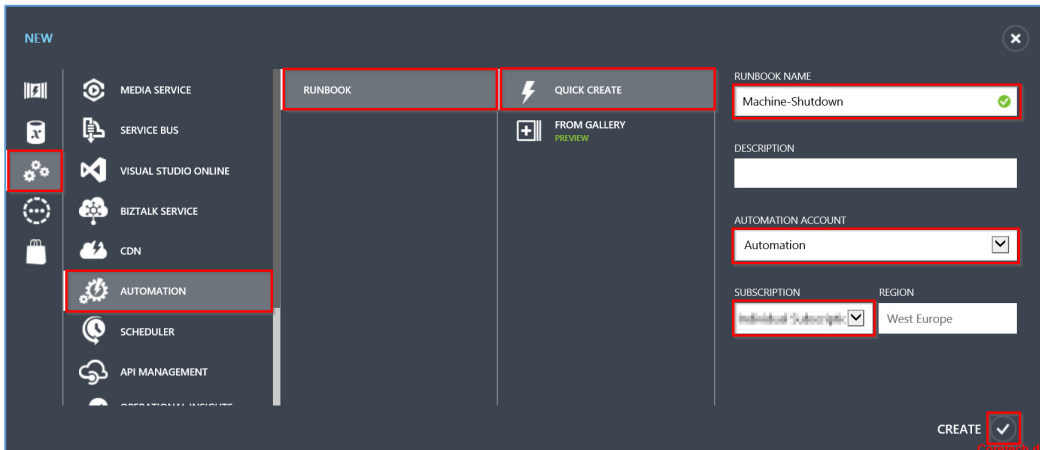


5 new ASSETS have now been created.

Create a Runbook.



Press “+ New” in bottom left of the Azure Portal.

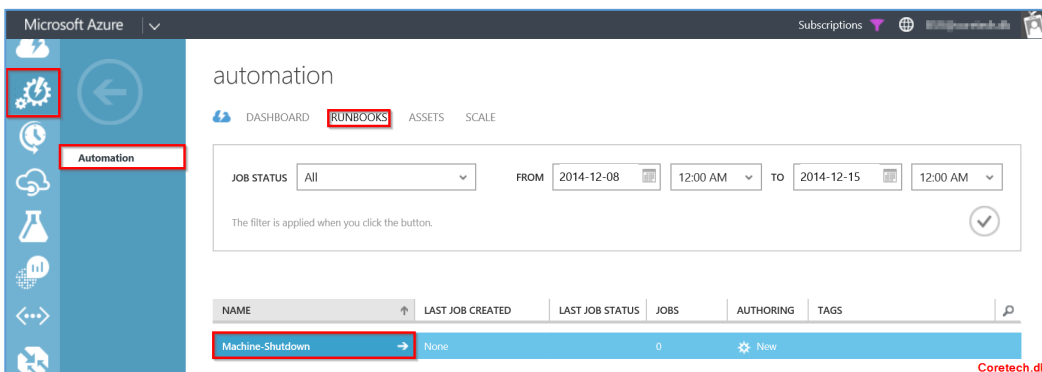


Choose “[APP SERVICES > AUTOMATION > RUNBOOK > QUICK CREATE](#)”.

In RUNBOOK NAME type “Machine-Shutdown”.

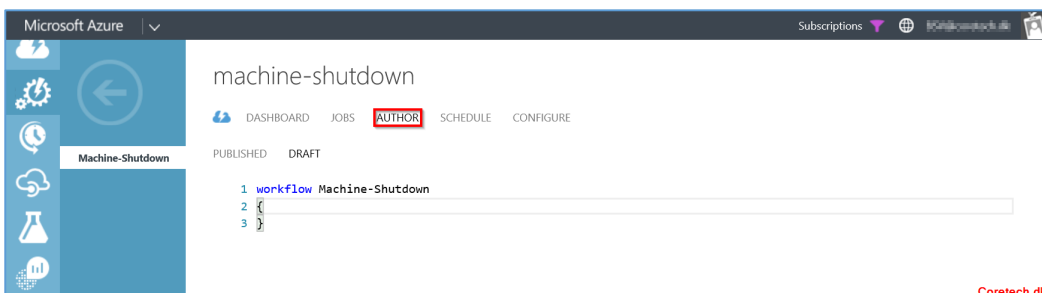
In AUTOMATION ACCOUNT choose “Automation”.

In SUBSCRIPTION choose “*Your subscription name”.



Go to “[Automation > Automation > RUNBOOKS](#)”.

Choose “Machine-Shutdown”.



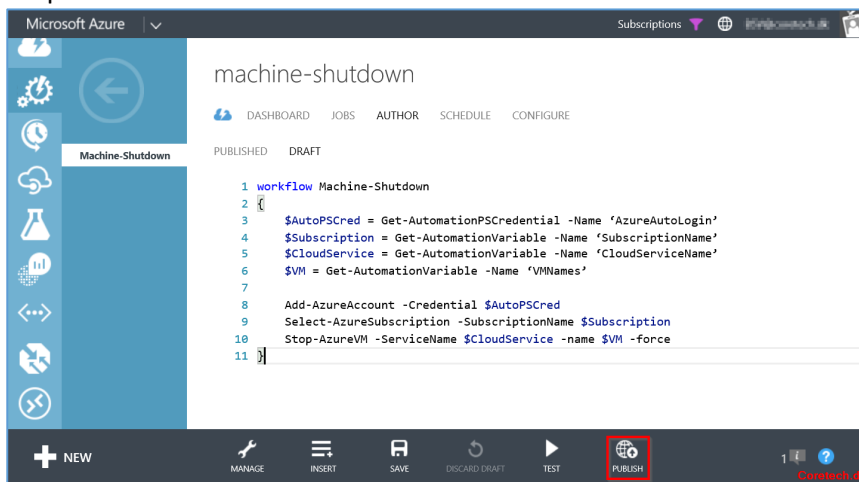
Choose “AUTHOR”.

Overwrite the existing script with the following workflow Machine-Shutdown

```
{
  $AutoPSCred = Get-AutomationPSCredential -Name 'AzureAutoLogin'
  $Subscription = Get-AutomationVariable -Name 'SubscriptionName'
  $CloudService = Get-AutomationVariable -Name 'CloudServiceName'
  $VM = Get-AutomationVariable -Name 'VMNames'

  Add-AzureAccount -Credential $AutoPSCred
  Select-AzureSubscription -SubscriptionName $Subscription
  Stop-AzureVM -ServiceName $CloudService -name $VM -force
}
```

Script should now look as the screenshot below

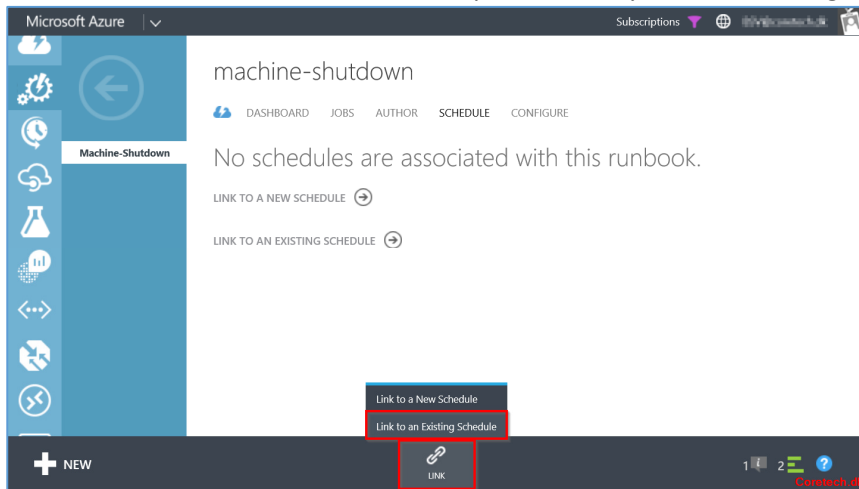


Press “PUBLISH” and press “YES” to the confirmation.

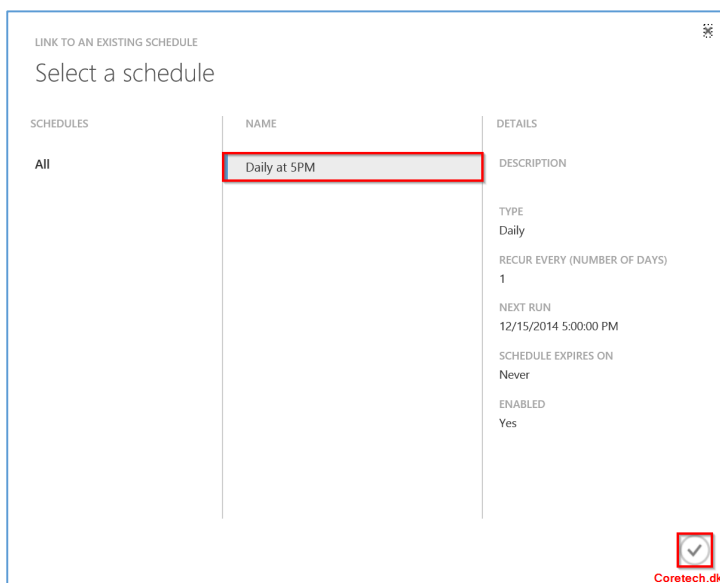
We recommend that you test the script before publishing. This can be done by using the testing function in Azure Automation. This is not part of this guide.

Schedule the automatic shutdown

Now all left to do is to schedule the script to run daily at 5.00PM using the already created schedule



Press “LINK” and press “Link to an Existing Schedule”



Press “Daily at 5PM” and press complete.