



TechNet Wiki Ninjas Guide to SharePoint 2013

I nfrastructure, D esign, T roubleshoot and P roject

## About the eBook

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# What is TechNet WIKI?

The TechNet Wiki is a library of information about Microsoft technologies, written by the community for the community. Whether you write code, manage servers, keep mission-critical sites up and running, or just enjoy digging into details, we think you will be at home in the TechNet Wiki.

- This is a community site. For official documentation, see [MSDN Library](#), [TechNet Library](#) or contact [Microsoft Support](#).
- The Wiki is focused on Microsoft technologies. The community will edit or remove topics that get too far off track.
- We are inspired by [Wikipedia](#).
- Anyone who joins can participate and contribute content.

## How Can I Participate?

The simplest way to participate is to use the information in this Wiki. The community is providing how-to guides, troubleshooting tips and techniques, practical usage scenarios, scripting pointers as well as overview, conceptual and technology overview topics.

- Read the [terms of use](#).
- Sign in, upload an avatar and configure your profile.
- Review the [Code of Conduct](#). It takes after the [Ubuntu Code of Conduct](#) and guides our behavior.
- Visit [Getting Started](#) and [What Makes a Great Article](#) to get the basics.
- Find topics using search, the [tag cloud](#) or by visiting the [article spotlight page](#).
- [Create](#) a topic. Contribute boldly, edit gently!

We welcome your feedback. Head over to the TechNet Wiki Discussion [forum](#), connect with us on the Wiki, or Tweet feedback using #TNWiki (and follow [WikiNinjas](#)).

Help us write the future.

## Our Lead - Ed Price

You can find below the interview with the one and only Mr. Wiki Ed Price:



**First question... I think for a lot of the readers (including me), you are mister Wiki. You have been there since, what I call, the First Light article (<http://social.technet.microsoft.com/wiki/contents/articles/695.wiki-about-technet-wiki-en-us.aspx>), and your activity levels are beyond-normal. Who is your Wiki “mr. Miyagi”? And outside of Wiki, who is your example?**

That’s interesting. What is the first article on TechNet Wiki? They’re numbered you know. I’ll hunt a little... [275](#)... [115](#)... [114](#)... That’s the lowest I can find for now.

Eric Battalio had the vision and the stubbornness to get this going. Tony Soper, Monica Rush, and Kim Ditto-Ehlert were all vital to getting the wiki ball rolling. And now we have important contributors that are both in Microsoft, like Tom Shinder, Nathaniel Scharer, Kurt Hudson, and Roger Doherty, and out of Microsoft, like Fernando Veltem, Patris, Luciano Lima, Luigi Bruno, Richard Mueller, Thiago Luiz, you, and Susan Bradley.

But if I was going to name one person who inspires me the most, my Mr. Miyagi, it would be the shirtless man... [Yuri Diogenes](#).

Outside of Wiki... I’m inspired by Benjamin Franklin. If he could write the wildly popular Silence Dogood letters when he was 16, then is anything I write or edit all that impressive?

**You’re a SQL Server Experience Program Manager at Microsoft. Why did you start working for Microsoft and what does an Experience Program Manager do?**

To be honest, I was starting a family, so I needed to think of working for a larger company. Microsoft takes care of its employees, so I naturally looked here.

I started working here back in 2005, focusing on assistance design and content for Microsoft Surface, our touch computer ([we just announced a line of pretty sweet tablets](#)). I’ve got five patents filed for Surface (4 pending). I later worked on Hardware (mice, keyboards, webcams) where I got to redesign our manual (working with our designer, Azy), removing the text and making it more of an IKEA or Lego like instruction booklet (pictures and arrows). Then I moved to SQL to work in the content team. I had a fun time of Wiki work, videos, redesigning Help layouts, and driving efforts to integrate more assistance in the UI.



Then I moved over closer to our UX team to be an xPM.

Experience program managers (at least in our group) focus on end-to-end experience envisioning, working with our Designers, Product Planners, and product PMs to help build out the experiences and scenarios and help make sure the customer is at the center of it all (here's an example of what [focusing on customers feels like in a design](#)). We also do a lot cross-team collaboration building, communication, and we sometimes own other Design-focused programs.

Personally, I own our personas program, I'm trying to help redefine and redesign the future of Help, I'm working to put a stronger focus on our customers, and I'm really driving toward some extreme team collaboration. I also sometimes make fun videos like [this one](#) I made with Ehren (that's my voice as the stick figure).

**Your TN Stats are insane: a total of 77,855 points, 1000s of forum replies, you've received more than 300 4 star ratings for your blog posts, 20,000+ Wiki activities... How do you fit this into your normal working schedule/life?**

I broke 80K points. Woot.

I use clones. A whole army of them. I dress them in white armor and give them blasters.

Some people play videogames. Community is my videogame. =^)

Hey you didn't mention my achievement awards. I have the most of those in the whole world. I've got 17 gold ones.



How many gold medals  
do you have?  
<http://technet.com/wiki>

**There's one thing I've noticed about your TN Stats: no translations at all! If you had to learn a foreign language to get this number up, which one would it be?**

I actually translate Spanish articles for TechNet Wiki. I lead a team of folks who help me refine the translations. Here's one: [Wiki: Acerca de TechNet Wiki \(es-ES\)](#)

That other stat on the profiles (Translation Wiki) is for translating on MSDN/TechNet Library, using a Translation Widget that's similar to what we have on TechNet Wiki and blogs. So on TechNet Wiki, you can translate an English article, and then similarly any edits you make go out to a moderator to double check them. They call the Library version the Translation Wiki, which is a little confusing because we also translate articles on TechNet Wiki, and then we have the Translation Widget with the same wiki-like features on the Wiki and blogs. So there are three different types of "translation wiki".

**I believe you are married and have kids too. If so, does Wiki mean anything to them or is this just a “weird hobby” of daddy?**

They’re too young to really know. But my one year old is involved. I sit her on my lap while I write or edit sometimes. I put two stickers on my shirt, she takes them off and puts them on hers. Then I take them off and put them somewhere else on my shirt or hers. We go on like that for hours. Days even.

For my wife, the interaction is more like, “Are you working?” “Sort of.” Then she gives me the look. I can see it even when I’m not looking at her. You can always see the look.

**You often sign a blog post as “Ninja Ed”. Now, to find a proper definition, I’ve looked it up and a ninja (or shinobi) was a mercenary in feudal Japan specializing in unorthodox warfare, including espionage, assassination, and open combat. Should we be afraid of you?**

Yes. Be afraid of my wiki editing skills. You know how they say the pen is mightier than the sword? Well that was before they invented the keyboard.

**I’m very fond of the Ninja stick figure, I think it’s hilarious. Where did this idea come from?**

Eric Battalio, the grand master of TechNet Wiki. I think he’s a fan of stick figure online comic strips and stick fighter animations... either way he likes the simplicity of it. He started out making a ninja stick figure icon for the Twitter account. Then he made some stick figure images for stickers to promote TechNet Wiki. Yuri followed with the Brazil Wiki Ninjas Twitter account and a ninja with the Brazil flag in the corner. Other Brazil members also made stick figures. I brought the concept of the Wiki Ninjas name and stick figures over to the blog.

I got the collection of ninja images from Eric, and I began adding to it, like the image above.

**If it was possible to get a present from the TN Wiki community on your birthday, what would you like to have?**

A medallion that grants peace to everyone you hit it with. Or... A Wiki Ninja stick figure image of me... tall, beard, glasses, and wearing a nametag that says “EDitor”.

**Any famous last words?**

In the famous words of Winston Churchill, “Madam, you are ugly. In the morning, I shall be sober.”

In the famous words of Eleanor Roosevelt or someone else, “Great minds discuss ideas; average minds discuss events; small minds discuss people.”

In the famous words of Benjamin Franklin, “Necessity never made a good bargain.”

## Guest authors

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**Philippe Levesque**  
Canada



I'm a system administrator with over 10 years of "on field" experiences. I got my MCP, MCTS: Exchange 2007, Citrix Certified Administrator XenApp, Citrix Certified Administrator XenDesktop, CompTIA A+ Technician, HP Accredited Platform Specialist (HP APS) and certified with Lenovo and IBM.

I'm a helper on the **TechNet** forum under the Windows Server category mostly (Got a **MCC** badge in July 2013). I'm member of the **TechNet Community Council** and the **TechNet International Council**. I blog on the wiki ninja's MSDN blog ([blogs.technet.com/b/WikiNinjas](http://blogs.technet.com/b/WikiNinjas)) and on my personal blog ([jabea.net](http://jabea.net)).

After all those contributions, I enjoy my free time with my wife and my three kids! :)

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**Valentin Lecerf**  
Belgium



Valentin Lecerf, I'm 23 years old. I Live in Brussels (Belgium) and I work as a SharePoint Consultant at Vision Consulting Group.

I started SharePoint 4 years ago with the 2007 release and now I'm a **SharePoint** addict. I have the expertise for SharePoint Administrator and Developer, it permit me to have a global vision of SharePoint Solution.

IT is my passion and I stay informed about new technologies and not only on SharePoint ;)

For the SharePoint part, I'm contributor on TechNet forums. SharePoint **Community**, **LinkedIn** and **Viadeo** Groups and I work on different project for SharePoint. I'm contributor on different SharePoint projects on **Codeplex**.

My blog: <http://vlecerf.be>

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**Benoît Jester**  
**France**



My name is Benoît Jester, I'm 37 years old, I live in Paris (France) and I work actually (since 3.5 years now) as a SharePoint Expert for a multinational, in Paris "La Défense".

I work on **SharePoint** since 2005, as **expert/administrator** on the different versions of SharePoint (2007, 2010 and 2013). I'm a "young" father, but my little Marlon already know how a keyboard works :)

**My blog** on SharePoint & Friends :

<http://spasipe.wordpress.com>,

Writing and translation of French articles on the TechNet

Wiki : <http://social.technet.microsoft.com/wiki>,

Participating in the TechNet forums dedicated to SharePoint,

Creator of the tool "**OWA Server Automatic Installer for SharePoint 2013**", published on the TechNet gallery :

<http://gallery.technet.microsoft.com/OWA-Server-Automatic-7a9d138b>,

TechNet Profile :

<http://social.technet.microsoft.com/profile/benoit%20jester>

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**Hezequias Vasconcelos**  
**Brazil**



Hezequias Vasconcelos, 33, I live in Minas Gerais (Brazil), I work as a SharePoint consultant in a multinational car trunk.

Recently named **MTFC** - Microsoft Technical French Contributor. I'm a professional who works in the training and consulting solutions for Microsoft since five years and a half. My focus technologies are: Office, SharePoint, Project Server and Project Professional. Experience and accumulated knowledge in the area during that period. I seek to constantly develop and improve my professional skills. I am a **Microsoft Partner** since 2008, with official certifications in these products. Recently, I was appointed **MTAC** - Microsoft Technical Contributor by Audience engagement with the technical community finish to July 2013. The great advantage in participating in this initiative is to help people extract the maximum all the benefits that Microsoft technologies can offer in their lives.

I'm a taxpayer in the **MSDN**, **TechNet** and Microsoft **ANSWER** (English, French and Portuguese community).

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# Principal Author

Gokan Ozcifci



Gokan, working for **Vision Consulting Group** is one of the few people in Belgium to hold the prestigious **Microsoft Most valuable Professional** Award and is one of the retired **MCC** badge holder.



Gokan has been involved in Microsoft Technologies (SharePoint) since 2009 and is a Moderator on SharePoint Forums and an Evangelist on **TechNet Wiki Ninjas Group**.

Creator of the **Microsoft Technical French –and Turkish Contributor** Award, he is now busy to set up a Turkish volunteer army **for TechNet Wiki International Council**. Early in 2013 he got a reward by harmon.ie as being a French Influencer.

Gokan co-authored and wrote multiple eBooks all on TechNet and free to download.

Gokan is blogging on SharePoint since 2011 at <http://gokanx.wordpress.com> and you can follow him on Twitter – @gokanozcifci.

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## Windows's Installation

The Windows installation got simplified with the time as you will see. Let's review the minimum spec together. Be aware in my document I will act as it's a new fresh install, not an upgrade.

You will need that to install a 2012R2's server at a minimum:

<b>Processor : 1.4Ghz 64 bit</b>	<b>Memory : 512 MB</b>	<b>Hard disk : 32G</b>	<b>A Network Interface Card (10/100/1000)</b>
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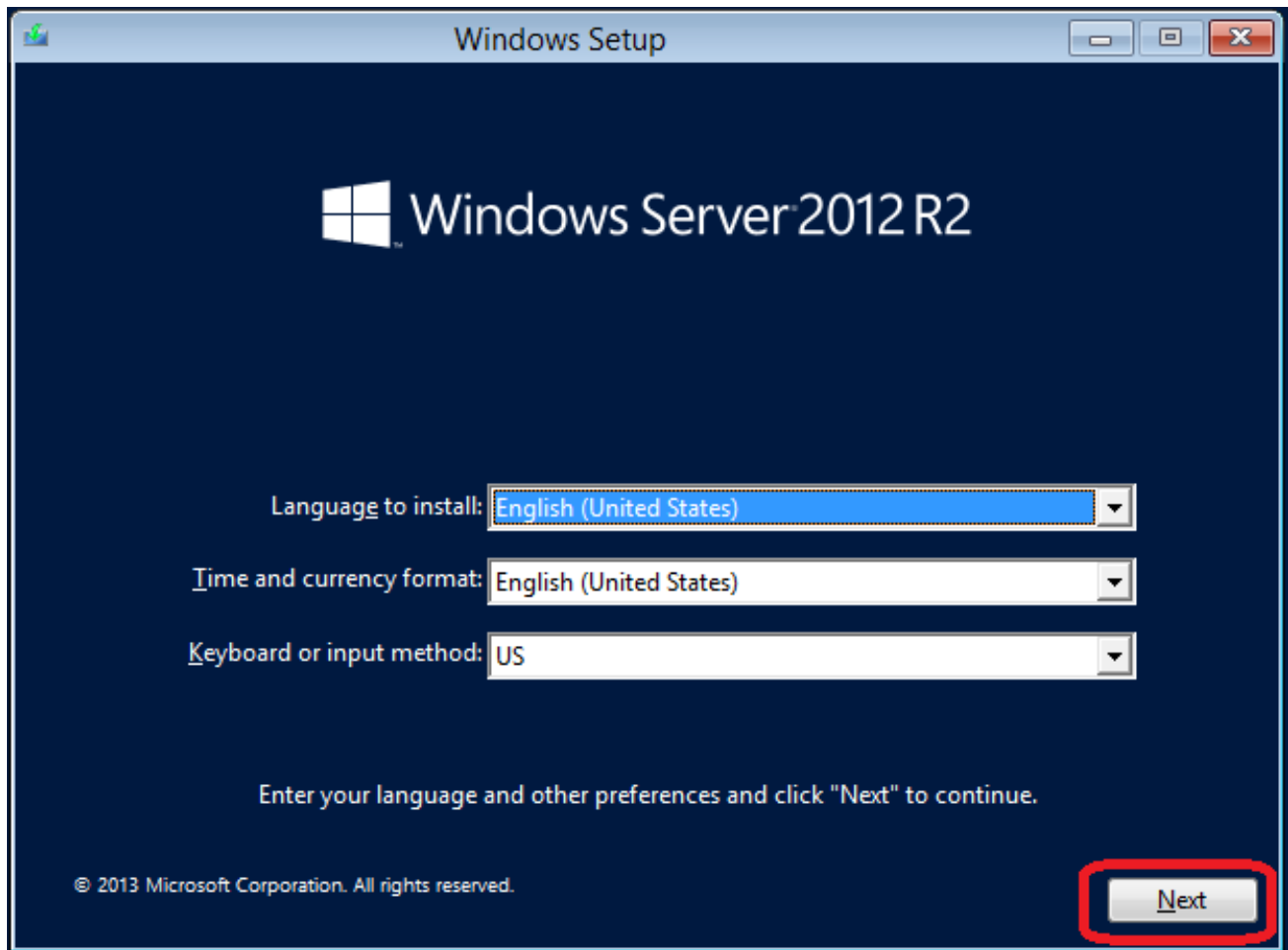
We will simply start with the install's media and we start the server.



We see the new loading image...



Choose the language that you want with the good keyboard layout and currency and hit **Next**.



The screenshot shows the 'Windows Setup' window for Windows Server 2012 R2. The window has a dark blue background with the Windows logo and 'Windows Server 2012 R2' text at the top. Below this, there are three dropdown menus for configuration: 'Language to install:' set to 'English (United States)', 'Time and currency format:' set to 'English (United States)', and 'Keyboard or input method:' set to 'US'. A red rectangle highlights the 'Next' button in the bottom right corner. At the bottom left, there is a copyright notice: '© 2013 Microsoft Corporation. All rights reserved.'

Windows Setup

Windows Server 2012 R2

Language to install: English (United States)

Time and currency format: English (United States)

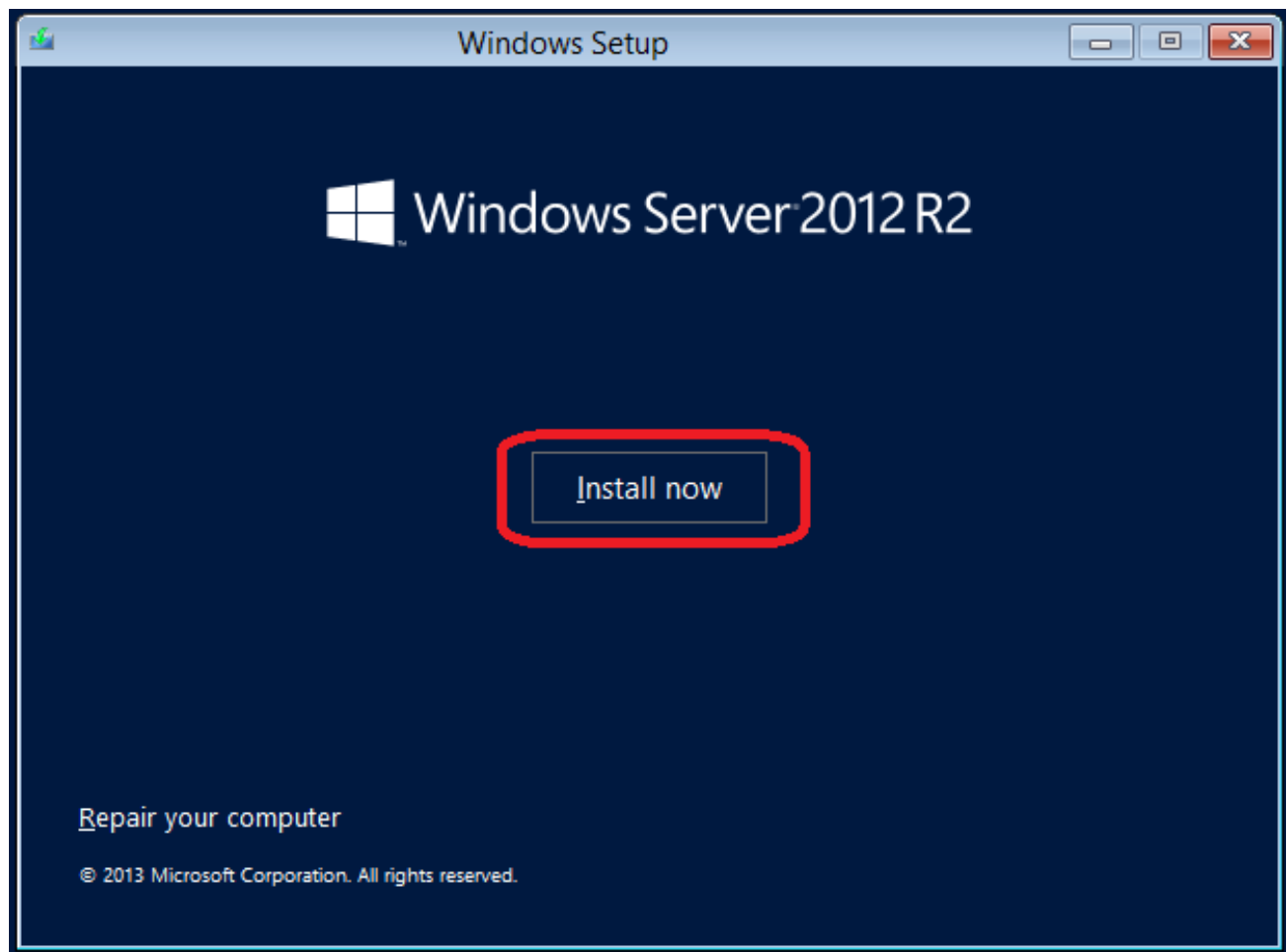
Keyboard or input method: US

Enter your language and other preferences and click "Next" to continue.

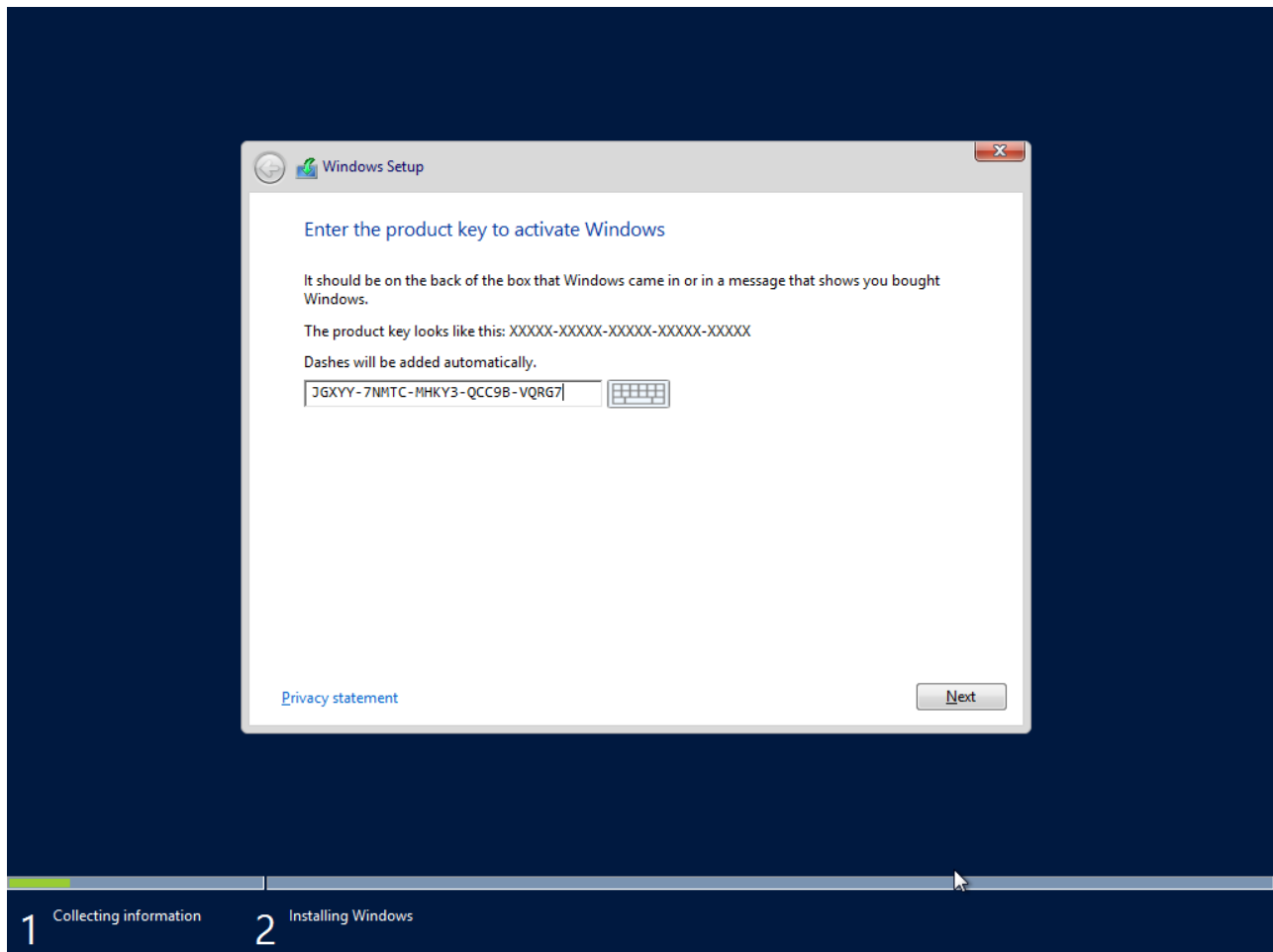
© 2013 Microsoft Corporation. All rights reserved.

Next

Please hit **Install now!**

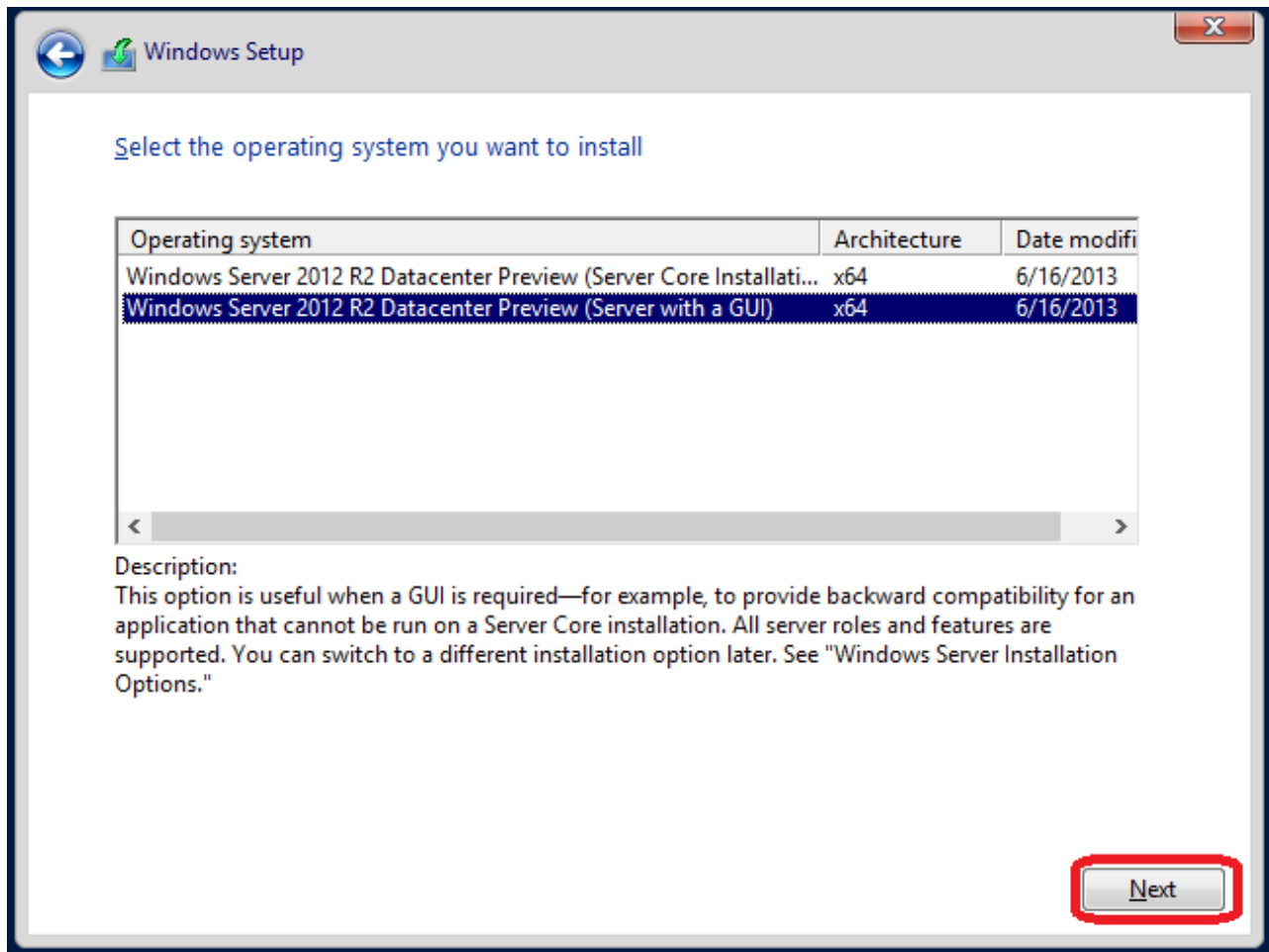


Please enter the Product key. Please find below the official product key for the evaluation. Click **Next!**



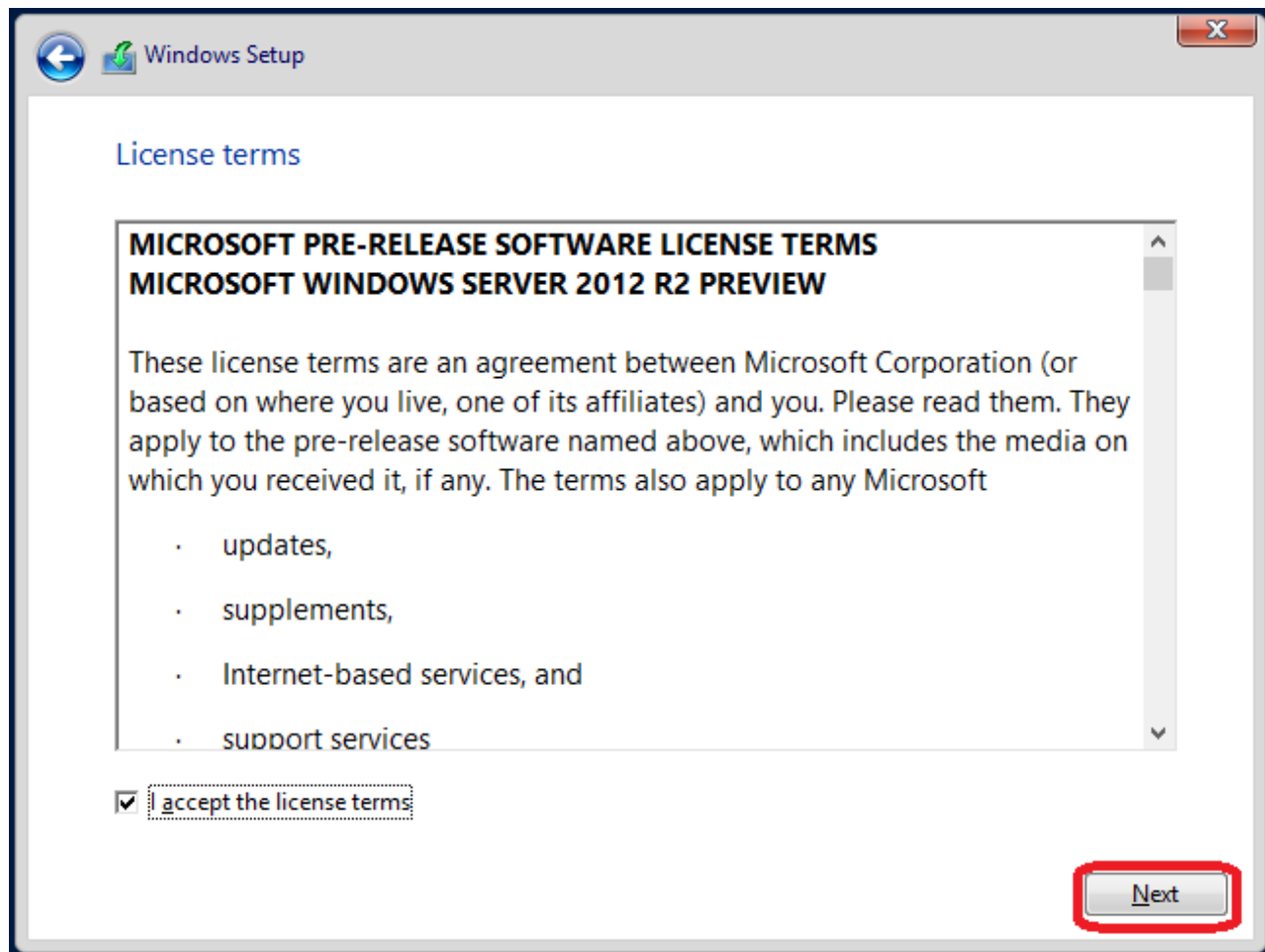


Select the GUI's install and click **Next!**

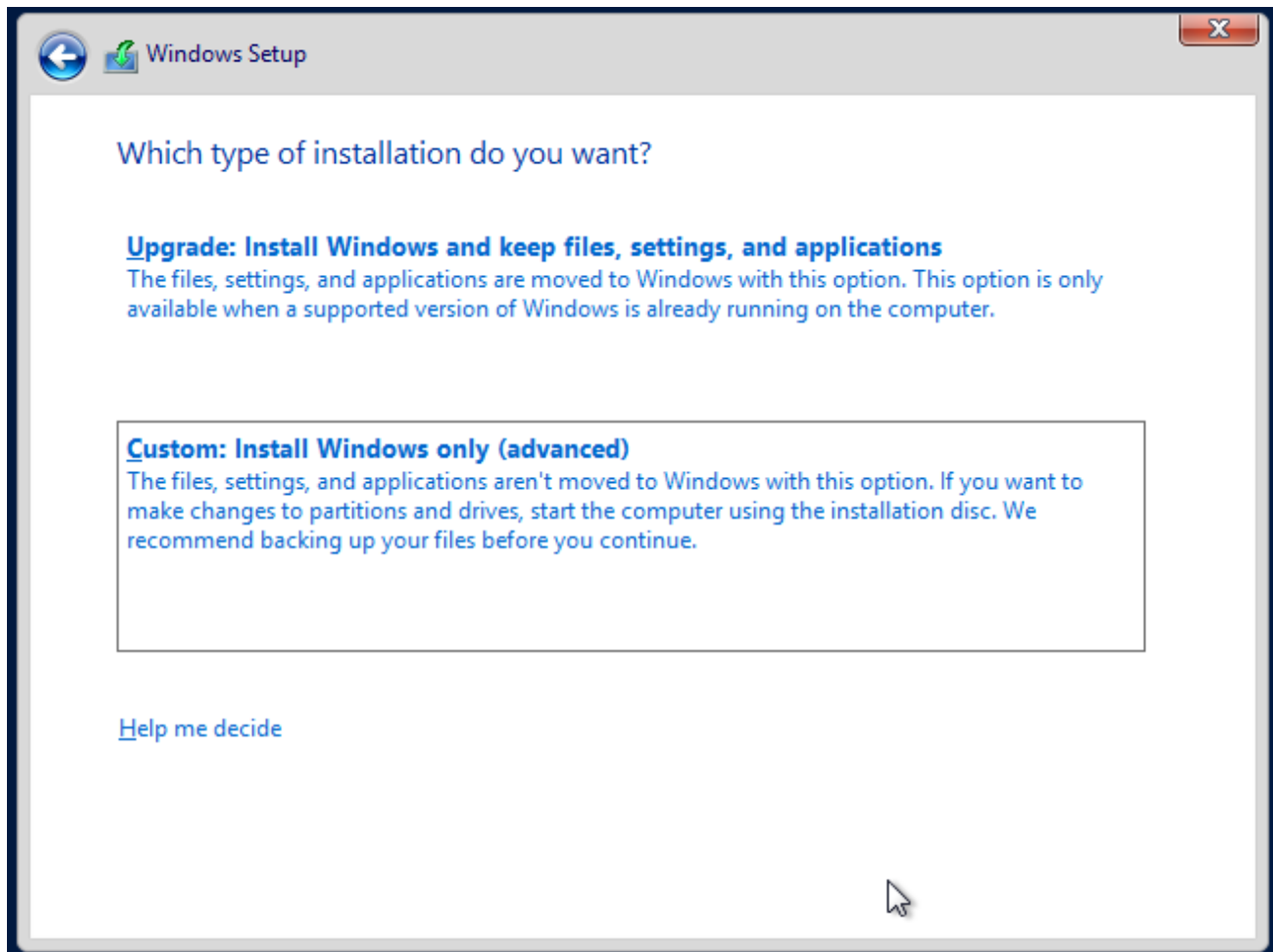


**TIP:** Unless you are good with PowerShell, I strongly suggest the GUI's version.

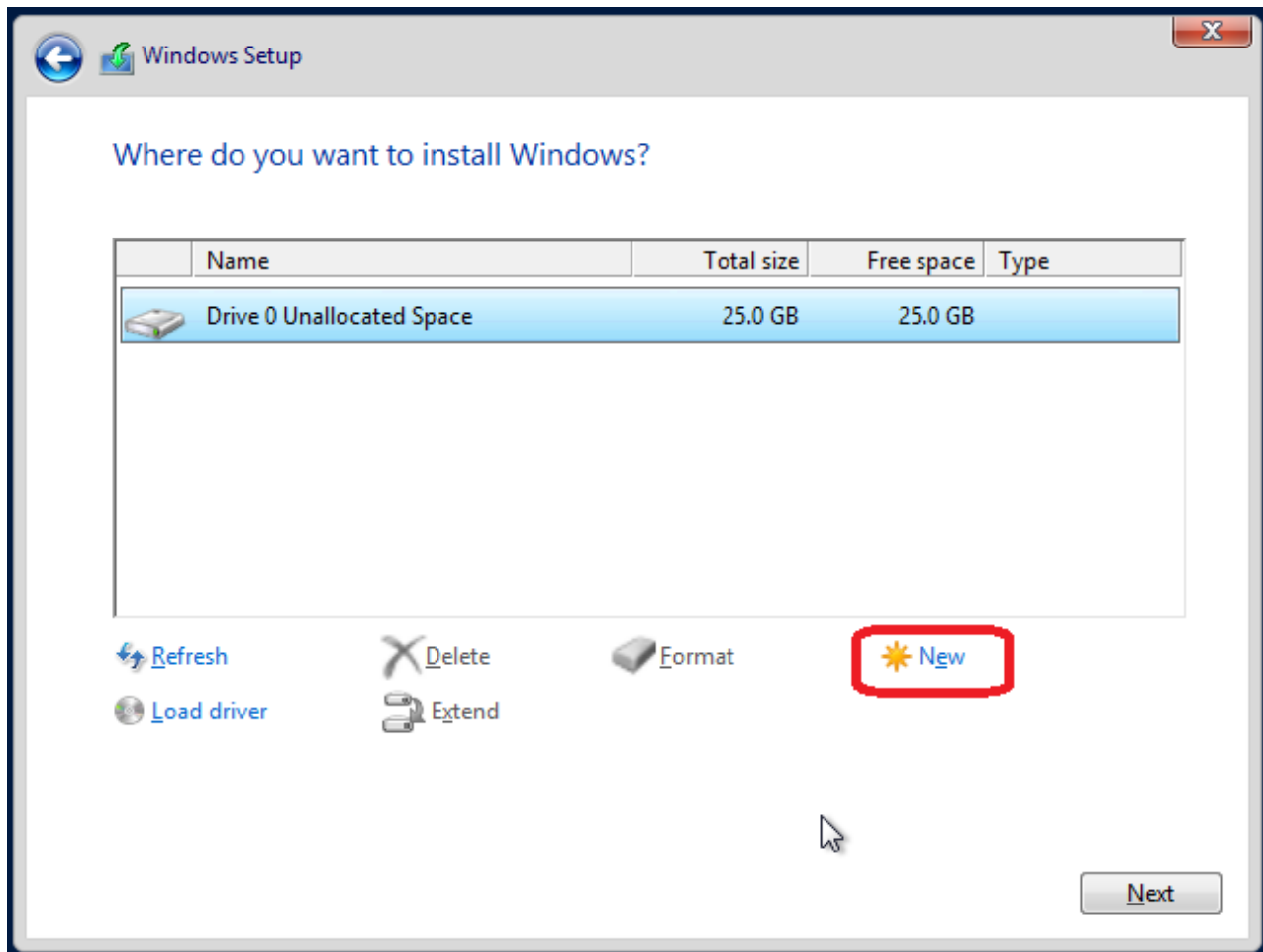
Click **I accept the license terms** and click **Next**!



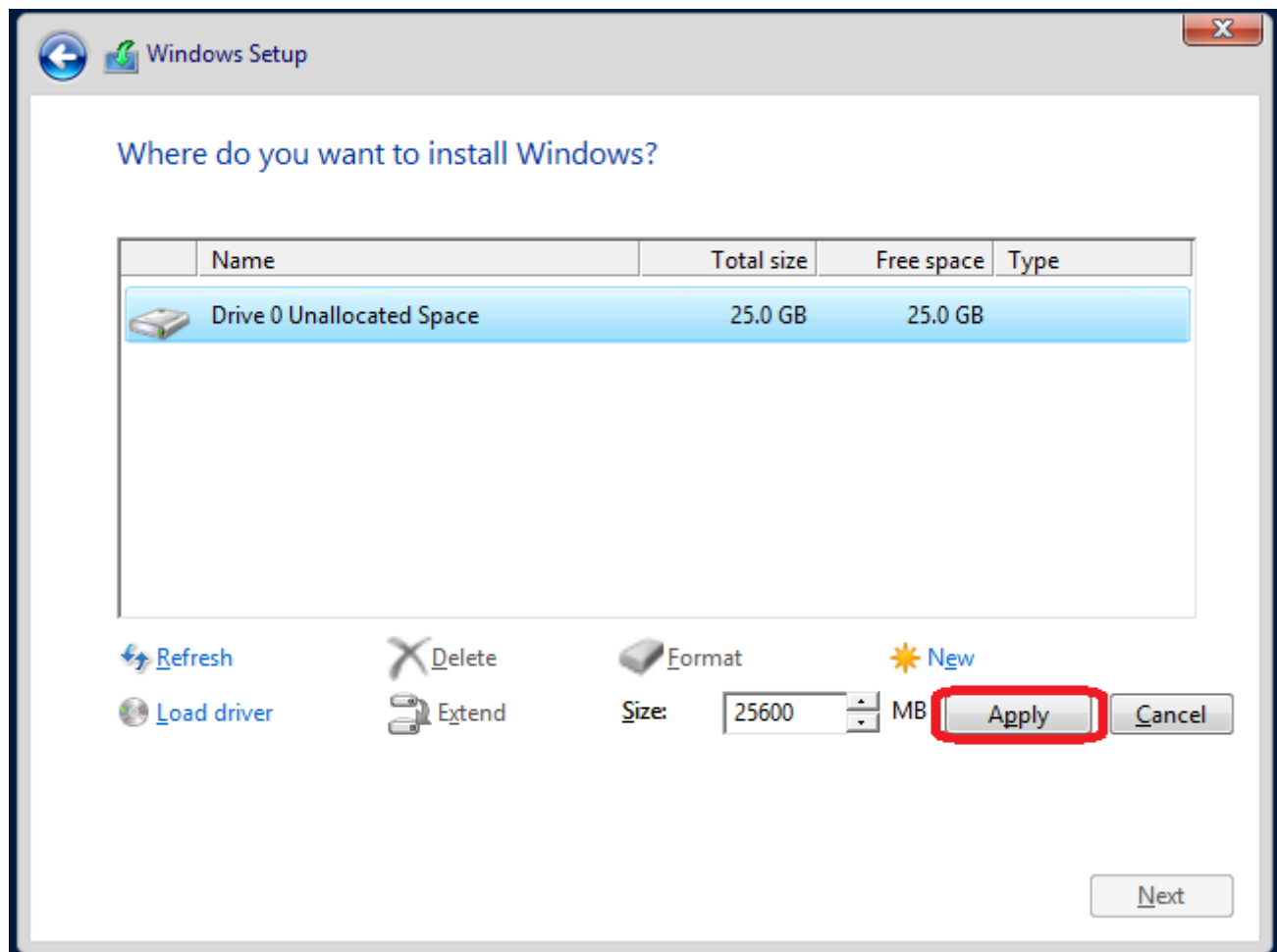
Click **Custom**! Like said earlier we are selecting a Standard version on the new server.



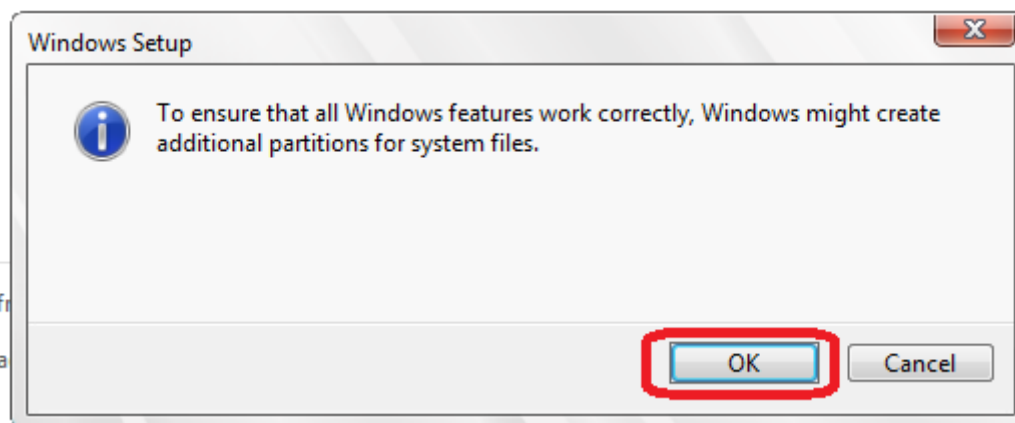
Click on the drive to format and hit **New**.



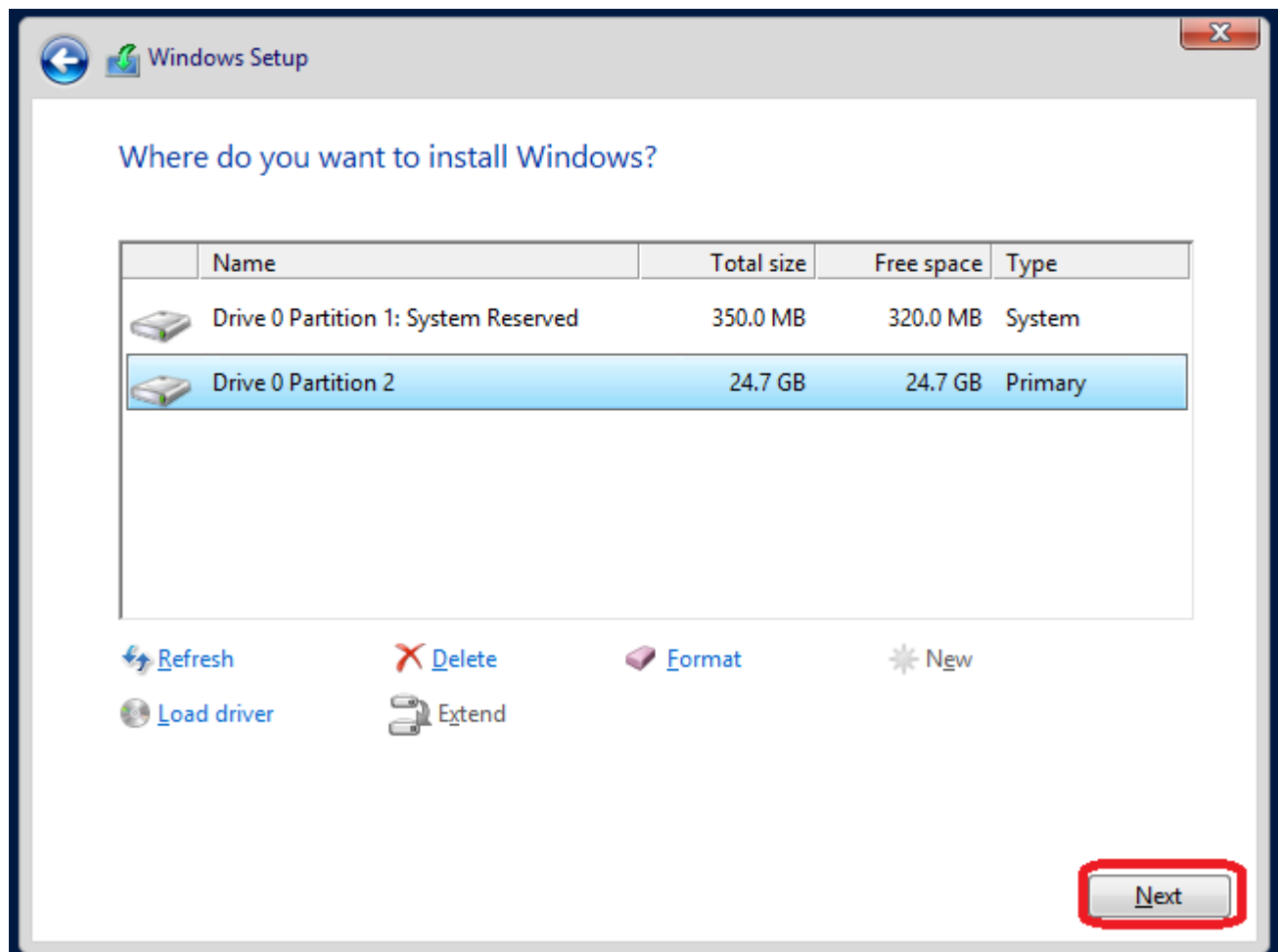
Select the size wanted and click **Apply**.



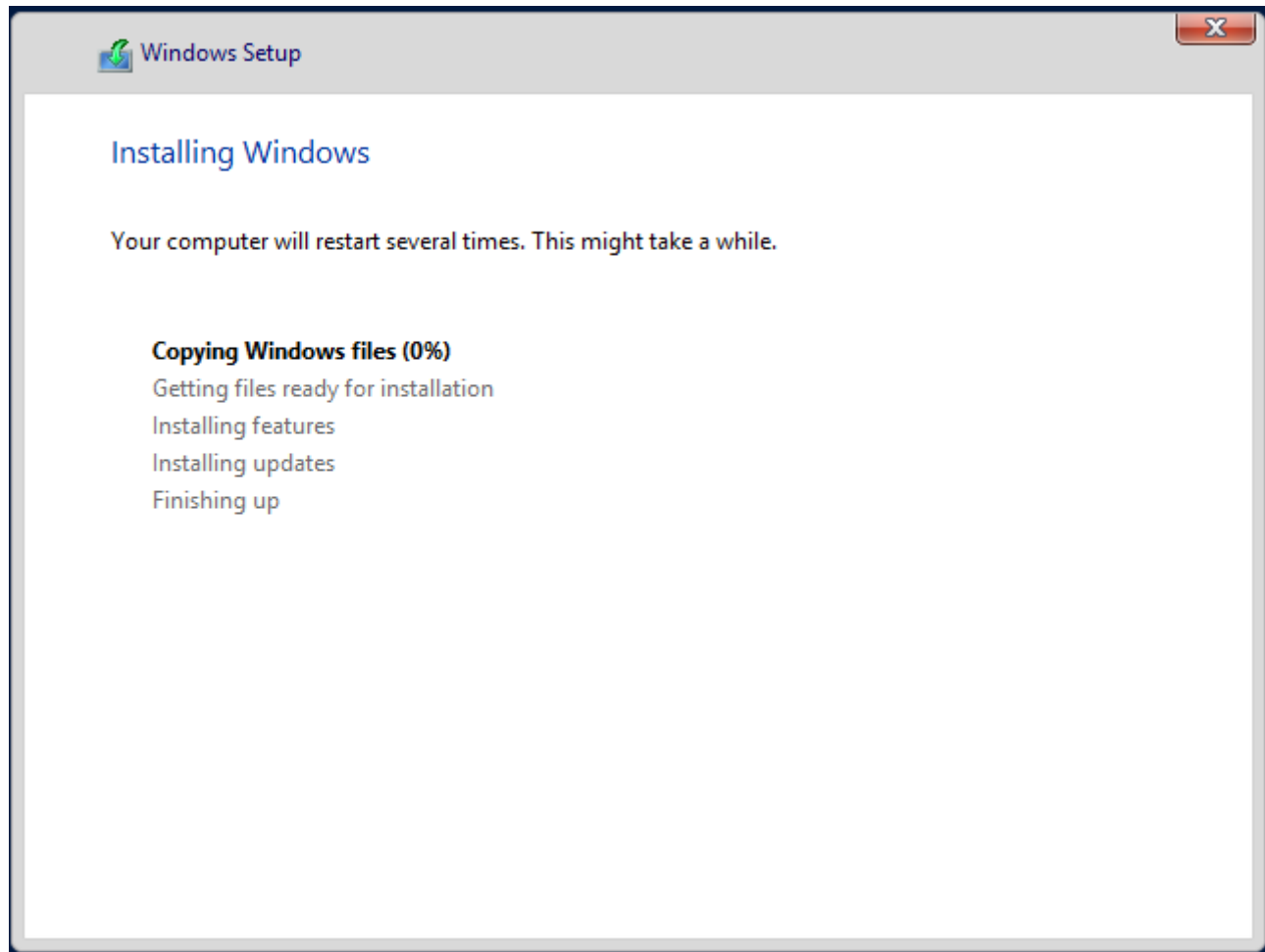
Hit Ok into that dialog's box, it will create a reserved partition.



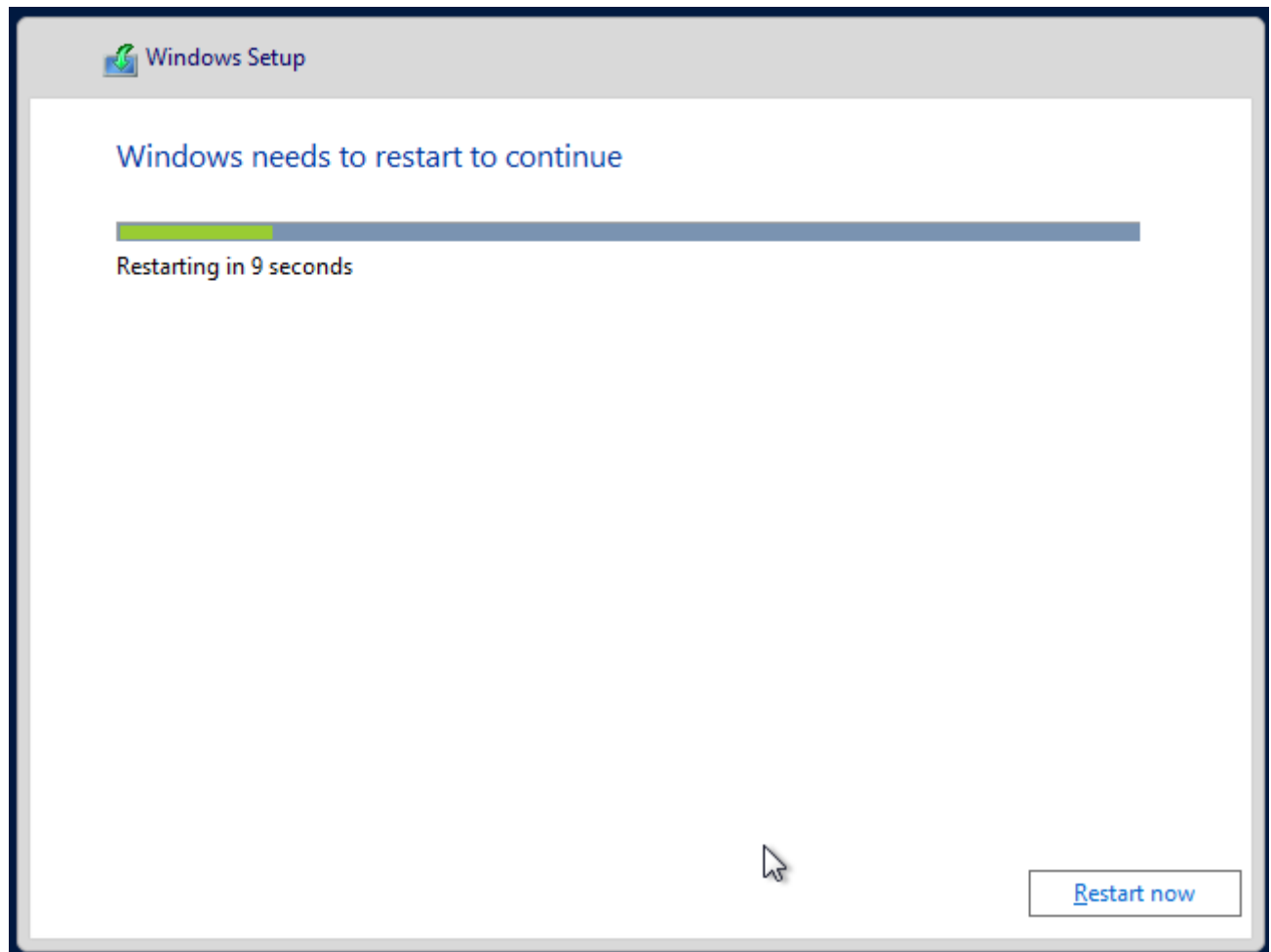
On the following screen you will see the review if needed you can correct. If everything seems good to you, click **Next**.



We have to wait now for actual setup. Depending your hardware it can take up to hours to install the software.



Windows needs to restart to continue. Please proceed.






Windows Server 2012R2 needs a Password for the local administrator. Hit a password and click **Next**!

# Settings

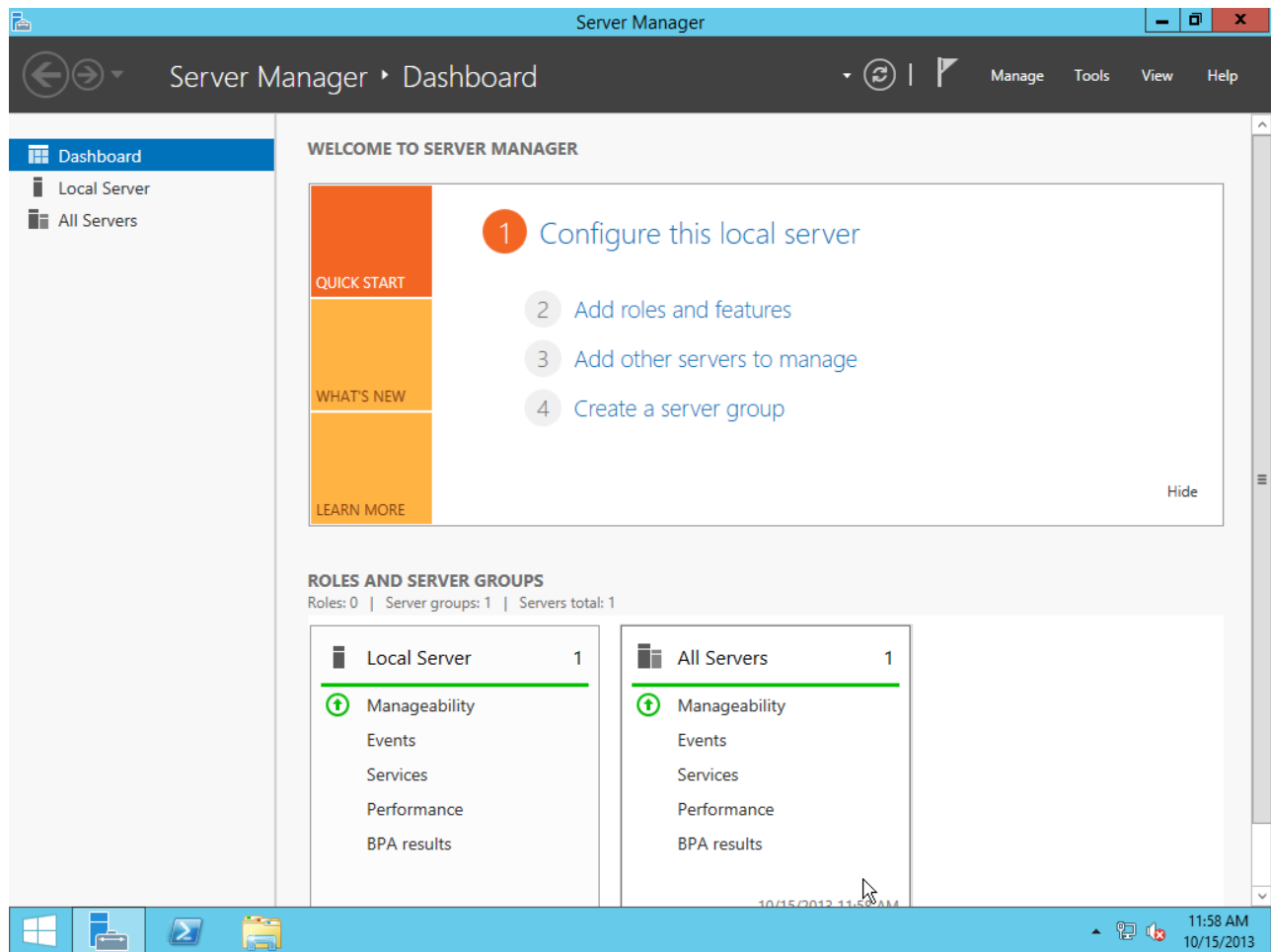
Type a password for the built-in administrator account that you can use to sign in to this computer.

User name	<input type="text" value="Administrator"/>
Password	<input type="password" value="••••••••"/>
Reenter password	<input type="password" value="••••••••"/> 



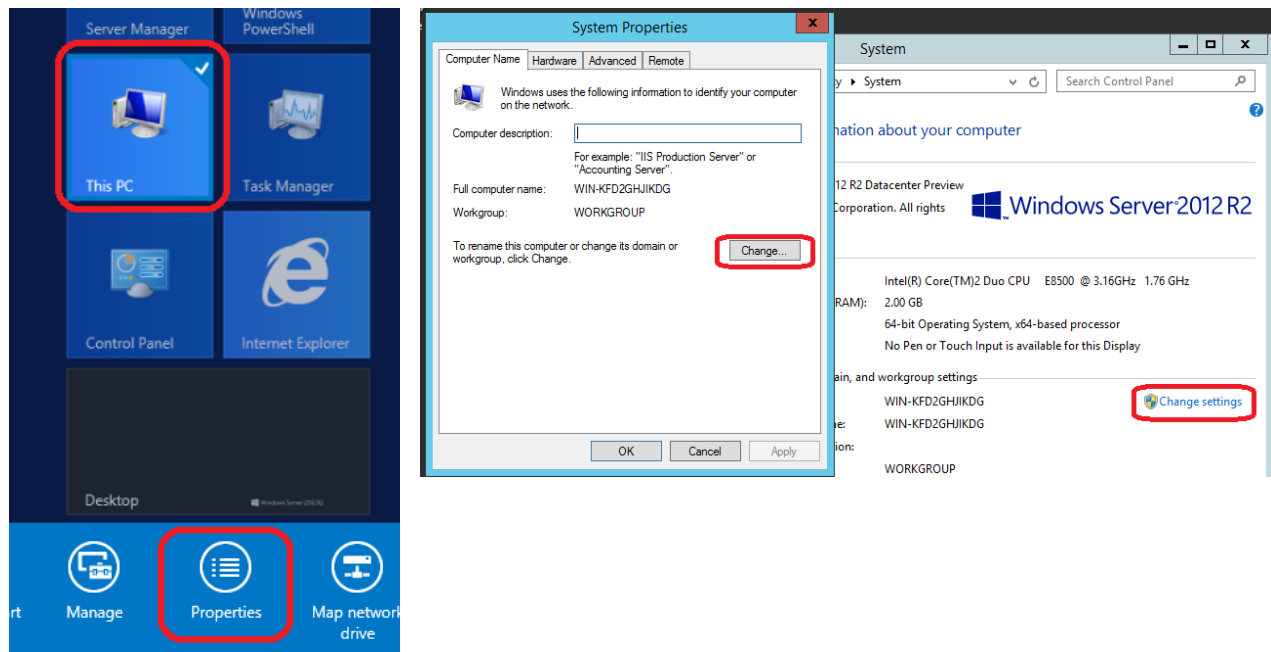
**TIP:** Be sure to remember your password! Even later when we will create an Active Directory Domain it will be the default password.

Now we can login to our freshly new Windows Server 2012R2 and use this for our SharePoint 2013 and Project Platform.

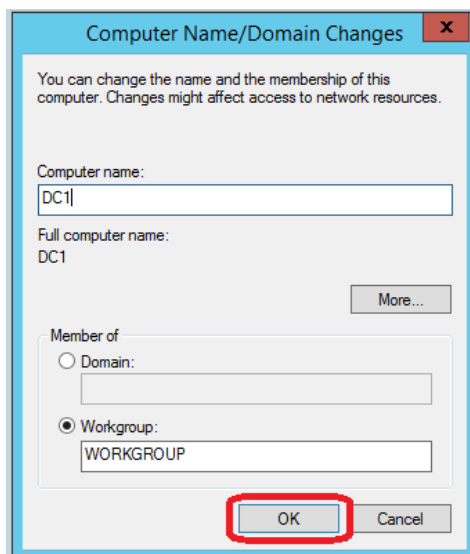


## Renaming the Server

In the main menu select **computer** and right-click. Select **Properties** click **Change settings**, and after **Change...**



Select a good computer's name and hit **OK**




**Good to know:** Renaming an existing Domain Controller is not an easy task, but doable. Please refer to this link if needed : [http://technet.microsoft.com/en-us/library/cc782761\(v=ws.10\).aspx](http://technet.microsoft.com/en-us/library/cc782761(v=ws.10).aspx)

## Windows Update

We are now going to handle the Windows Update. If your corporate has already a WSUS you can skip that general tip. Otherwise, if you don't have any WSUS it's preferable to Turn off this feature. Why? If you got a bad update or an update that requires a reboot it may not be easy to handle. The best way is to install any **Cumulative Update** if it will resolve any issue.

## Windows Update



### Turn on automatic updating

**Updates are not being installed automatically**

Turn on automatic updating to help improve the security and performance of your PC and allow standard users to install updates on this PC.

[Turn on automatic updates](#)  
[Let me choose my settings](#)

Most recent check for updates: Today at 12:00 PM  
Updates were installed: Never  
You receive updates: For Windows only.

## Choose your Windows Update settings

When your PC is online, Windows can automatically check for important updates and install them using these settings. When new updates are available, you can also choose to install them when you shut down your PC.

### Important updates

Check for updates but let me choose whether to download and install them ▼

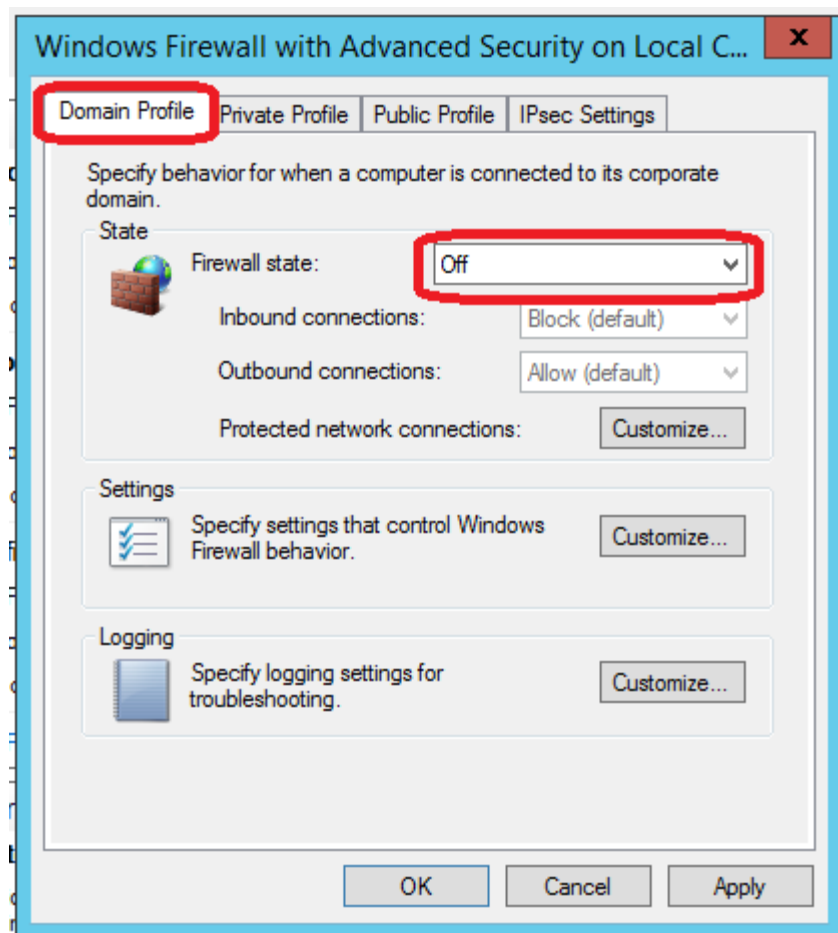
## Windows Firewall

It's preferable to close the out-of-the-box firewall on a Windows Server. Some technicians on corporates prefer to leave it on, but in our case I prefer to disable it. The same question can be asked, why?

For the simple reason that the **Windows Firewall** blocks certain port, but in our case all the needed port should be open to allow connections from corporate applications.

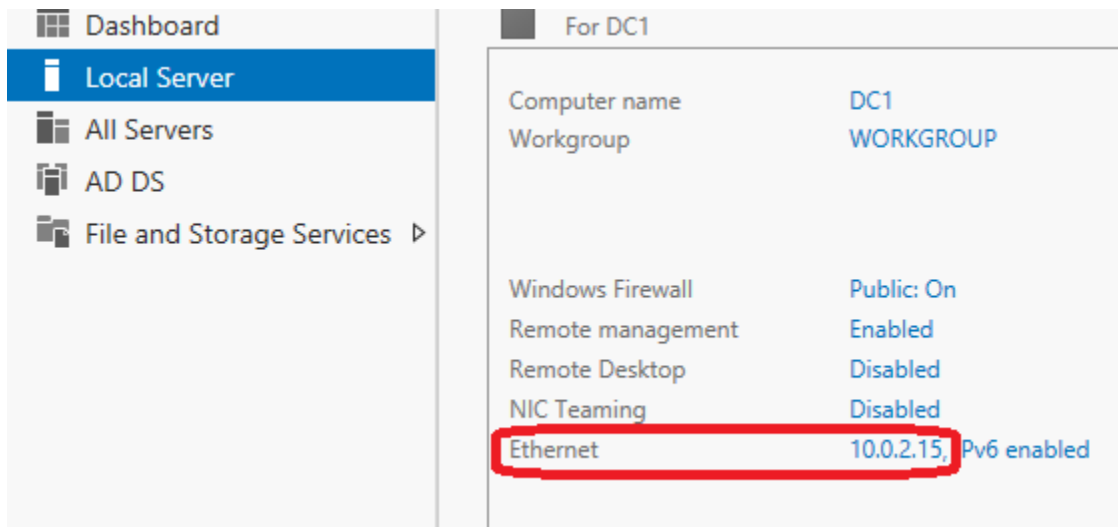
I prefer to limit the VLAN's traffic in the switch / main router if needed and to have a good router to prevent any WAN's abuse (as the DC is never in a DMZ or facing the Internet).

Some corporate technicians will tell us that it would be to prevent virus spanning, but if the file sharing is already activated and the SMB's port is already open this won't block anything. (**Unless unsecured LAN can access the DC**)



## IP's configuration

It is preferable to set **the IP Address** as a static value! Changing a DC's IP later on is not a simple.



For DC1	
Computer name	DC1
Workgroup	WORKGROUP
Windows Firewall	Public: On
Remote management	Enabled
Remote Desktop	Disabled
NIC Teaming	Disabled
Ethernet	10.0.2.15, Pv6 enabled



Good to know: Setting a static IPv6 address is a best practice.

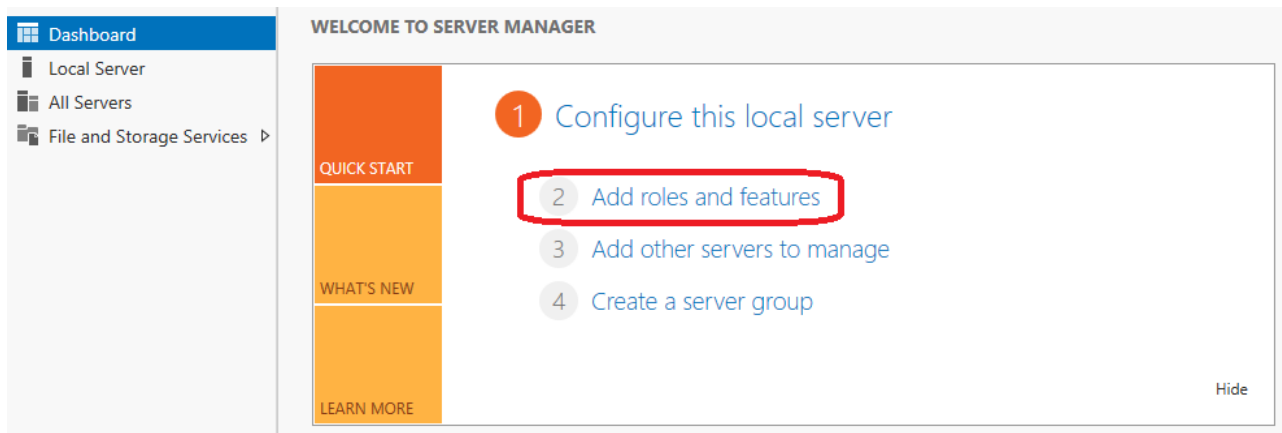
## Active Directory Configuration

There is the actual step to configure a working Active Directory.

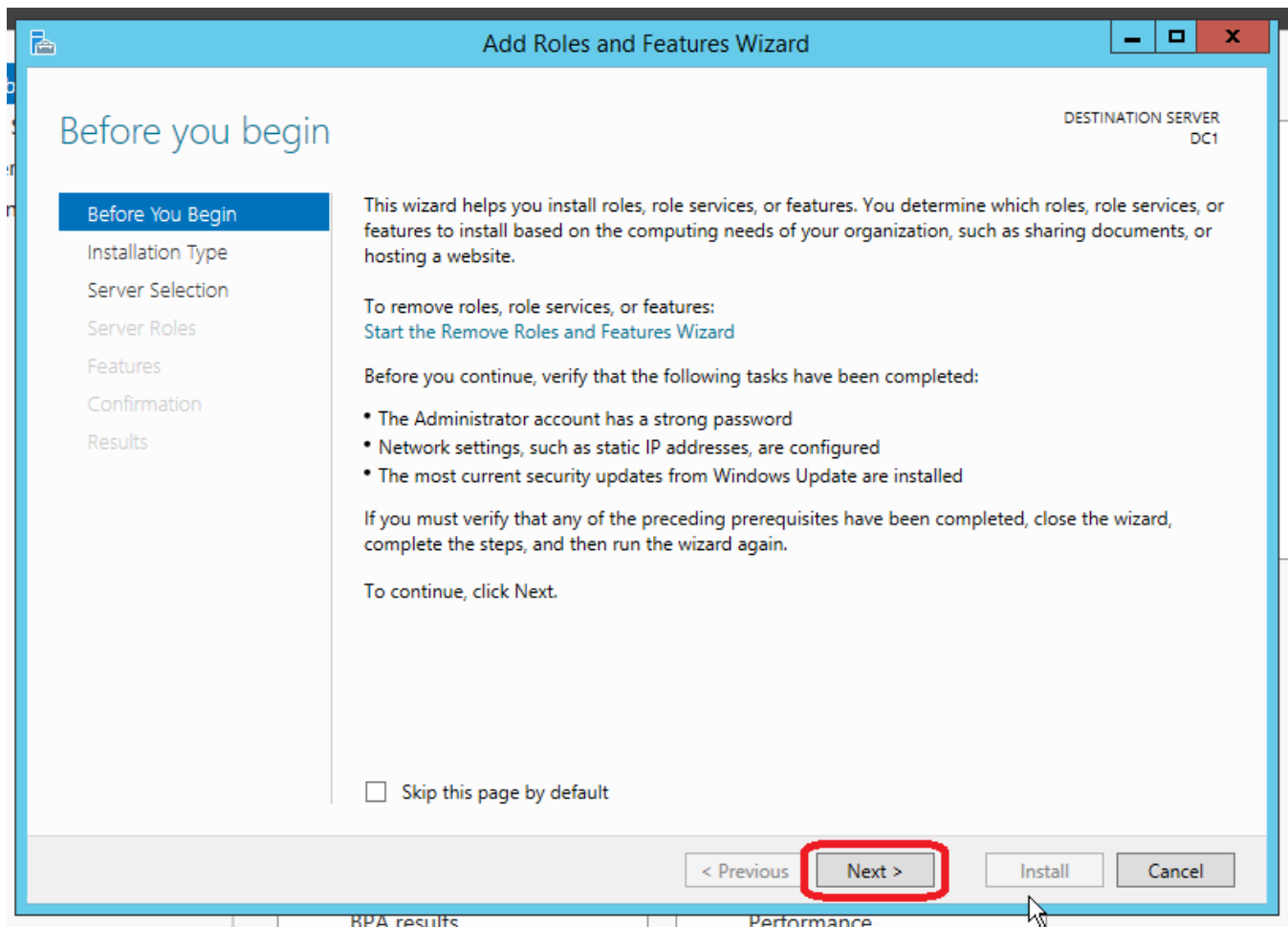


**Good to know: dcpromo** has been retired in Windows Server 2012 and upper.

In the **Dashboard of Server Manager** select to add a **Role**.



The first screen is an information screen that will guide you to install the **Domain Controller**, only thing to do is to click **Next**.





Please select **Role based or feature based installation** and click **Next**.

The screenshot shows the 'Add Roles and Features Wizard' window. The title bar is blue and contains the text 'Add Roles and Features Wizard' and standard window controls. The main area is white and titled 'Select installation type'. On the left, there is a navigation pane with the following items: 'Before You Begin', 'Installation Type' (highlighted in blue), 'Server Selection', 'Server Roles', 'Features', 'Confirmation', and 'Results'. The main content area contains the text: 'Select the installation type. You can install roles and features on a running physical computer or virtual machine, or on an offline virtual hard disk (VHD)'. Below this text are two radio button options. The first option, 'Role-based or feature-based installation', is selected (indicated by a filled radio button) and is enclosed in a red rectangular box. Its description is 'Configure a single server by adding roles, role services, and features.' The second option, 'Remote Desktop Services installation', is not selected (indicated by an empty radio button) and its description is 'Install required role services for Virtual Desktop Infrastructure (VDI) to create a virtual machine-based or session-based desktop deployment.' At the bottom of the window, there are four buttons: '< Previous', 'Next >' (highlighted with a red rectangular box), 'Install', and 'Cancel'. In the top right corner, the text 'DESTINATION SERVER DC1' is displayed.

DESTINATION SERVER  
DC1

Select installation type

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

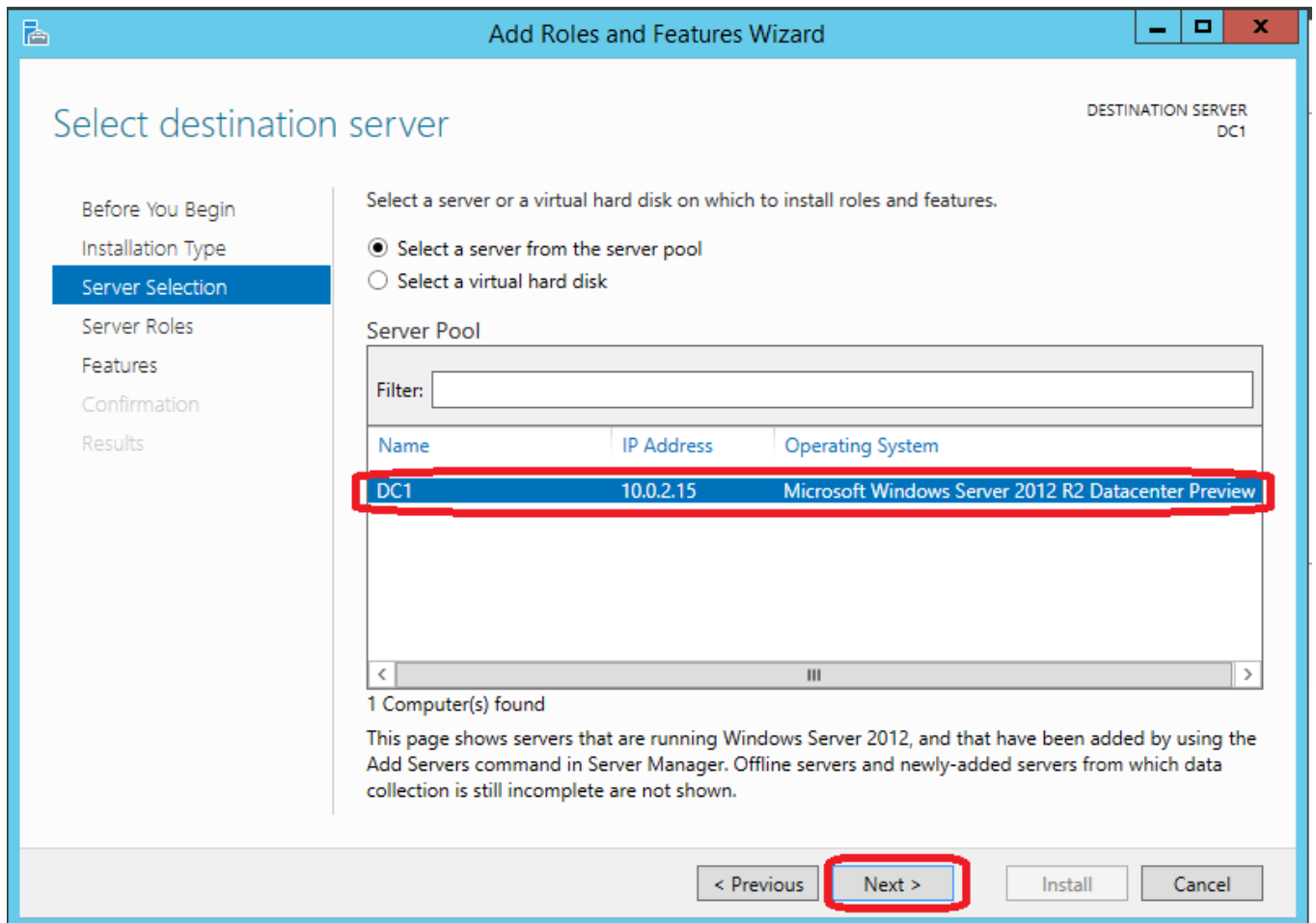
Select the installation type. You can install roles and features on a running physical computer or virtual machine, or on an offline virtual hard disk (VHD).

☒ **Role-based or feature-based installation**  
Configure a single server by adding roles, role services, and features.

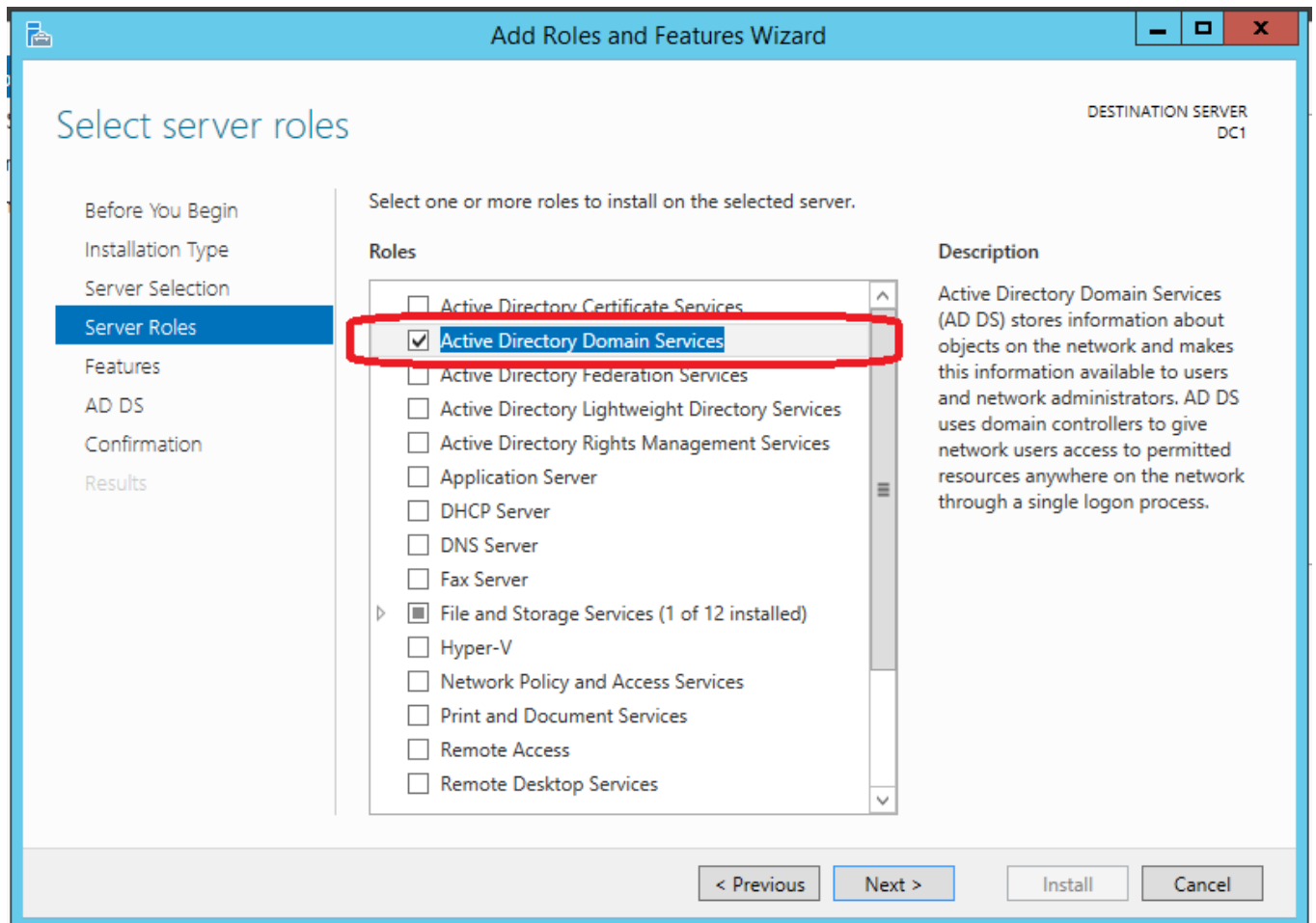
☐ **Remote Desktop Services installation**  
Install required role services for Virtual Desktop Infrastructure (VDI) to create a virtual machine-based or session-based desktop deployment.

< Previous   **Next >**   Install   Cancel

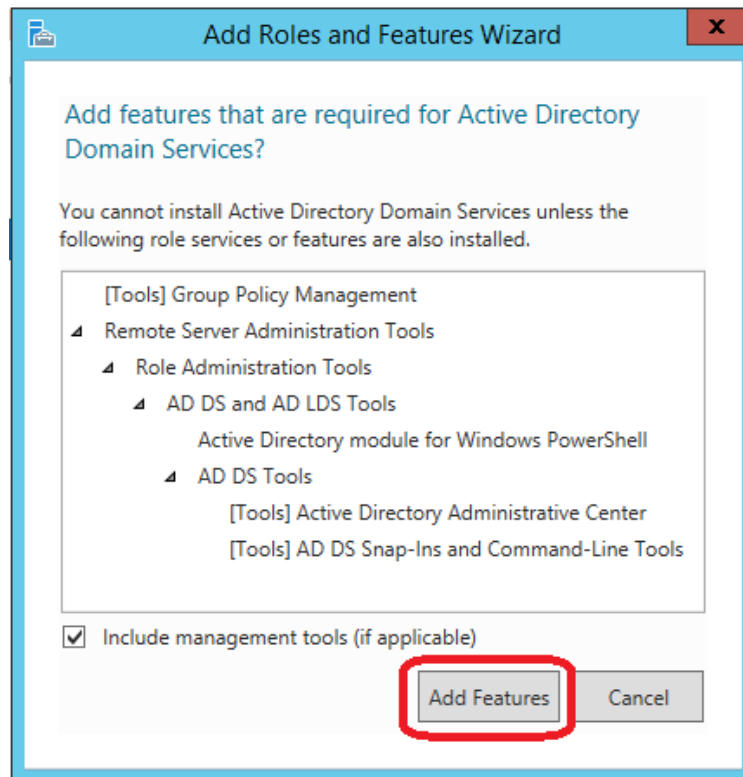
We select our freshly new installed Windows Server and click **Next**.



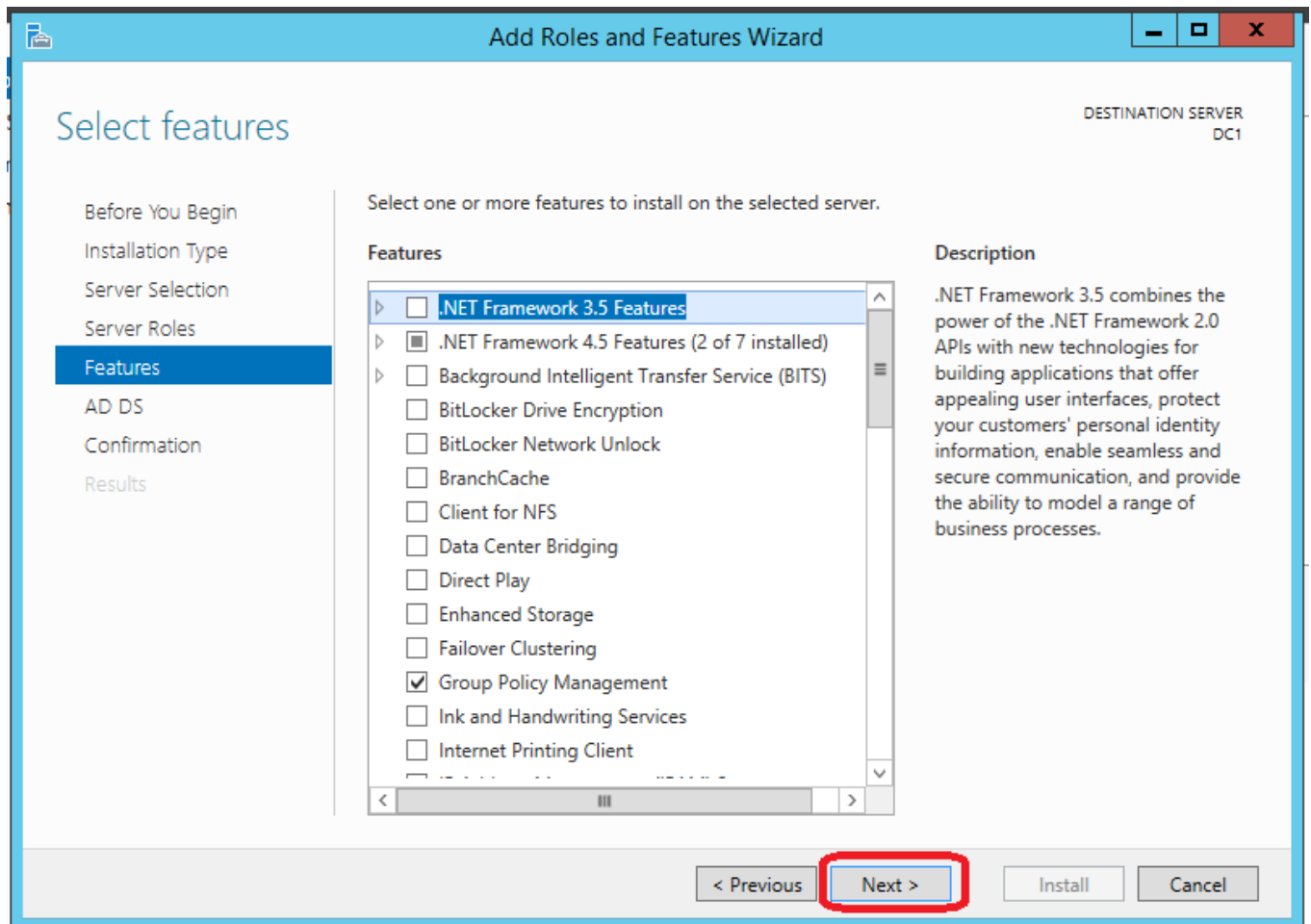
Be sure to select the **Active Directory domain Service** and hit **Next**



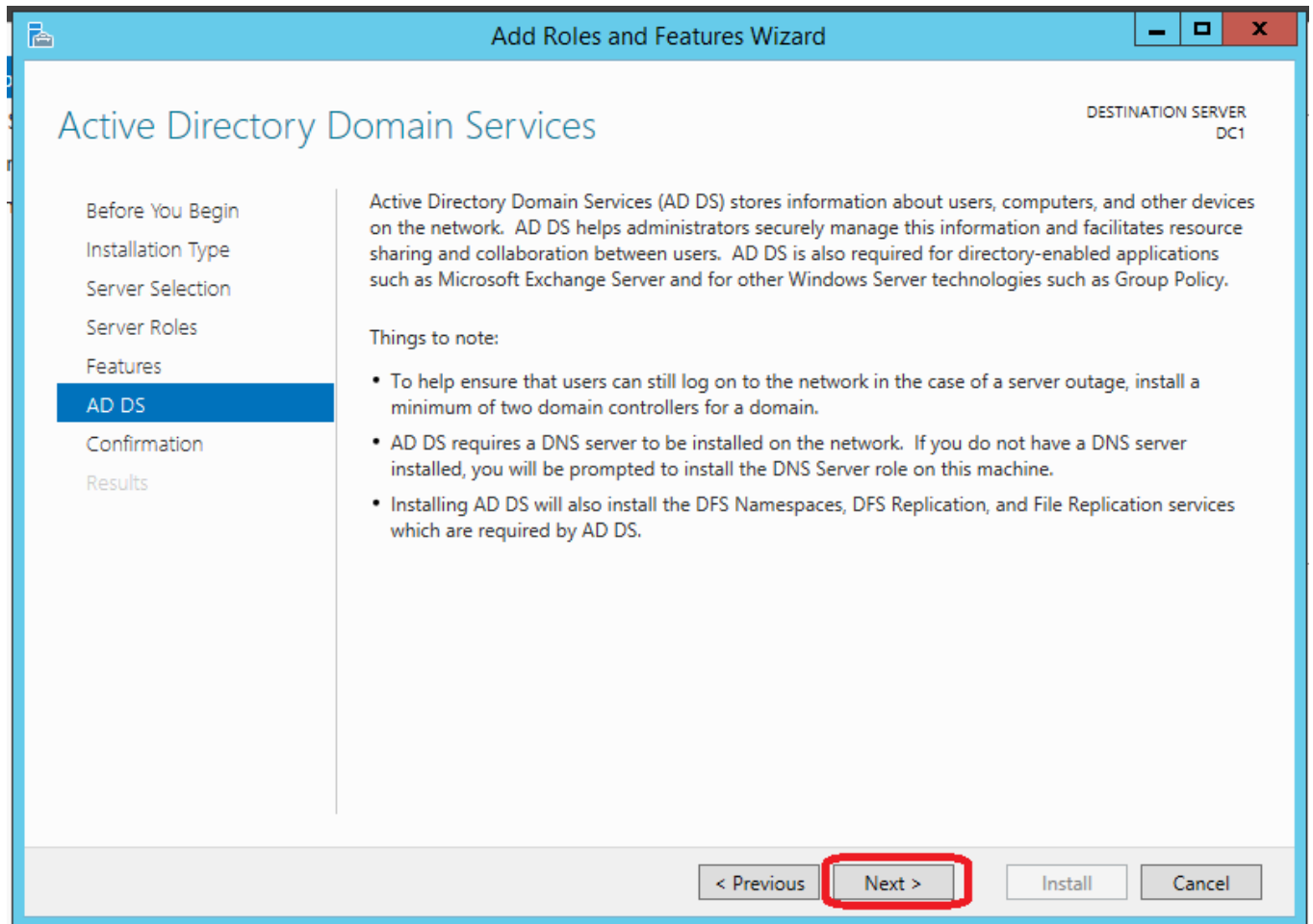
You actually cannot install the Active Directory Domain Services without some prerequisites. Hit **Add Features**.



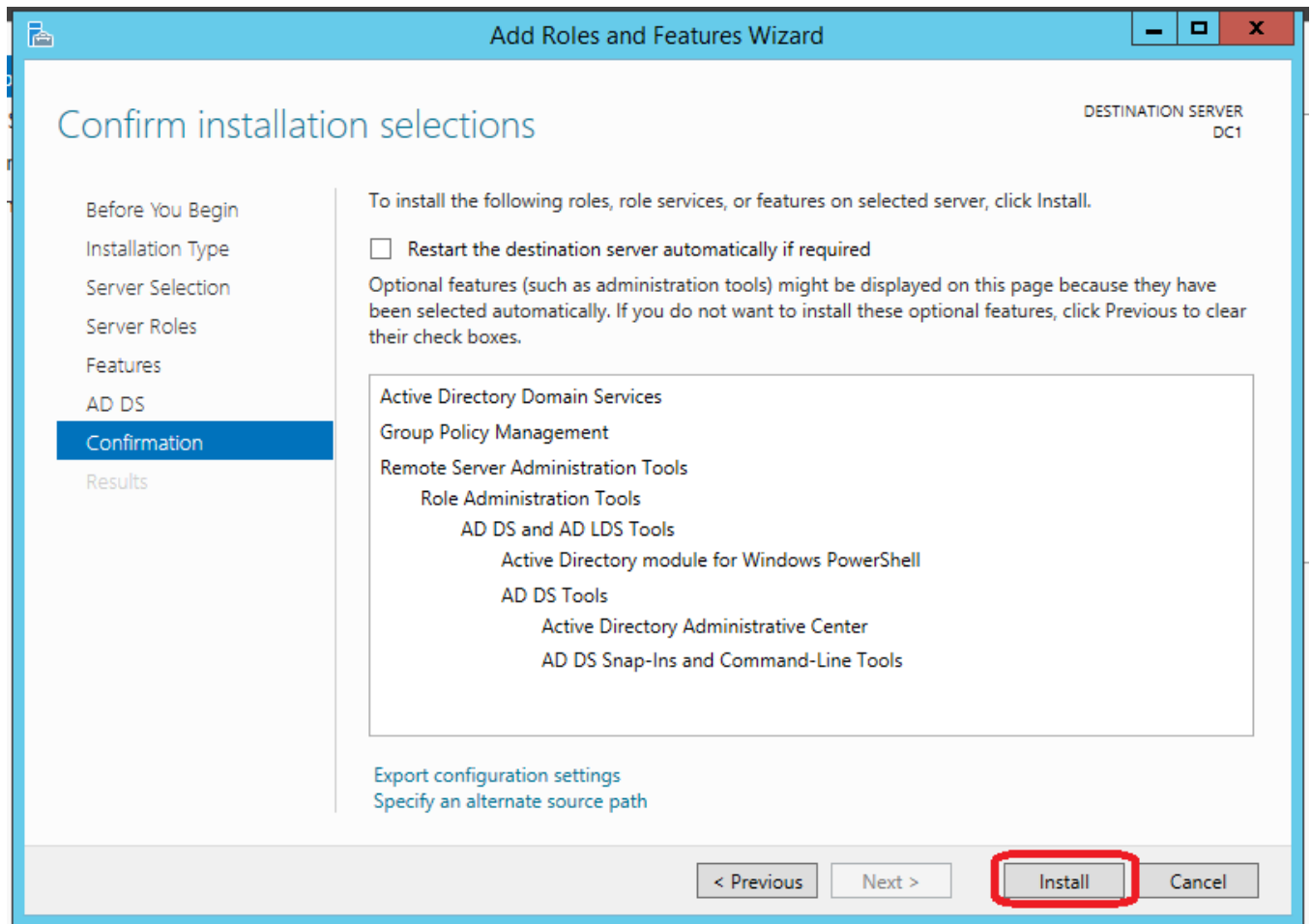
You can add features but be sure to not remove the automatic selected values. Click **Next**.



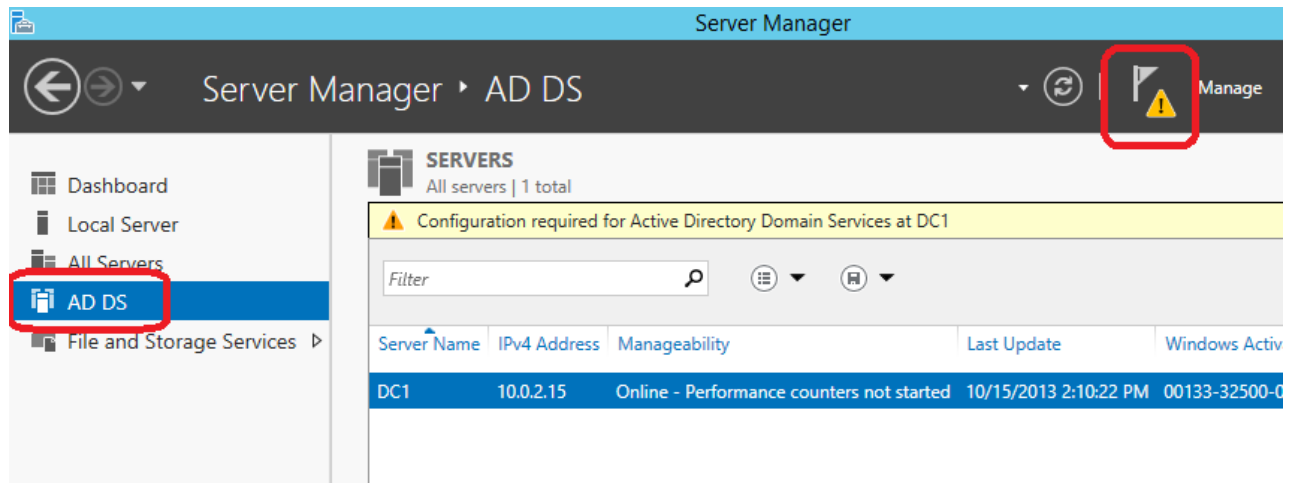
The Active Directory Domain Services stores information about users, computers and other devices on your corporate. The screen is only an information screen so you can click **Next** again!



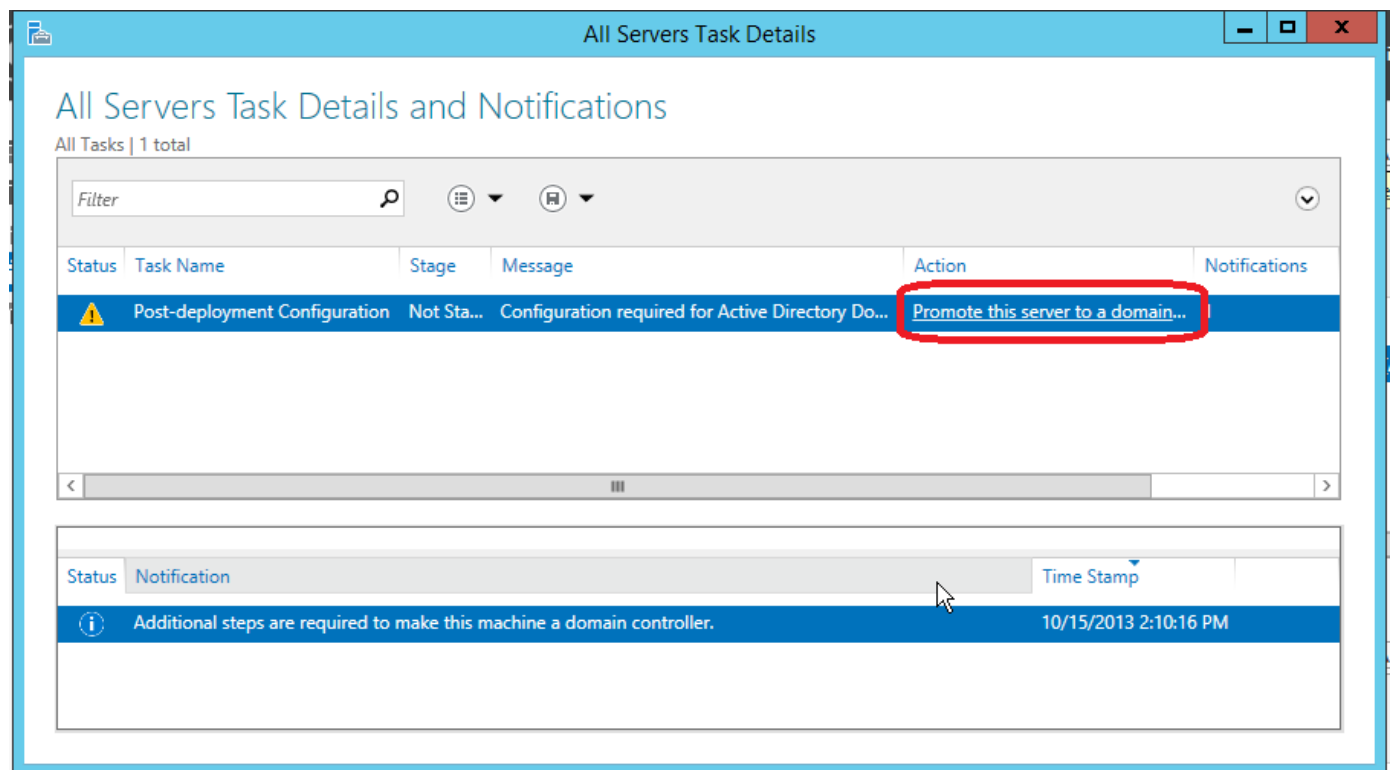
To install the following roles, services and other hit **Install**. You can also select the “**Restart the destination server automatically if required**”



In Server Manager you will notice on the upper right corner a **new warning**.



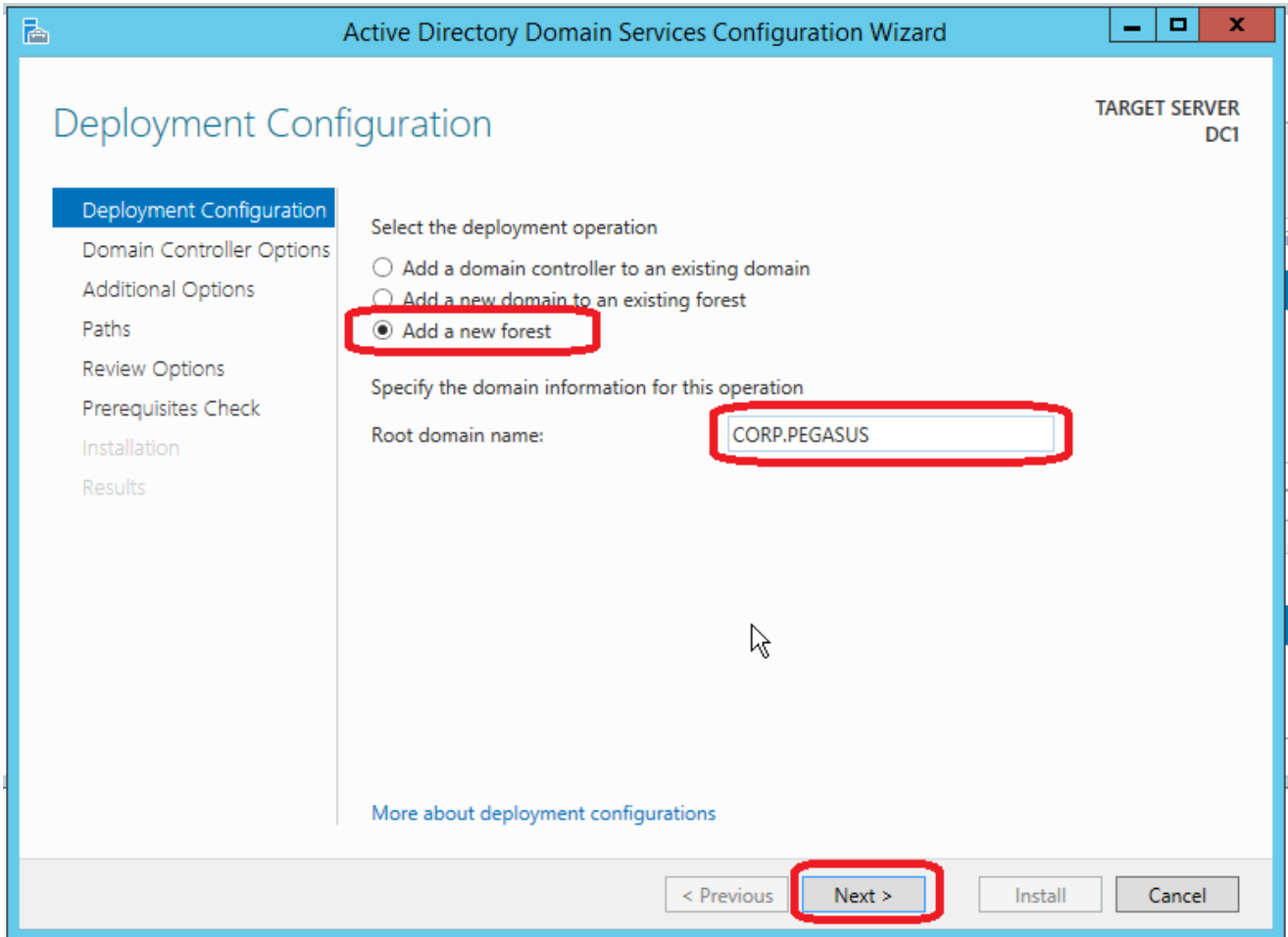
On the Notifications Center you can see the warning that you can **promote this server to a Domain Controller**.





As we are installing a new infrastructure we select the following option: “Add a new Forest”.

You also have to provide a Root domain name. In our corporate we select **CORP.PEGASUS**



The screenshot shows the 'Active Directory Domain Services Configuration Wizard' window. The title bar includes a file icon, the text 'Active Directory Domain Services Configuration Wizard', and standard window controls. The main window has a blue header with the title 'Deployment Configuration' and 'TARGET SERVER DC1' on the right. A left-hand navigation pane lists steps: 'Deployment Configuration' (highlighted), 'Domain Controller Options', 'Additional Options', 'Paths', 'Review Options', 'Prerequisites Check', 'Installation', and 'Results'. The main content area is titled 'Select the deployment operation' and contains three radio button options: 'Add a domain controller to an existing domain', 'Add a new domain to an existing forest', and 'Add a new forest' (which is selected and circled in red). Below this, the section 'Specify the domain information for this operation' contains a text box labeled 'Root domain name:' with the value 'CORP.PEGASUS' entered and circled in red. At the bottom of the window, there are four buttons: '< Previous', 'Next >' (circled in red), 'Install', and 'Cancel'. A mouse cursor is visible over the 'Next >' button. A link 'More about deployment configurations' is located at the bottom left of the main content area.



**TIP:** Always try to use a domain name with an extension. For local corporates we recommend you to use the .LOCAL extension. An existing extension like .COM or .NET in example will force you to use a split-DNS setup. (It's more complex to handle...)

We select the **Functional level**, enter the **DSRM password** and we click **Next**.

The screenshot shows the 'Active Directory Domain Services Configuration Wizard' window. The title bar includes standard Windows window controls (minimize, maximize, close) and the text 'Active Directory Domain Services Configuration Wizard'. The main window has a light blue header with the title 'Domain Controller Options' on the left and 'TARGET SERVER DC1' on the right. A left-hand navigation pane contains a list of steps: 'Deployment Configuration', 'Domain Controller Options' (highlighted in blue), 'DNS Options', 'Additional Options', 'Paths', 'Review Options', 'Prerequisites Check', 'Installation', and 'Results'. The main content area is titled 'Select functional level of the new forest and root domain'. It contains the following elements: 'Forest functional level:' with a dropdown menu showing 'Windows Server 2008 R2' selected; 'Domain functional level:' with a dropdown menu showing 'Windows Server 2008 R2' selected; 'Specify domain controller capabilities' with three checkboxes: 'Domain Name System (DNS) server' (checked), 'Global Catalog (GC)' (checked), and 'Read only domain controller (RODC)' (unchecked); and 'Type the Directory Services Restore Mode (DSRM) password' with two password input fields labeled 'Password:' and 'Confirm password:', each with a red asterisk icon to its left. At the bottom of the main content area is a blue hyperlink 'More about domain controller options'. The bottom of the window features a grey bar with four buttons: '< Previous', 'Next >', 'Install', and 'Cancel'.

Active Directory Domain Services Configuration Wizard

Domain Controller Options

TARGET SERVER  
DC1

Deployment Configuration  
Domain Controller Options  
DNS Options  
Additional Options  
Paths  
Review Options  
Prerequisites Check  
Installation  
Results

Select functional level of the new forest and root domain

Forest functional level: Windows Server 2008 R2

Domain functional level: Windows Server 2008 R2

Specify domain controller capabilities

☒ Domain Name System (DNS) server  
☒ Global Catalog (GC)  
☐ Read only domain controller (RODC)

Type the Directory Services Restore Mode (DSRM) password

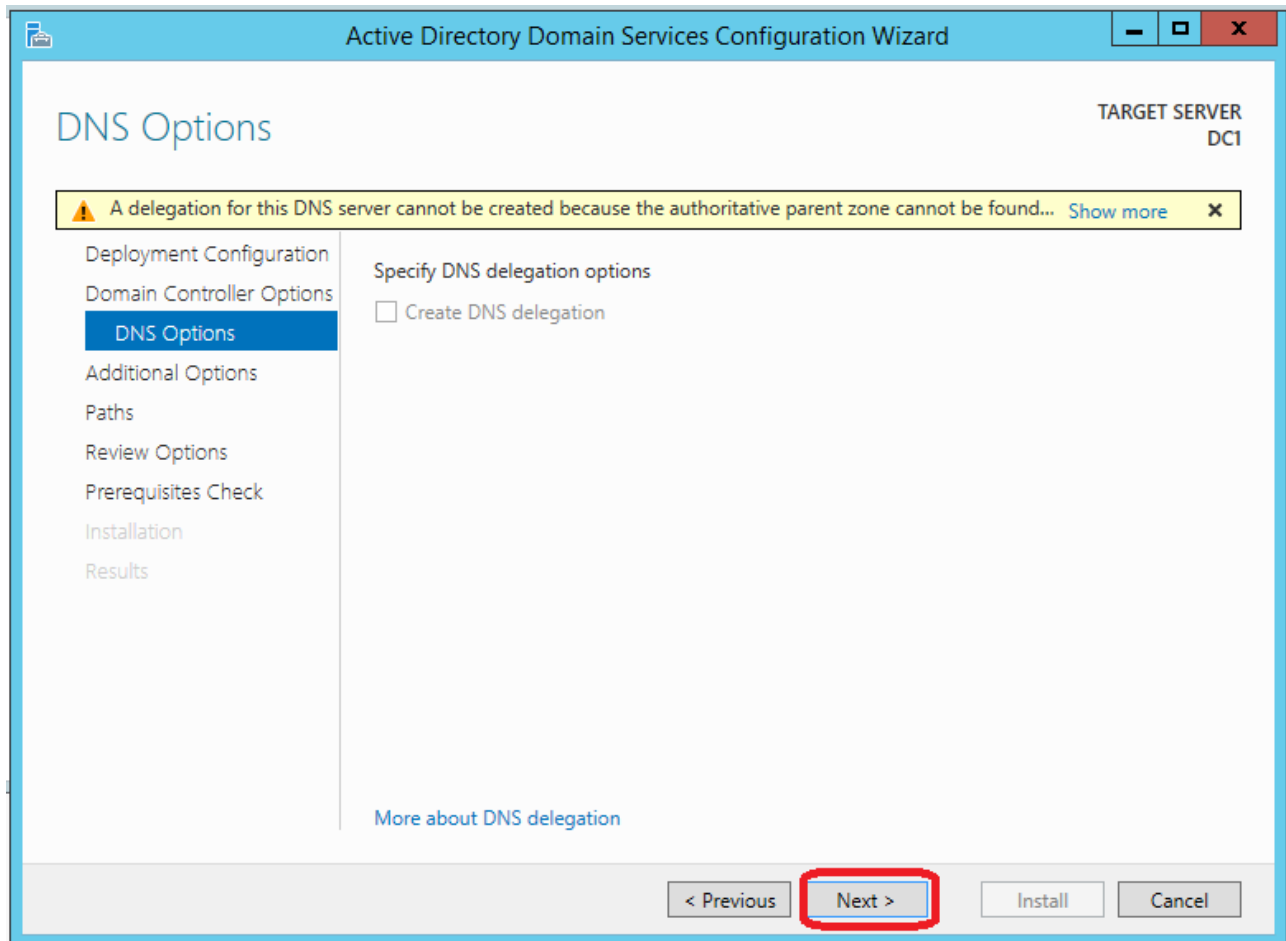
Password: \*

Confirm password: \*

[More about domain controller options](#)

< Previous Next > Install Cancel

We click **Next!** (If you receive an error you can safely ignore it.)



We click **Next**.

The screenshot shows the 'Active Directory Domain Services Configuration Wizard' window. The title bar includes standard Windows window controls (minimize, maximize, close). The main window has a blue header with the title. On the left is a navigation pane with the following items: 'Deployment Configuration', 'Domain Controller Options', 'DNS Options', 'Additional Options' (highlighted with a blue background), 'Paths', 'Review Options', 'Prerequisites Check', 'Installation', and 'Results'. The main content area is titled 'Additional Options' and contains the text 'Verify the NetBIOS name assigned to the domain and change it if necessary'. Below this is a label 'The NetBIOS domain name:' followed by a text input field containing the value 'CORP'. At the bottom left of the main area is a link 'More about additional options'. At the bottom right is a mouse cursor pointing at the 'Next >' button, which is highlighted with a red rectangle. Other buttons at the bottom include '< Previous', 'Install', and 'Cancel'. In the top right corner, the text 'TARGET SERVER DC1' is displayed.

Active Directory Domain Services Configuration Wizard

TARGET SERVER  
DC1

Additional Options

Deployment Configuration  
Domain Controller Options  
DNS Options  
Additional Options  
Paths  
Review Options  
Prerequisites Check  
Installation  
Results

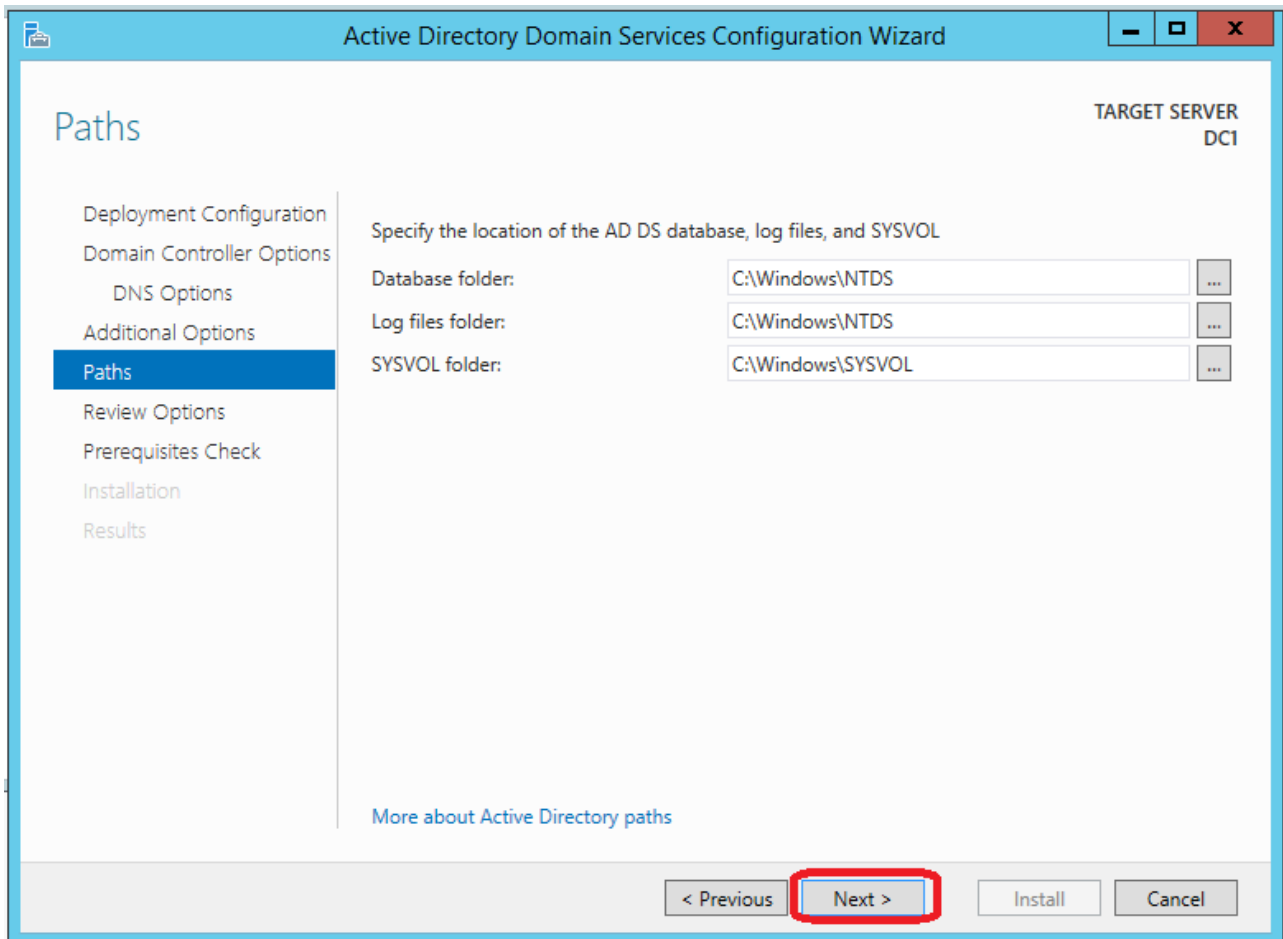
Verify the NetBIOS name assigned to the domain and change it if necessary

The NetBIOS domain name: CORP

More about additional options

< Previous Next > Install Cancel

Use the default value and we click **Next**.



The image shows the 'Active Directory Domain Services Configuration Wizard' window, specifically the 'Paths' step. The window has a blue title bar with the text 'Active Directory Domain Services Configuration Wizard' and standard window controls (minimize, maximize, close). On the left is a navigation pane with the following items: 'Deployment Configuration', 'Domain Controller Options', 'DNS Options', 'Additional Options', 'Paths' (highlighted in blue), 'Review Options', 'Prerequisites Check', 'Installation', and 'Results'. The main area is titled 'Paths' and contains the instruction 'Specify the location of the AD DS database, log files, and SYSVOL'. Below this are three input fields: 'Database folder:' with the value 'C:\Windows\NTDS', 'Log files folder:' with the value 'C:\Windows\NTDS', and 'SYSVOL folder:' with the value 'C:\Windows\SYSVOL'. Each field has a browse button (three dots) to its right. In the top right corner, it says 'TARGET SERVER DC1'. At the bottom, there are four buttons: '< Previous', 'Next >' (which is highlighted with a red rectangle), 'Install', and 'Cancel'. A link 'More about Active Directory paths' is located at the bottom left of the main area.

Active Directory Domain Services Configuration Wizard

TARGET SERVER  
DC1

Paths

Deployment Configuration  
Domain Controller Options  
DNS Options  
Additional Options  
**Paths**  
Review Options  
Prerequisites Check  
Installation  
Results

Specify the location of the AD DS database, log files, and SYSVOL

Database folder: C:\Windows\NTDS ...

Log files folder: C:\Windows\NTDS ...

SYSVOL folder: C:\Windows\SYSVOL ...

More about Active Directory paths

< Previous **Next >** Install Cancel

You can change the default locations for the Database, Log files and SYSVOL folders. If not, just click **Next!**

The screenshot shows the 'Active Directory Domain Services Configuration Wizard' window. The title bar includes standard Windows window controls (minimize, maximize, close). The main window has a light blue header with the title. On the left is a navigation pane with the following items: 'Deployment Configuration', 'Domain Controller Options', 'DNS Options', 'Additional Options', 'Paths', 'Review Options' (highlighted in blue), 'Prerequisites Check', 'Installation', and 'Results'. The main area is titled 'Review Options' and contains a list of configuration choices. At the bottom right, there is a 'View script' button. At the bottom of the window, there are four buttons: '< Previous', 'Next >' (highlighted with a red rectangle), 'Install', and 'Cancel'. The 'Next >' button is the focus of the instruction.

Active Directory Domain Services Configuration Wizard

TARGET SERVER  
DC1

## Review Options

Review your selections:

- Configure this server as the first Active Directory domain controller in a new forest.
- The new domain name is "CORP.PEGASUS". This is also the name of the new forest.
- The NetBIOS name of the domain: CORP
- Forest Functional Level: Windows Server 2008 R2
- Domain Functional Level: Windows Server 2008 R2
- Additional Options:
  - Global catalog: Yes
  - DNS Server: Yes
  - Create DNS Delegation: No

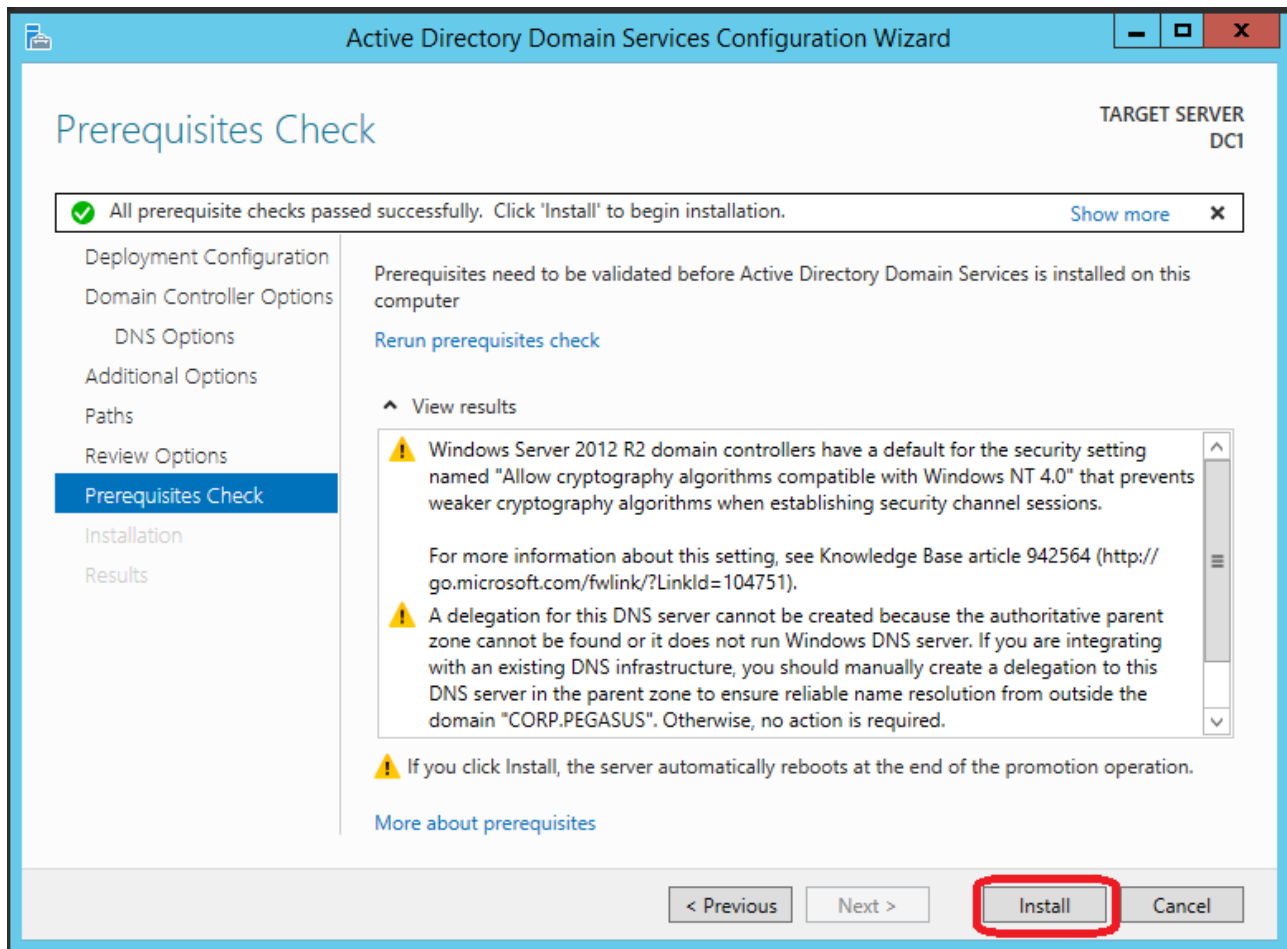
These settings can be exported to a Windows PowerShell script to automate additional installations

[View script](#)

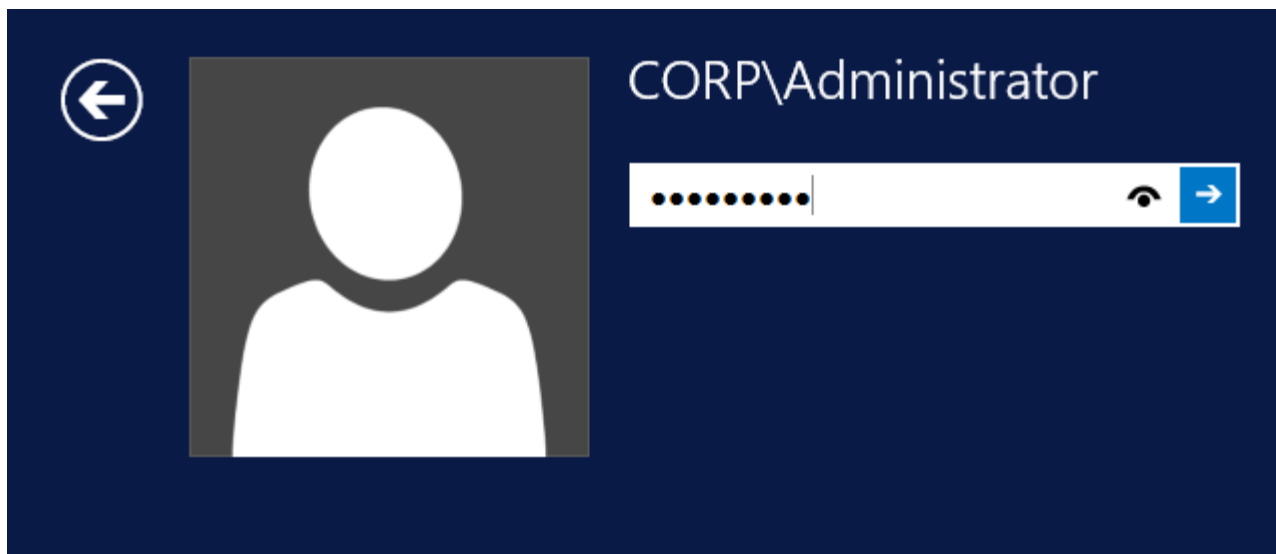
[More about installation options](#)

< Previous   **Next >**   Install   Cancel

Now we click **Install**!



After a reboot we can finally login with our domain credential!



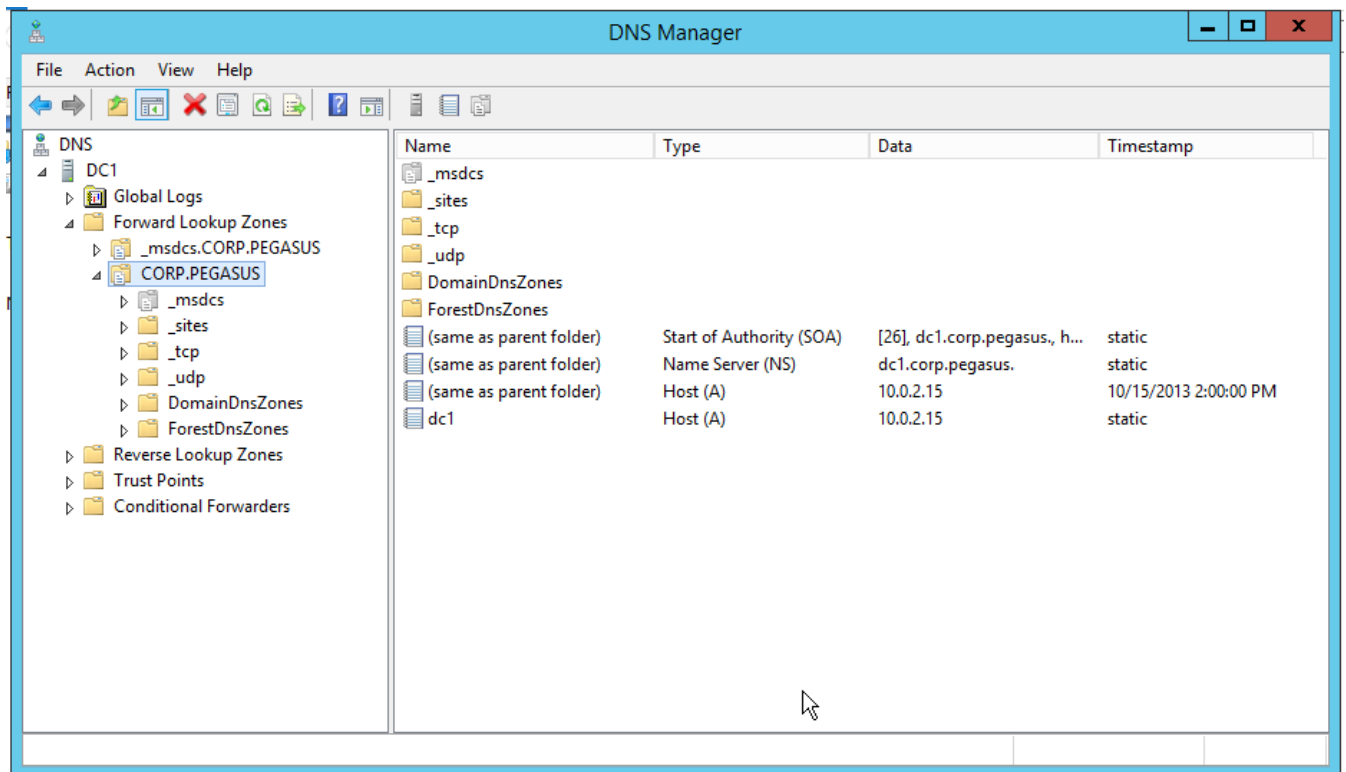
## Post Active Directory Installation Task: DNS

Let's finish our Active Directory configuration! Open Administrative Tools.

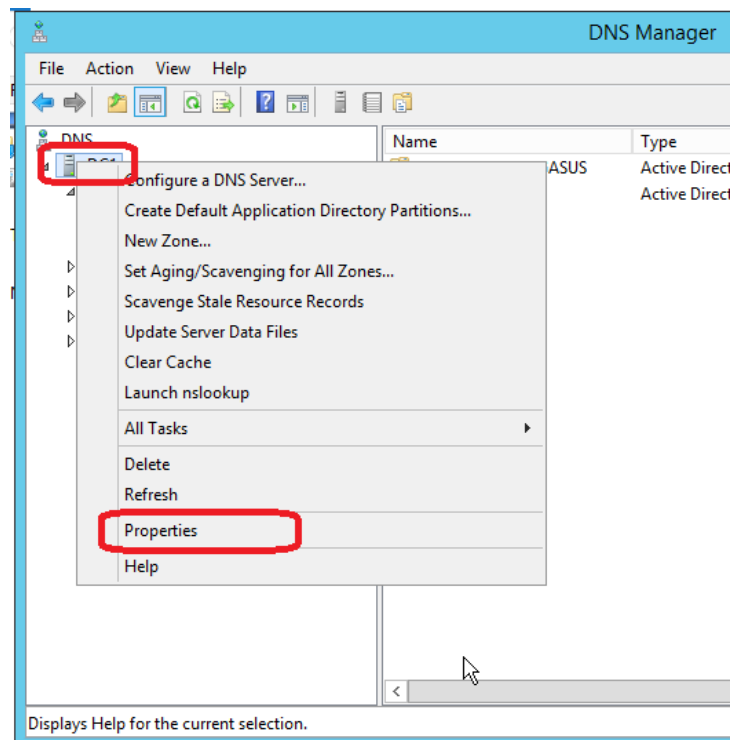
Control Panel > System and Security > Administrative Tools				
	Name	Date modified	Type	Size
	Terminal Services	6/15/2013 10:38 PM	File folder	
s	Active Directory Administrative Center	6/15/2013 12:43 PM	Shortcut	2 KB
ices	Active Directory Domains and Trusts	6/15/2013 12:43 PM	Shortcut	2 KB
	Active Directory Module for Windows Po...	6/15/2013 12:44 PM	Shortcut	2 KB
	Active Directory Sites and Services	6/15/2013 12:43 PM	Shortcut	2 KB
	Active Directory Users and Computers	6/15/2013 12:43 PM	Shortcut	2 KB
	ADSI Edit	6/15/2013 12:43 PM	Shortcut	2 KB
	Component Services	6/15/2013 12:47 PM	Shortcut	2 KB
	Computer Management	6/15/2013 12:43 PM	Shortcut	2 KB
	Defragment and Optimize Drives	6/15/2013 12:35 PM	Shortcut	2 KB
	DNS	6/15/2013 12:43 PM	Shortcut	2 KB
	Event Viewer	6/15/2013 12:44 PM	Shortcut	2 KB
	Group Policy Management	6/15/2013 12:45 PM	Shortcut	2 KB



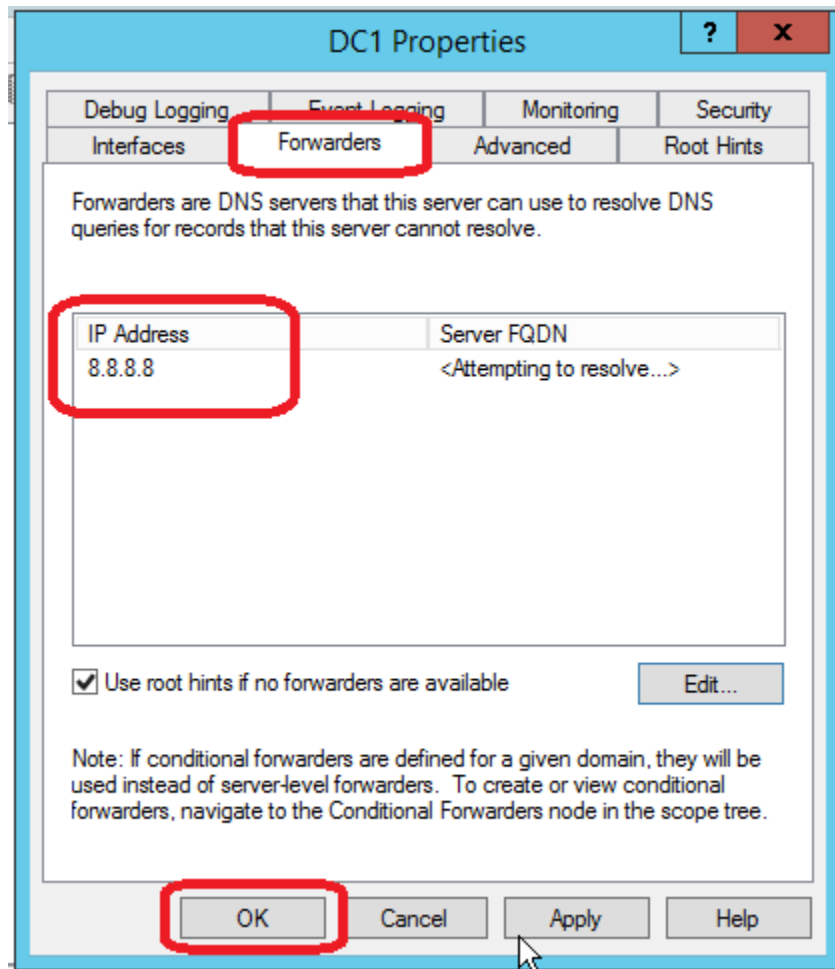
In the **DNS Manager** we see our zone.



Right-click the DNS's server name and select **Properties**.



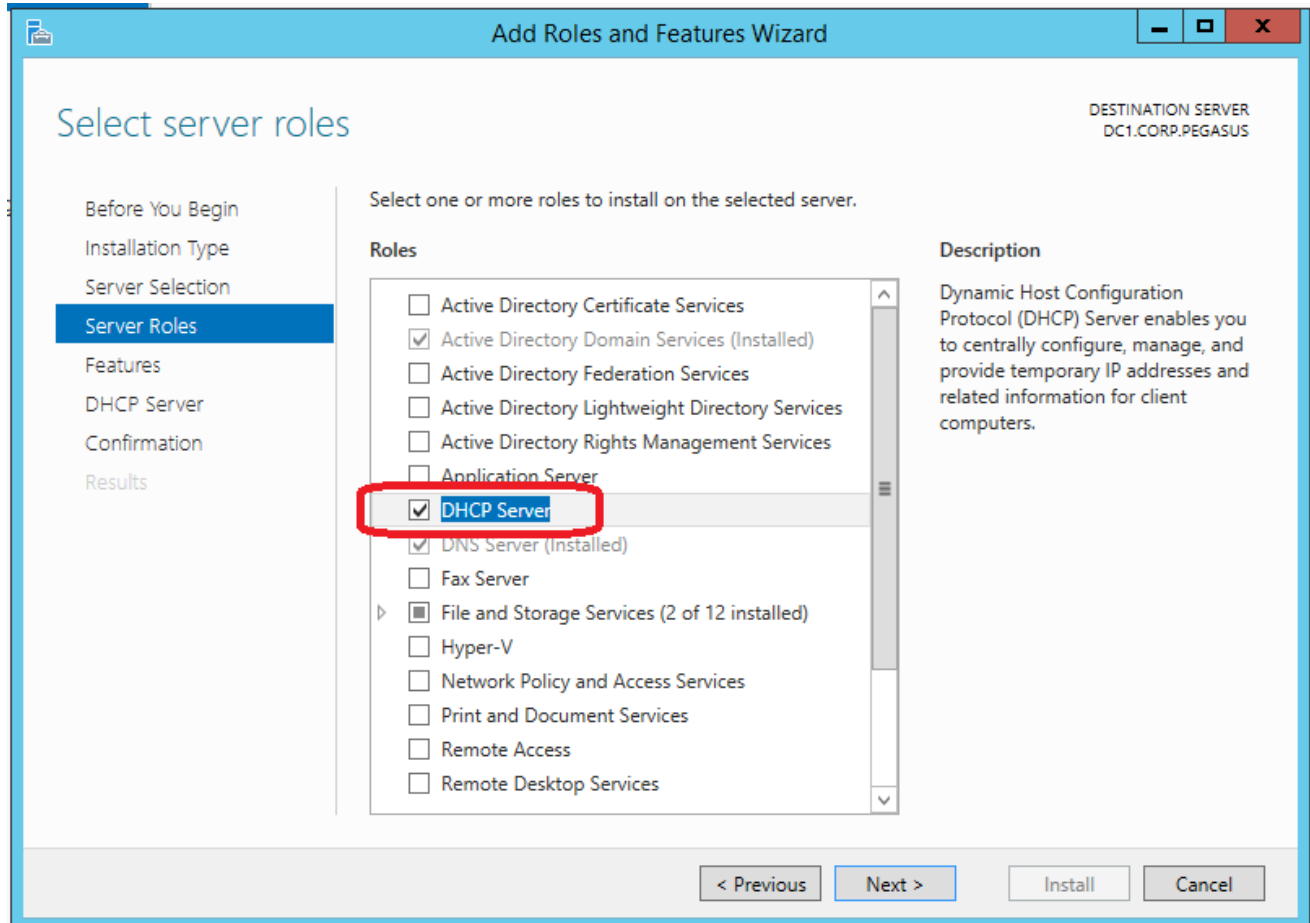
In the **forwarder settings** please add our ISP's **DNS**.



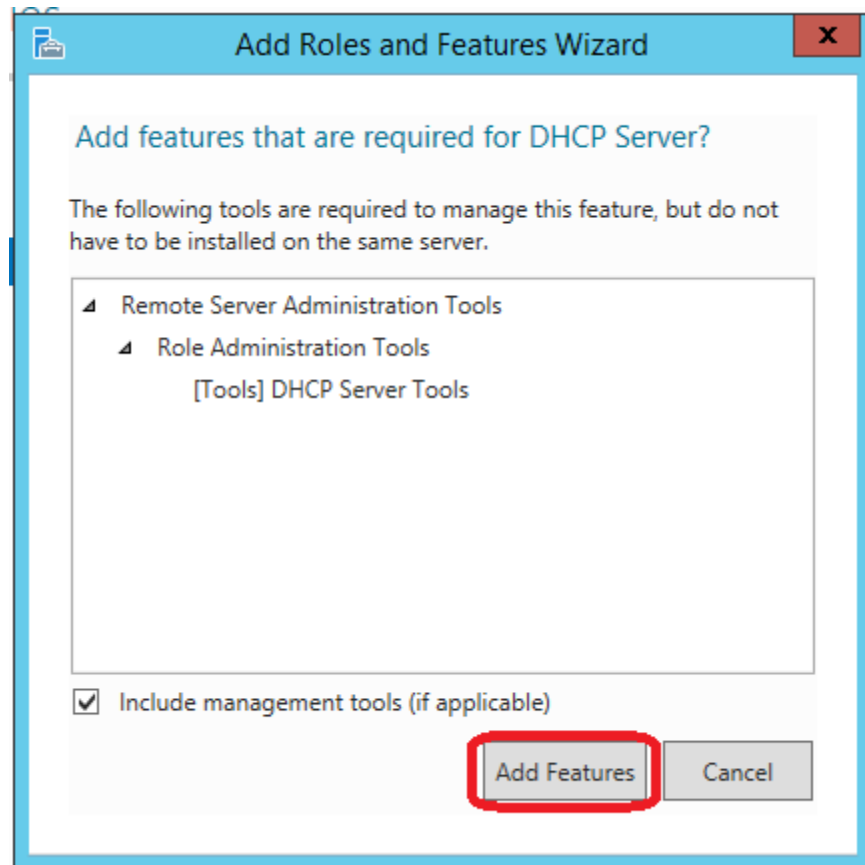
## DHCP

Now that our AD and DNS is settled, we can go configure our DHCP. I suggest using the server as a DHCP's server to allow controlling all ACL over the DHCP, but you can use other server too. Just be sure to set the DNS server for the DHCP's client to point to the DNS's server and to give the correct DNS's suffix if you can.

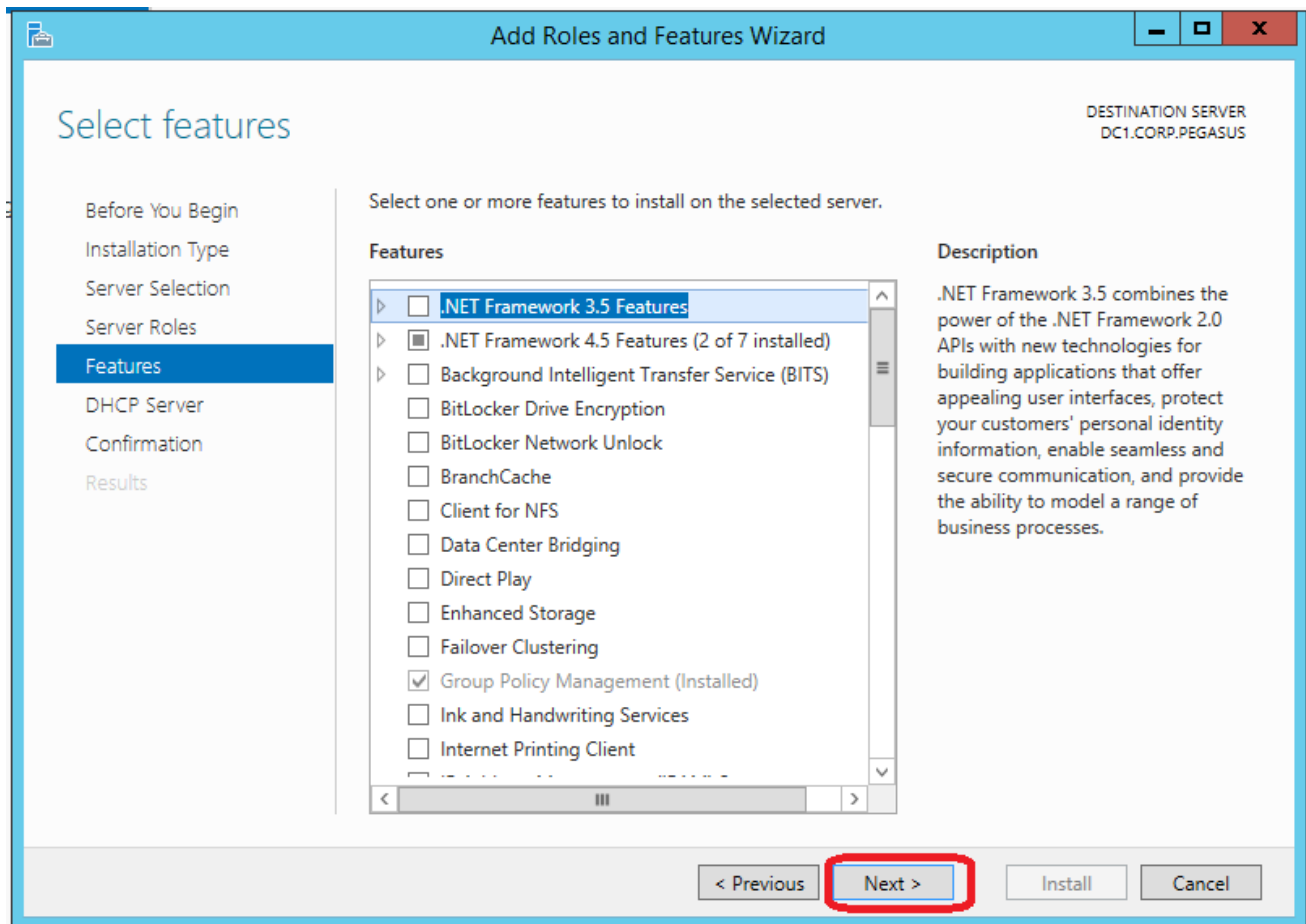
Go to your **Server Manager** and clicks add **Server Roles**. Then select the **DHCP Server**.



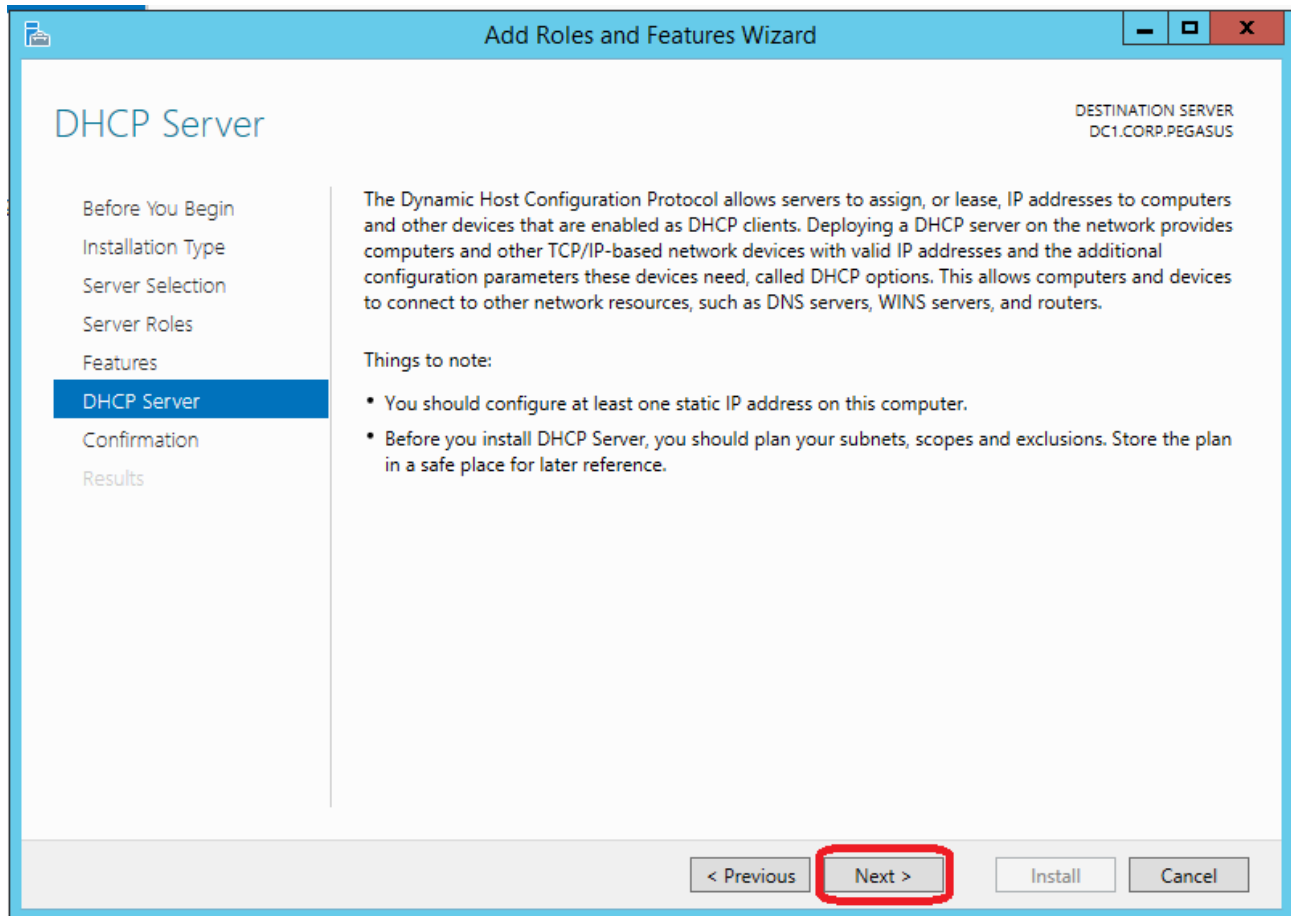
Click **Add Features**.



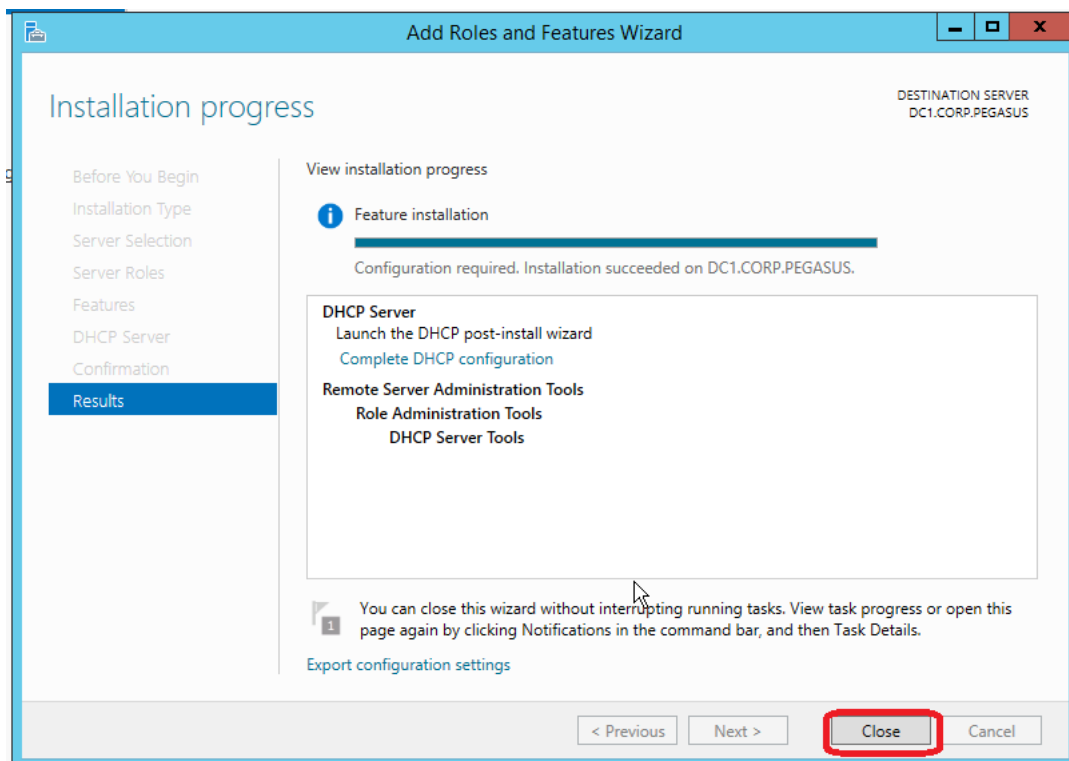
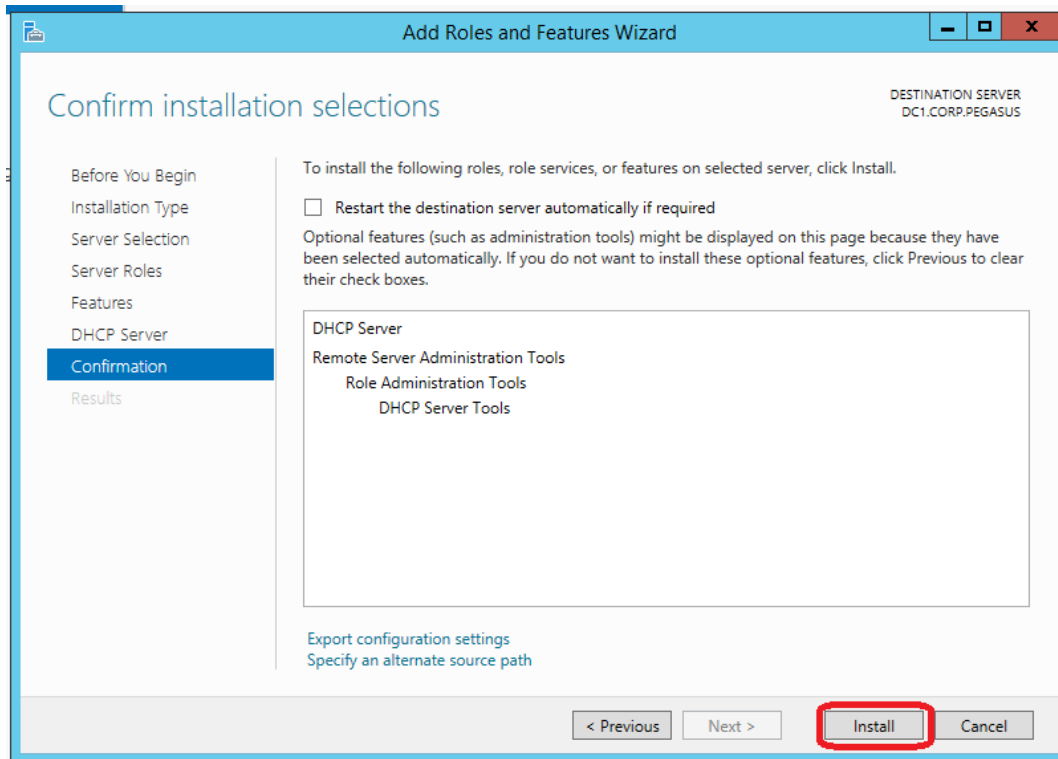
On the next screen click **next**



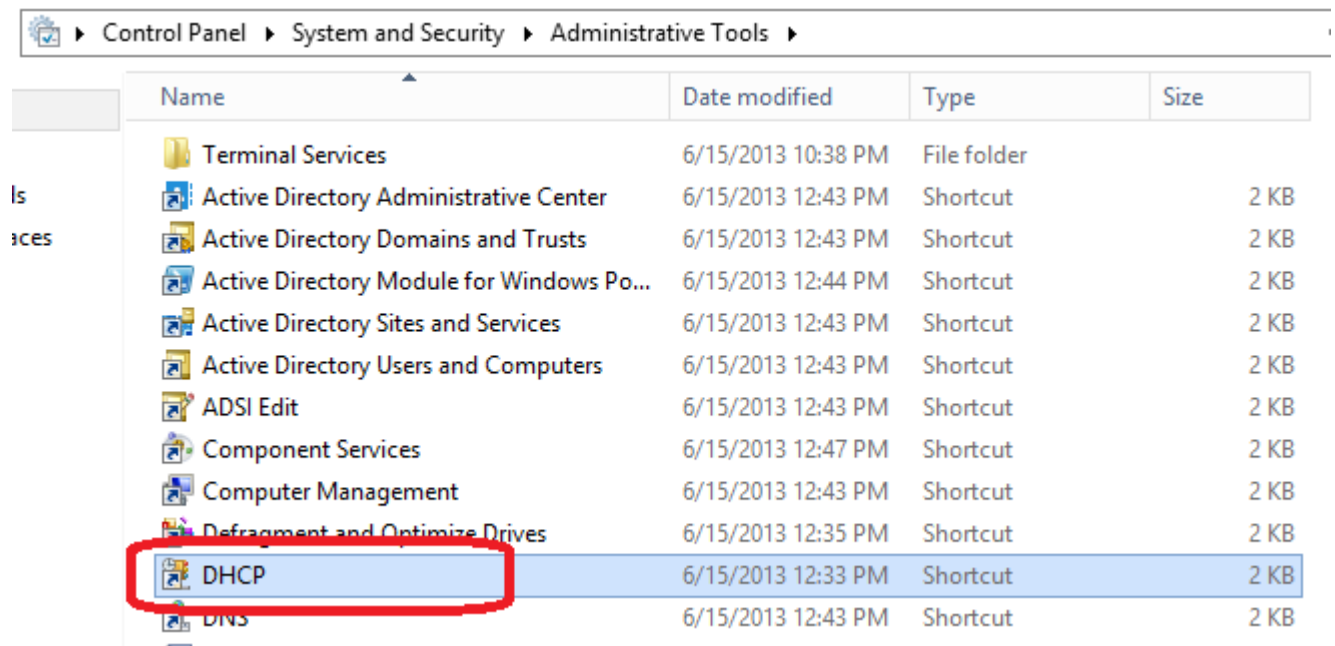
We click **Next!**



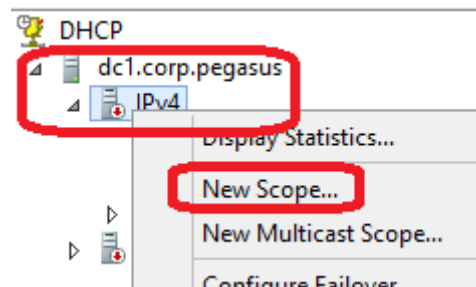
Please hit **install** and if applicable reboot the server.



Open now your **DHCP** under **Administrator Tools**.

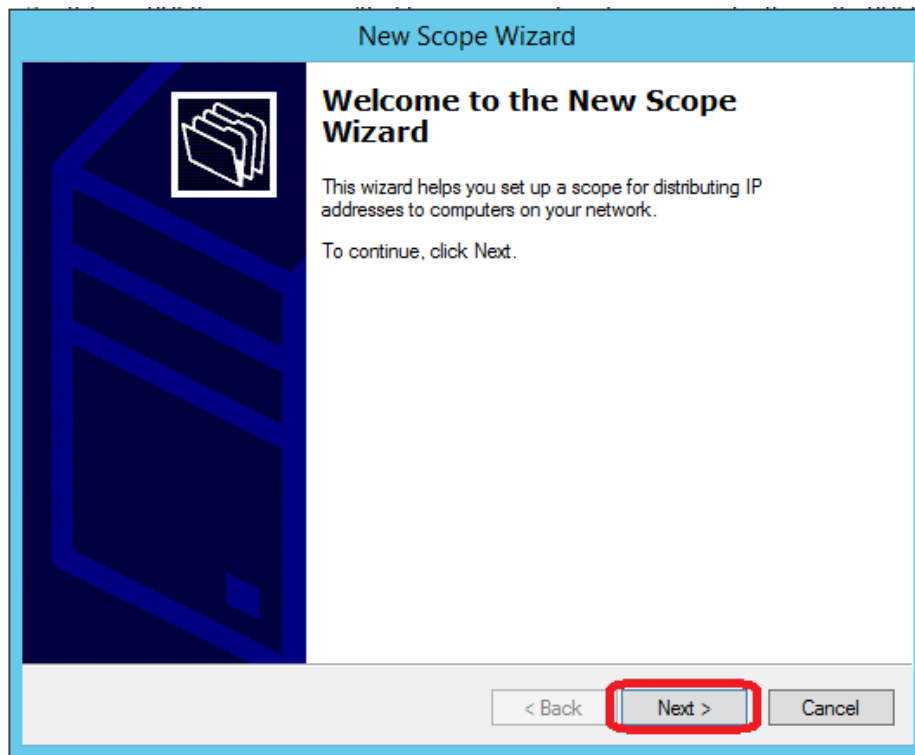


Over the **IPv4** right-click and select **New Scope**

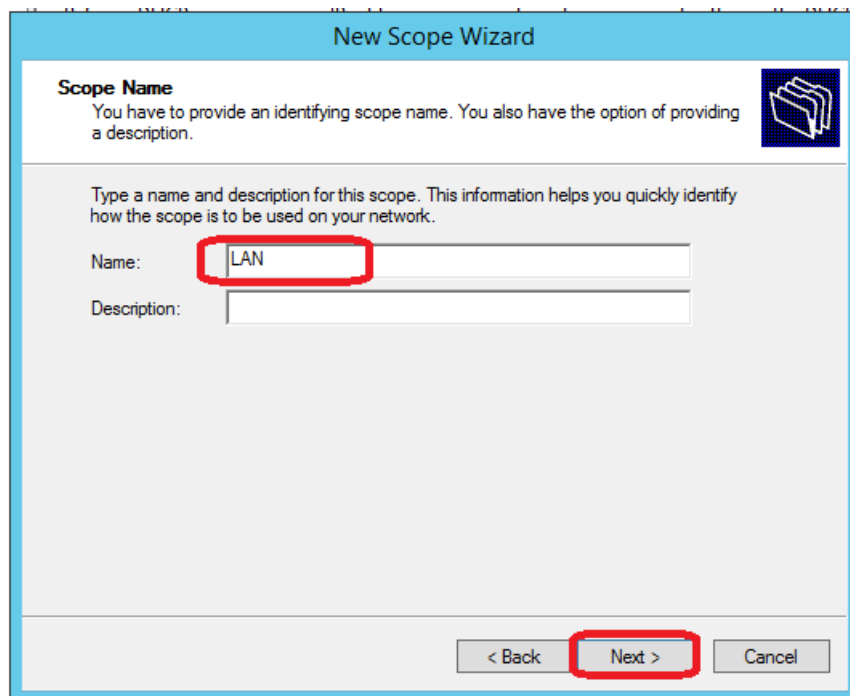




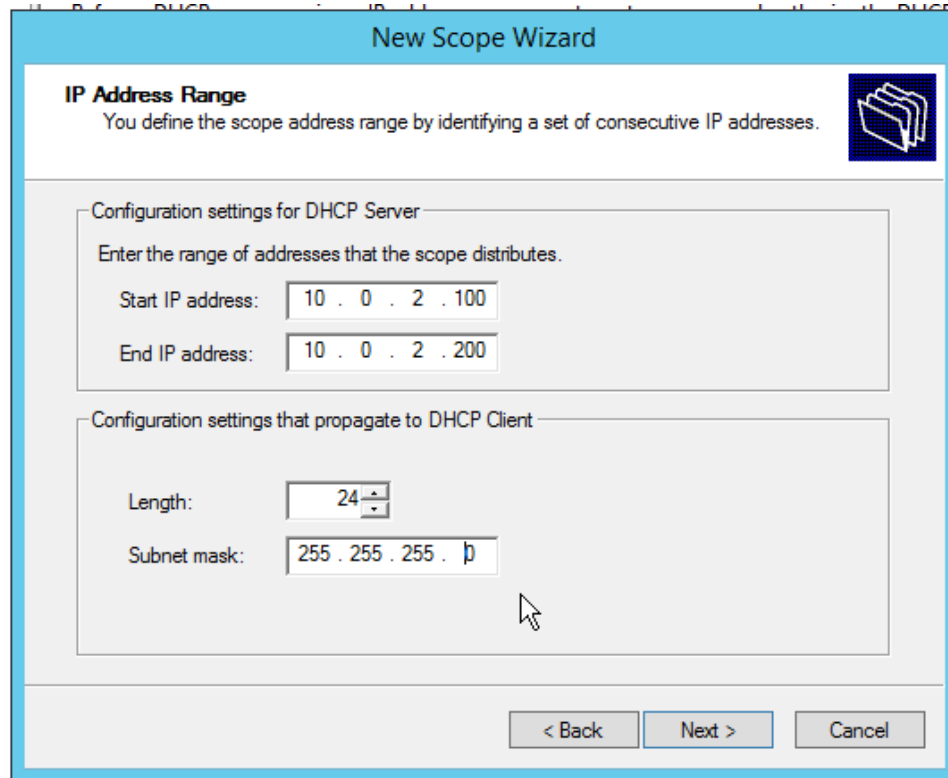
Please hit **Next!**



Provide a scope a name. As example I just took LAN. A descriptive name is always a good idea. (Like Site A or B). After click **Next!**

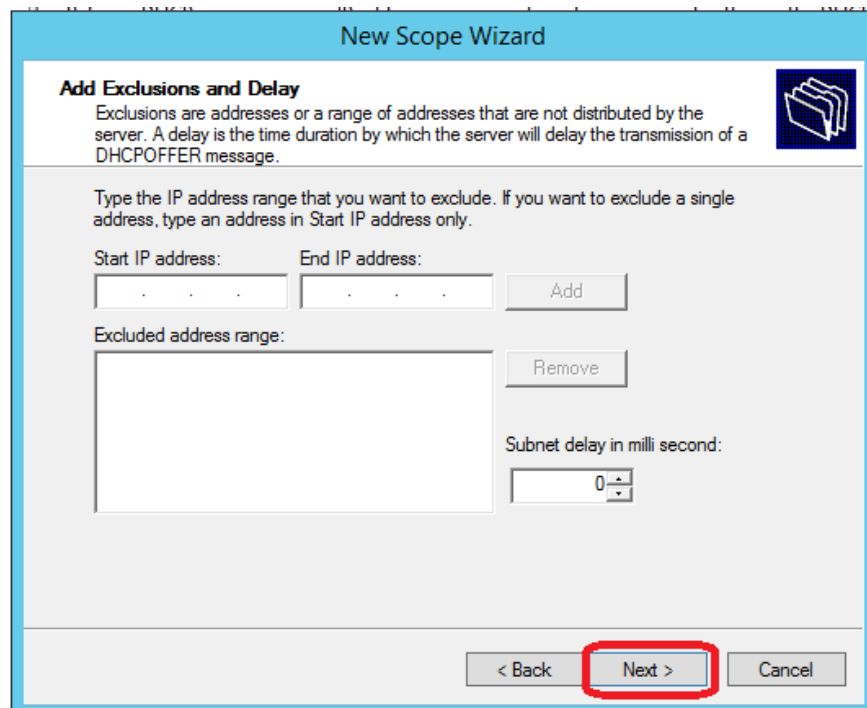


Give the scope range and click **Next!**



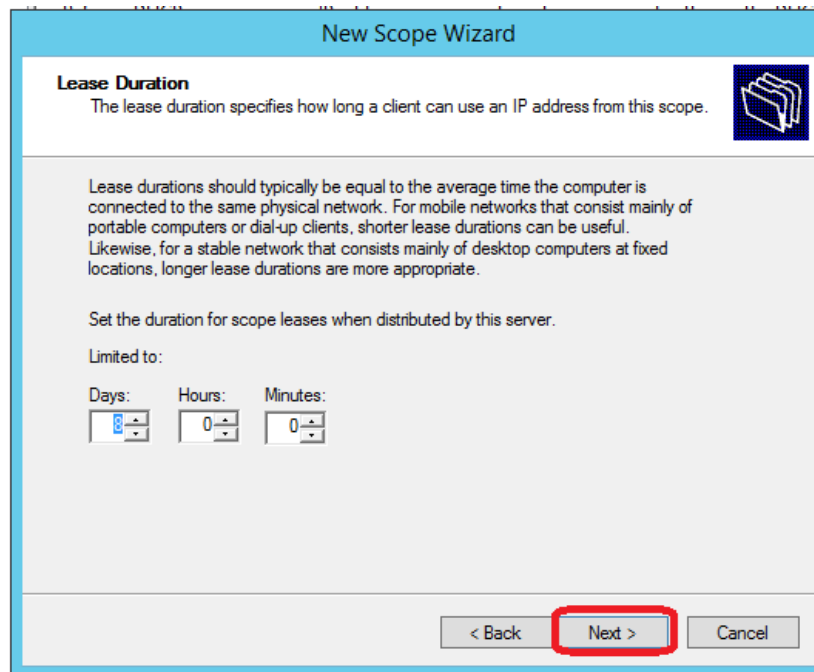
The screenshot shows the 'New Scope Wizard' window, specifically the 'IP Address Range' step. The title bar reads 'New Scope Wizard'. Below the title, the section is 'IP Address Range' with a folder icon. The instruction says: 'You define the scope address range by identifying a set of consecutive IP addresses.' There are two main sections: 'Configuration settings for DHCP Server' and 'Configuration settings that propagate to DHCP Client'. In the first section, 'Enter the range of addresses that the scope distributes.', the 'Start IP address' is '10 . 0 . 2 . 100' and the 'End IP address' is '10 . 0 . 2 . 200'. In the second section, 'Length' is '24' and 'Subnet mask' is '255 . 255 . 255 . 0'. At the bottom are buttons for '< Back', 'Next >', and 'Cancel'. A mouse cursor is pointing at the 'Next >' button.

Hit **Next!**



The screenshot shows the 'New Scope Wizard' window, specifically the 'Add Exclusions and Delay' step. The title bar reads 'New Scope Wizard'. Below the title, the section is 'Add Exclusions and Delay' with a folder icon. The instruction says: 'Exclusions are addresses or a range of addresses that are not distributed by the server. A delay is the time duration by which the server will delay the transmission of a DHCP OFFER message.' There are two main sections: 'Type the IP address range that you want to exclude. If you want to exclude a single address, type an address in Start IP address only.' and 'Excluded address range:'. In the first section, 'Start IP address' and 'End IP address' are empty, and there is an 'Add' button. In the second section, there is an empty text box for 'Excluded address range:' and a 'Remove' button. Below these is 'Subnet delay in milli second:' with a spinner box set to '0'. At the bottom are buttons for '< Back', 'Next >', and 'Cancel'. The 'Next >' button is highlighted with a red rectangle.

Leave the default value and we **Next!**



The screenshot shows the 'Lease Duration' step of the 'New Scope Wizard'. The title bar reads 'New Scope Wizard'. The section header is 'Lease Duration' with a sub-header 'The lease duration specifies how long a client can use an IP address from this scope.' Below this, there is explanatory text about lease durations. A section titled 'Set the duration for scope leases when distributed by this server.' contains a 'Limited to:' label and three spinners for 'Days', 'Hours', and 'Minutes'. The 'Days' spinner is set to 8, 'Hours' to 0, and 'Minutes' to 0. At the bottom, there are three buttons: '< Back', 'Next >', and 'Cancel'. The 'Next >' button is highlighted with a red rectangle.

**New Scope Wizard**

**Lease Duration**  
The lease duration specifies how long a client can use an IP address from this scope.

Lease durations should typically be equal to the average time the computer is connected to the same physical network. For mobile networks that consist mainly of portable computers or dial-up clients, shorter lease durations can be useful. Likewise, for a stable network that consists mainly of desktop computers at fixed locations, longer lease durations are more appropriate.

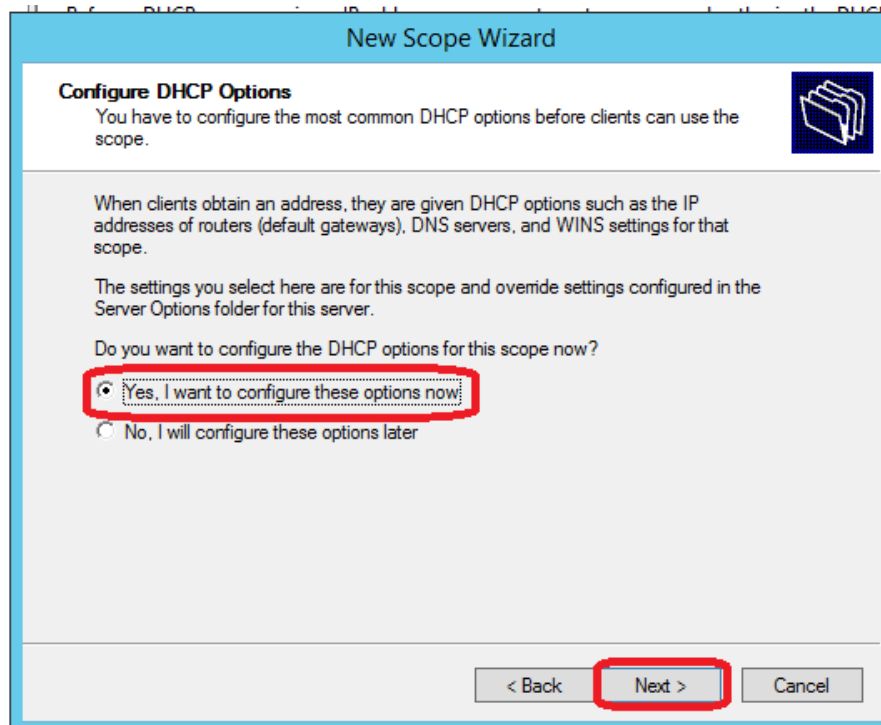
Set the duration for scope leases when distributed by this server.

Limited to:

Days: 8 Hours: 0 Minutes: 0

< Back **Next >** Cancel

Click the following option to configure the scope options and click **Next!**



The screenshot shows the 'Configure DHCP Options' step of the 'New Scope Wizard'. The title bar reads 'New Scope Wizard'. The section header is 'Configure DHCP Options' with a sub-header 'You have to configure the most common DHCP options before clients can use the scope.' Below this, there is explanatory text about DHCP options. A question is asked: 'Do you want to configure the DHCP options for this scope now?'. There are two radio button options: 'Yes, I want to configure these options now!' (which is selected and highlighted with a red rectangle) and 'No, I will configure these options later'. At the bottom, there are three buttons: '< Back', 'Next >', and 'Cancel'. The 'Next >' button is highlighted with a red rectangle.

**New Scope Wizard**

**Configure DHCP Options**  
You have to configure the most common DHCP options before clients can use the scope.

When clients obtain an address, they are given DHCP options such as the IP addresses of routers (default gateways), DNS servers, and WINS settings for that scope.

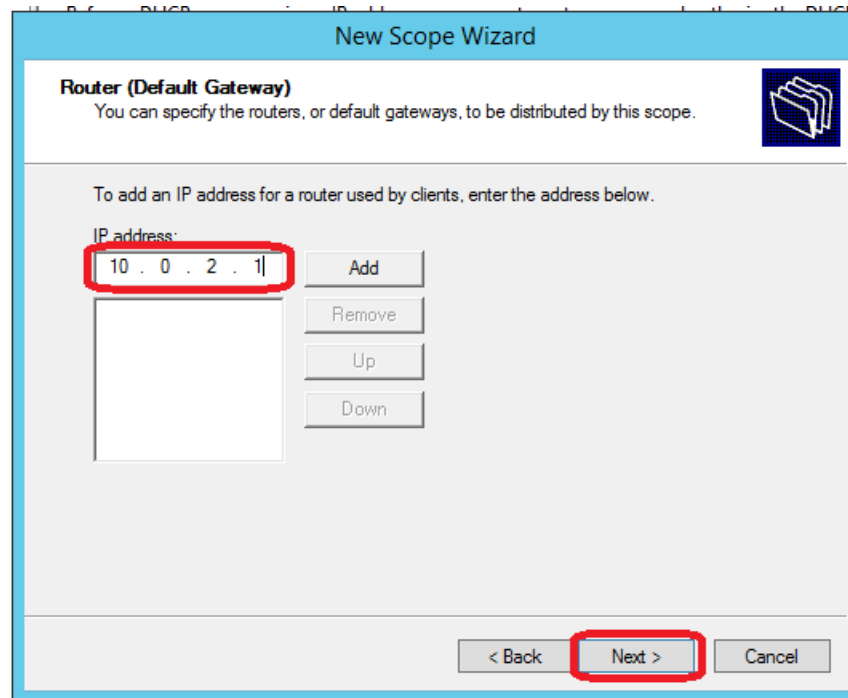
The settings you select here are for this scope and override settings configured in the Server Options folder for this server.

Do you want to configure the DHCP options for this scope now?

☒ **Yes, I want to configure these options now!**  
☐ No, I will configure these options later

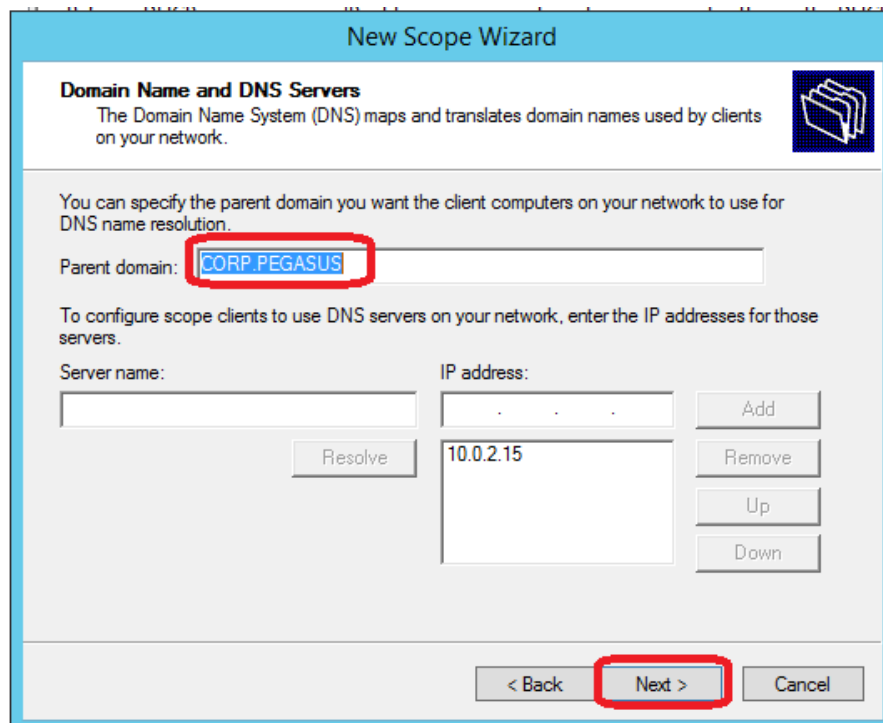
< Back **Next >** Cancel

Give the IP of our router and we click **Next!**



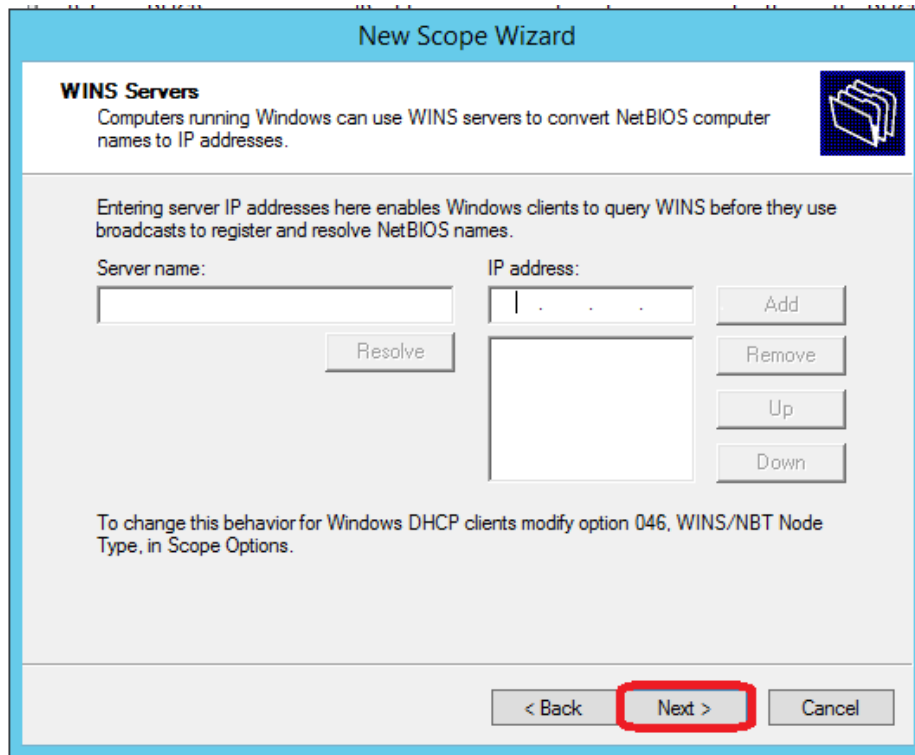
The screenshot shows the 'New Scope Wizard' window, specifically the 'Router (Default Gateway)' step. The title bar reads 'New Scope Wizard'. Below the title, the section is 'Router (Default Gateway)' with a sub-instruction: 'You can specify the routers, or default gateways, to be distributed by this scope.' The main instruction says: 'To add an IP address for a router used by clients, enter the address below.' There is a text input field labeled 'IP address:' containing '10 . 0 . 2 . 1', which is highlighted with a red rectangle. To the right of the input field are buttons: 'Add', 'Remove', 'Up', and 'Down'. At the bottom right, there are navigation buttons: '< Back', 'Next >', and 'Cancel'. The 'Next >' button is highlighted with a red rectangle.

There is the important task; we have to validate **the DNS Suffix** to be sure that's correct. We click **next!**



The screenshot shows the 'New Scope Wizard' window, specifically the 'Domain Name and DNS Servers' step. The title bar reads 'New Scope Wizard'. Below the title, the section is 'Domain Name and DNS Servers' with a sub-instruction: 'The Domain Name System (DNS) maps and translates domain names used by clients on your network.' The main instruction says: 'You can specify the parent domain you want the client computers on your network to use for DNS name resolution.' There is a text input field labeled 'Parent domain:' containing 'CORP.PEGASUS', which is highlighted with a red rectangle. Below this, there is a section for DNS servers with the instruction: 'To configure scope clients to use DNS servers on your network, enter the IP addresses for those servers.' There are two columns: 'Server name:' and 'IP address:'. The 'IP address:' column has a list box containing '10.0.2.15'. To the right of the list box are buttons: 'Add', 'Remove', 'Up', and 'Down'. At the bottom right, there are navigation buttons: '< Back', 'Next >', and 'Cancel'. The 'Next >' button is highlighted with a red rectangle.

Leave the following screen blank and hit **Next!**



The screenshot shows the 'New Scope Wizard' window, specifically the 'WINS Servers' step. The title bar is blue with the text 'New Scope Wizard'. Below the title bar, the section is titled 'WINS Servers' with a sub-header 'Computers running Windows can use WINS servers to convert NetBIOS computer names to IP addresses.' To the right of this text is a blue icon of a folder with a document. The main area contains a paragraph: 'Entering server IP addresses here enables Windows clients to query WINS before they use broadcasts to register and resolve NetBIOS names.' Below this, there are two input fields: 'Server name:' and 'IP address:'. The 'Server name' field has a 'Resolve' button next to it. The 'IP address' field has an 'Add' button next to it. Below the 'IP address' field is a list box and three buttons: 'Remove', 'Up', and 'Down'. At the bottom of the window, there are three buttons: '< Back', 'Next >', and 'Cancel'. The 'Next >' button is highlighted with a red rectangle.

**New Scope Wizard**

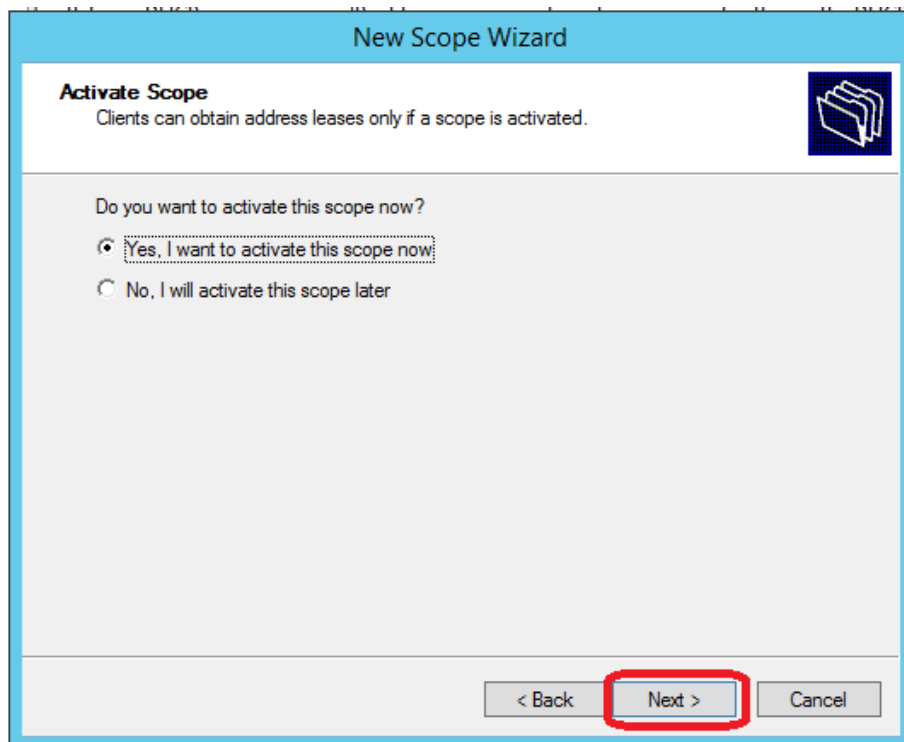
**WINS Servers**  
Computers running Windows can use WINS servers to convert NetBIOS computer names to IP addresses.

Entering server IP addresses here enables Windows clients to query WINS before they use broadcasts to register and resolve NetBIOS names.

Server name:  IP address:

To change this behavior for Windows DHCP clients modify option 046, WINS/NBT Node Type, in Scope Options.

Select the first option and hit **Next!**



The screenshot shows the 'New Scope Wizard' window, specifically the 'Activate Scope' step. The title bar is blue with the text 'New Scope Wizard'. Below the title bar, the section is titled 'Activate Scope' with a sub-header 'Clients can obtain address leases only if a scope is activated.' To the right of this text is a blue icon of a folder with a document. The main area contains a paragraph: 'Do you want to activate this scope now?'. Below this, there are two radio button options: 'Yes, I want to activate this scope now' (which is selected) and 'No, I will activate this scope later'. At the bottom of the window, there are three buttons: '< Back', 'Next >', and 'Cancel'. The 'Next >' button is highlighted with a red rectangle.

**New Scope Wizard**

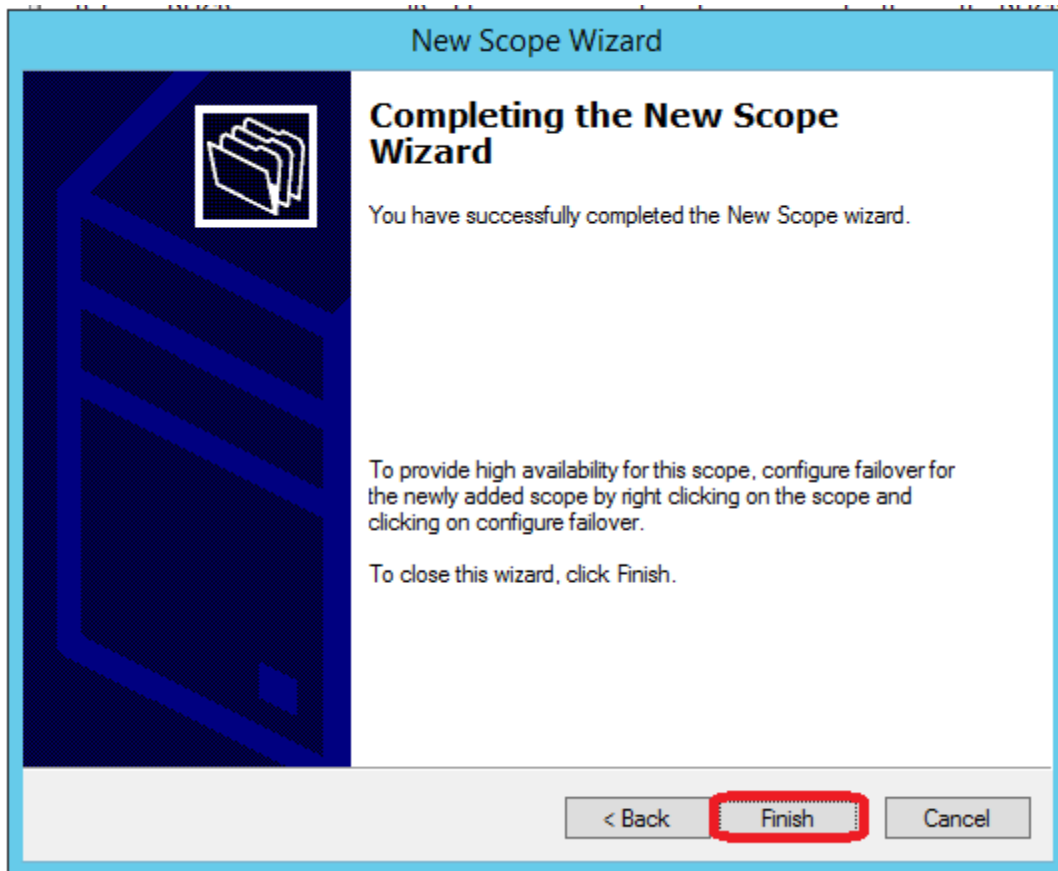
**Activate Scope**  
Clients can obtain address leases only if a scope is activated.

Do you want to activate this scope now?

☒ Yes, I want to activate this scope now

☐ No, I will activate this scope later

And **Finish!**



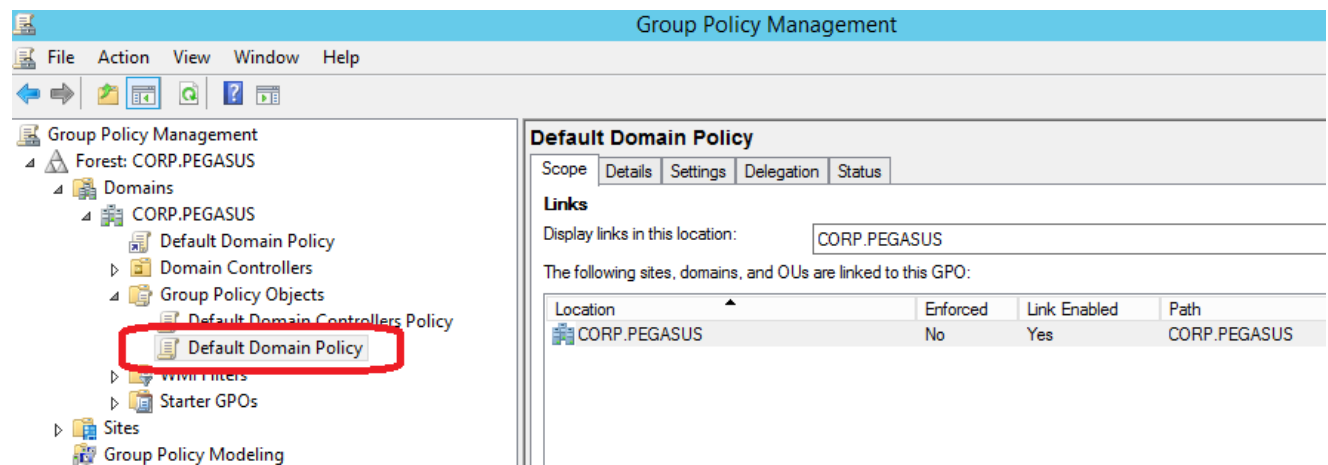
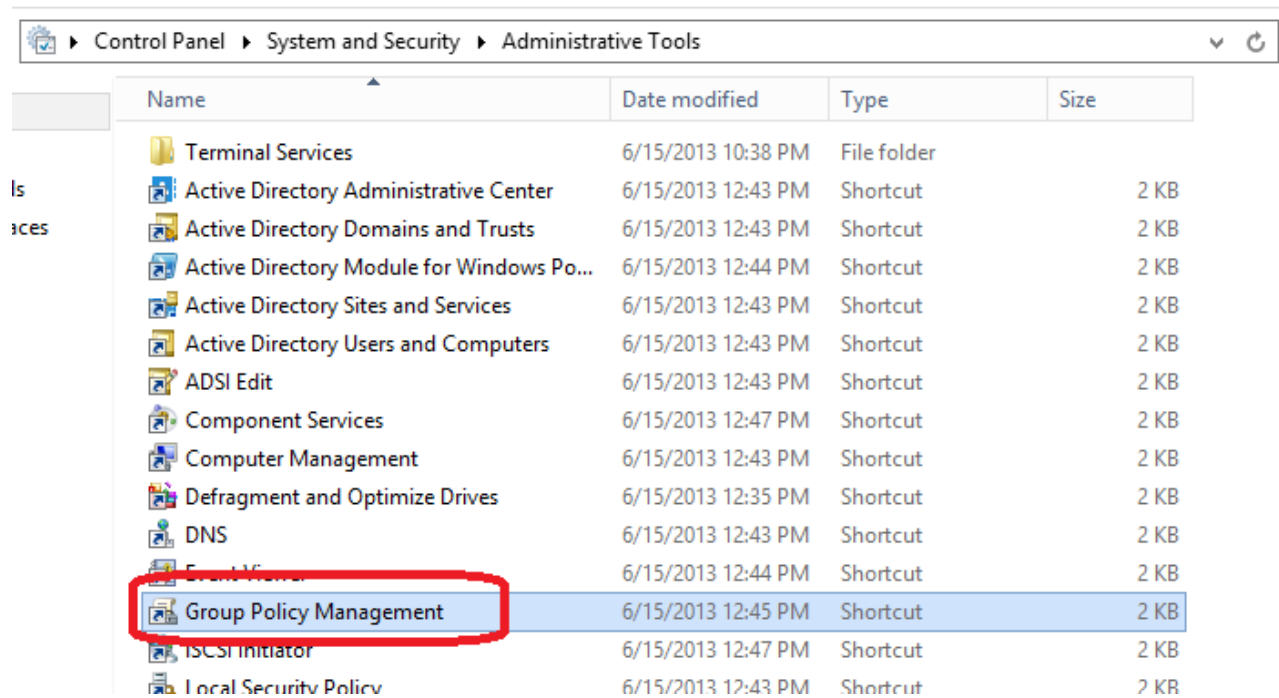
We can review the scope's options in the console to be sure...

The screenshot shows the DHCP console with a tree view on the left and a table of options on the right. In the tree view, 'Scope [10.0.2.0] LAN' is expanded, and 'Scope Options' is highlighted with a red rectangle. The table on the right lists three options, which are also highlighted with a red rectangle.

Option Name	Vendor	Value
003 Router	Standard	10.0.2.1
006 DNS Servers	Standard	10.0.2.15
015 DNS Domain Name	Standard	CORP.PEGASUS

## Best practices AD - Windows pour SharePoint: Default Domain Policy

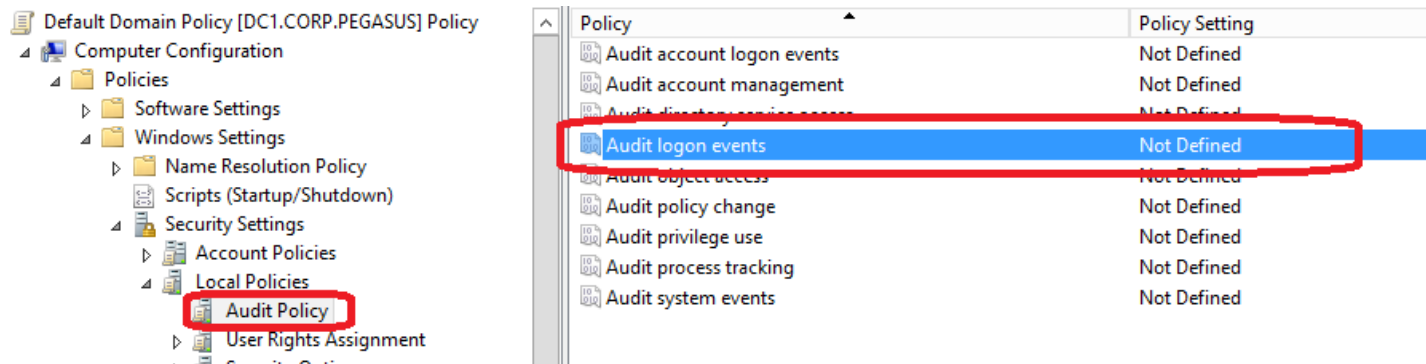
I recommend you to change it for some value to have a more secured Active Directory.



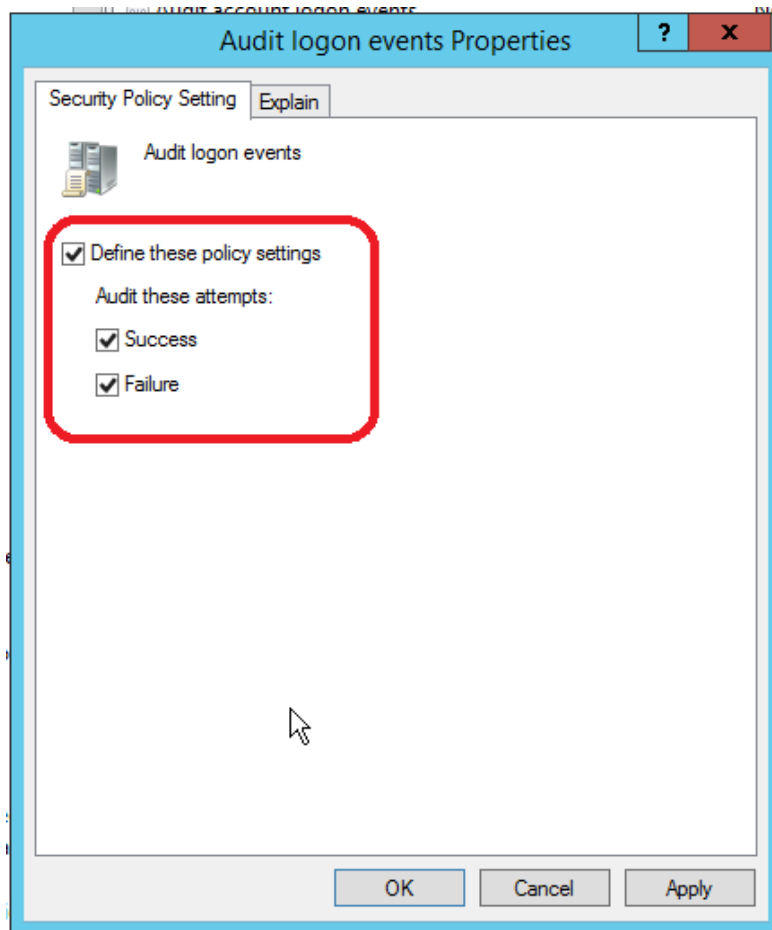
## Enable Auditing

For security issues; I recommend you to enable the auditing. It will make your Security EventLog filled on the other side. So you better think to your archiving need for those events.

In our Default Domain Policy we go into **Computer Configuration\Policies\Windows Settings\Security Settings\Local Policies\Audit Policy**, and we change the below options.

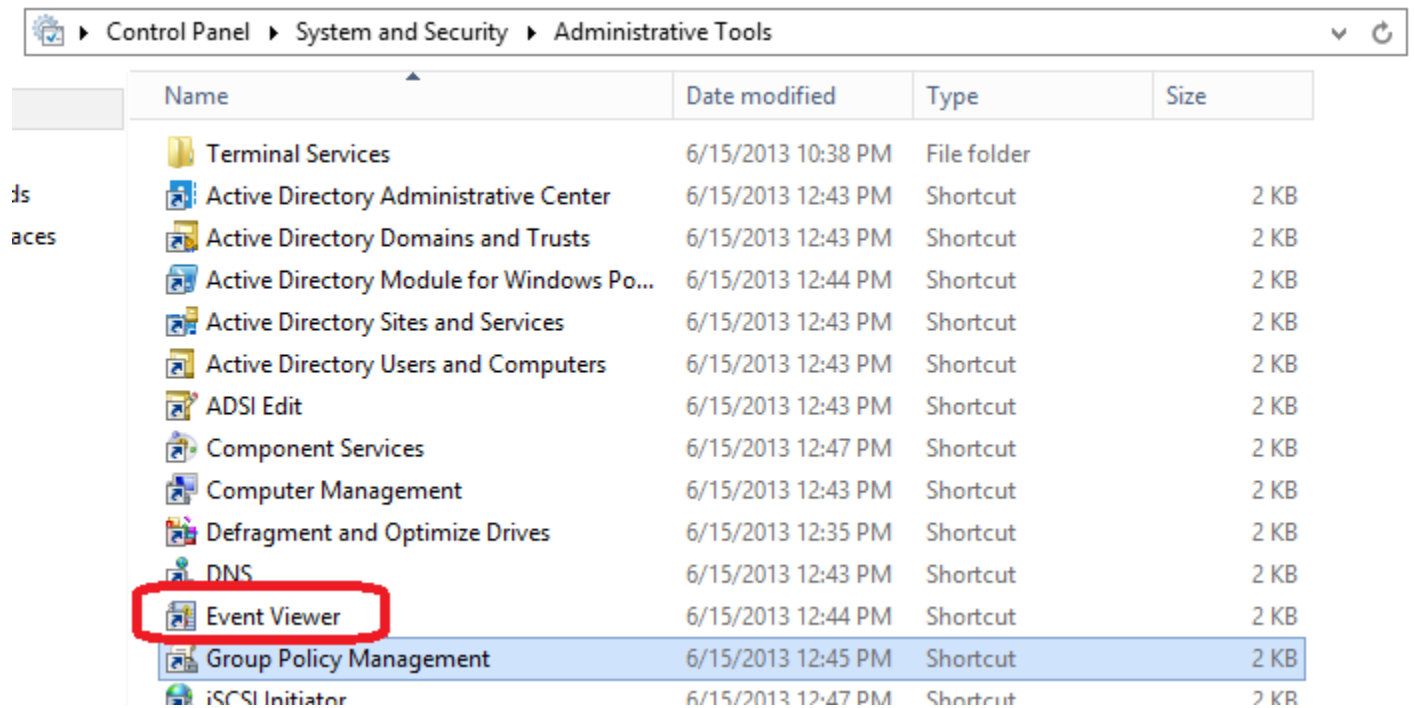


Please select the desired value:

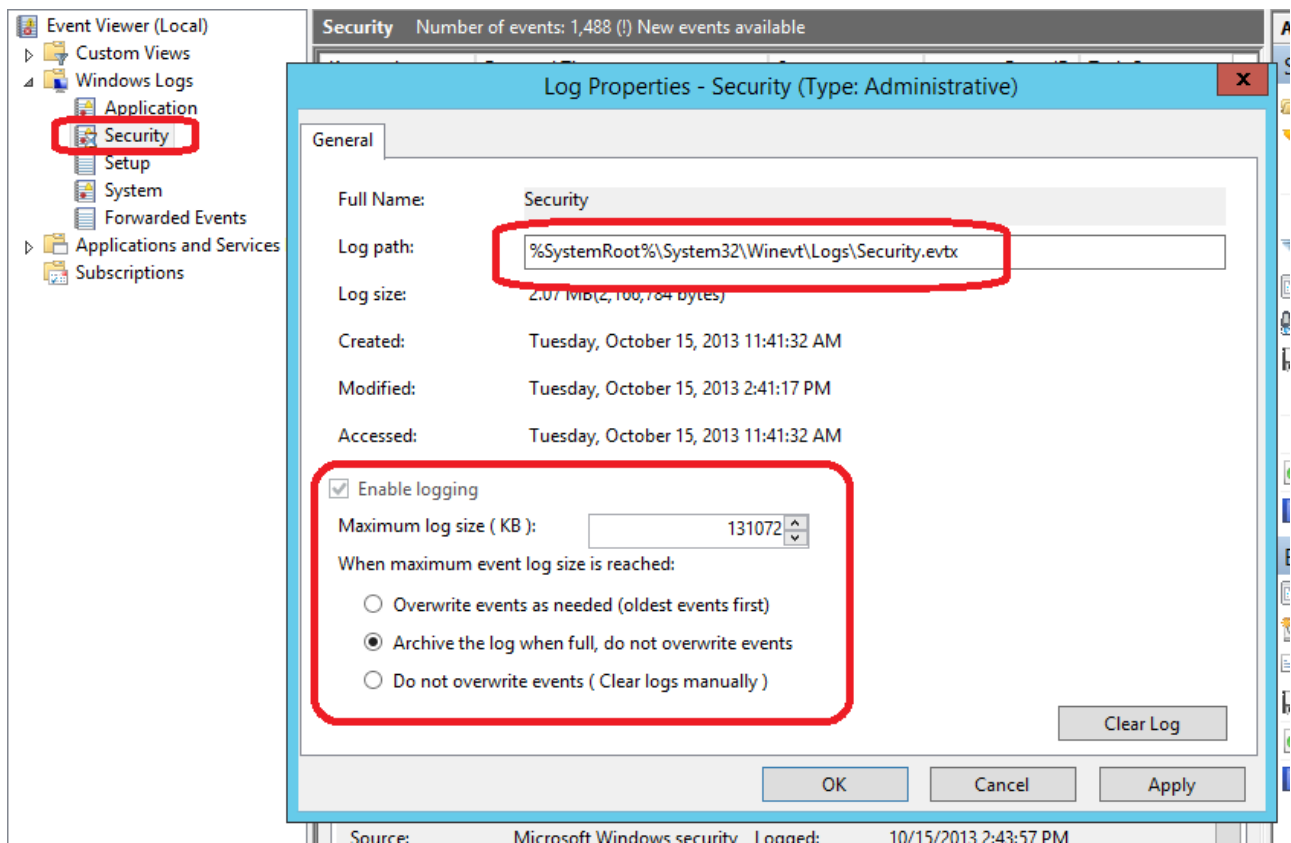




After we can go see our Event Viewer to validate the future logging of those events.

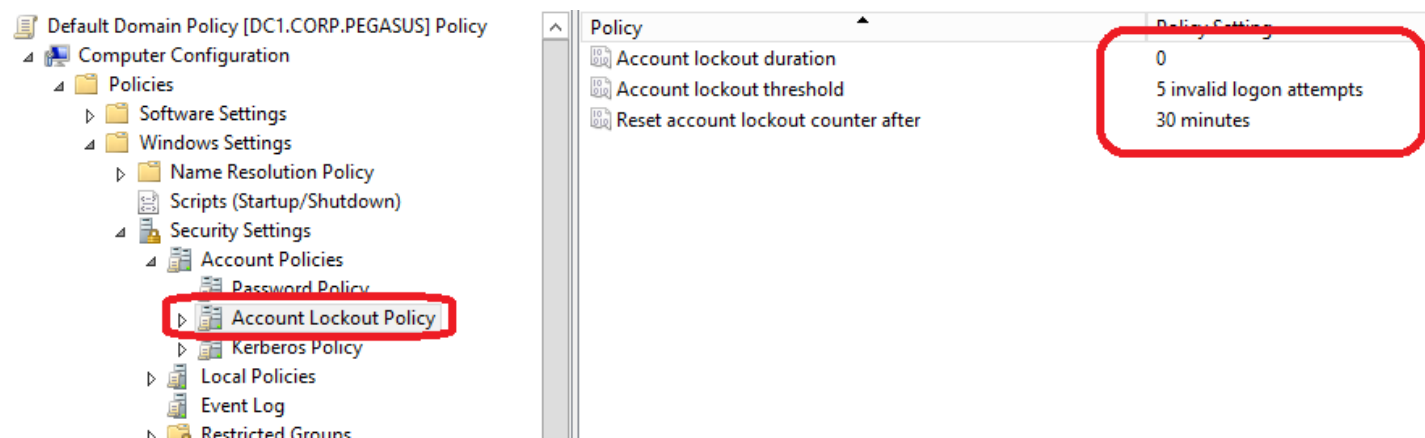


We right click on the Security tab and there we can change the path from the C (because it can come really big) or we can select that it overwrite old event.



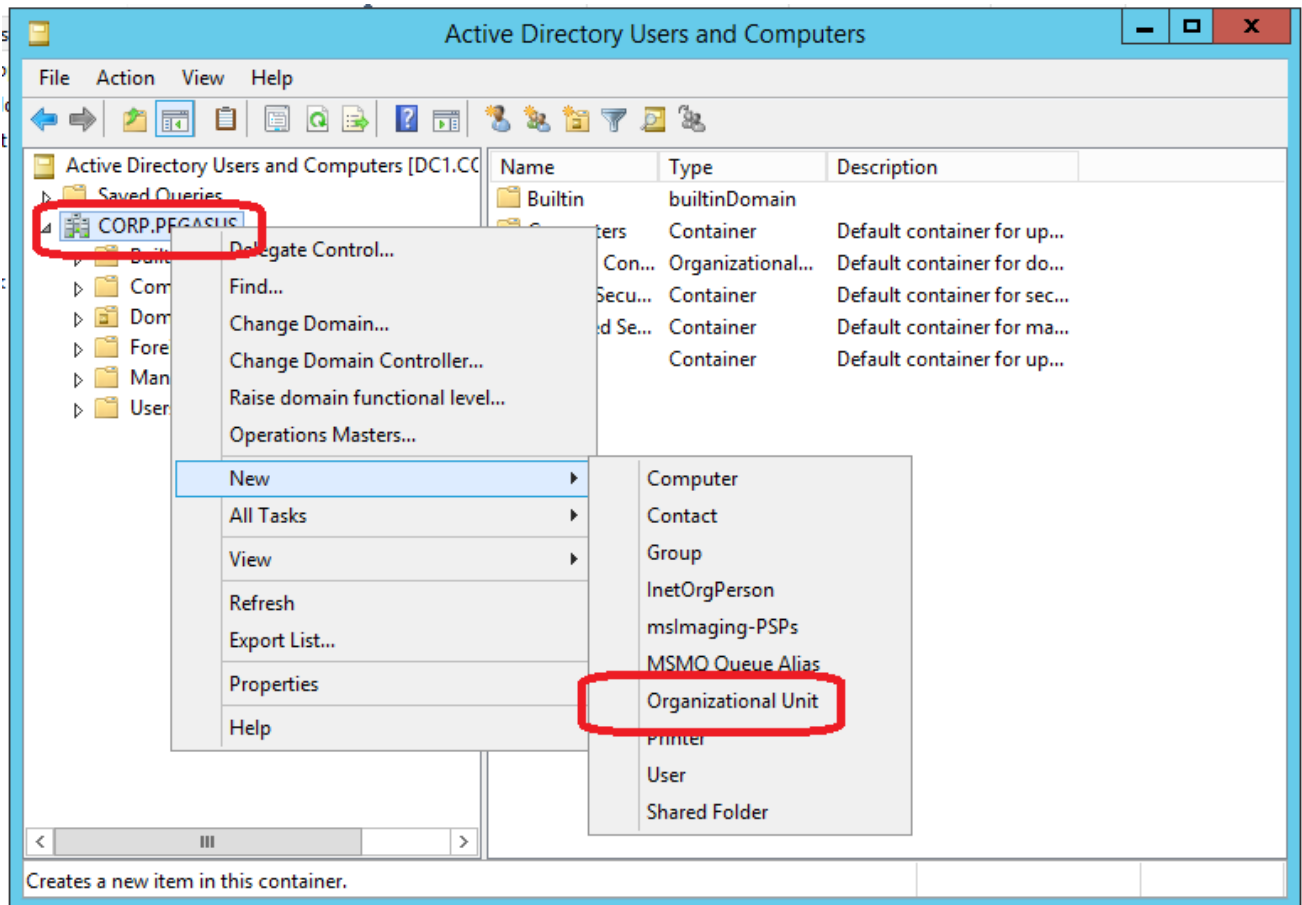
## Account Lockout Policy

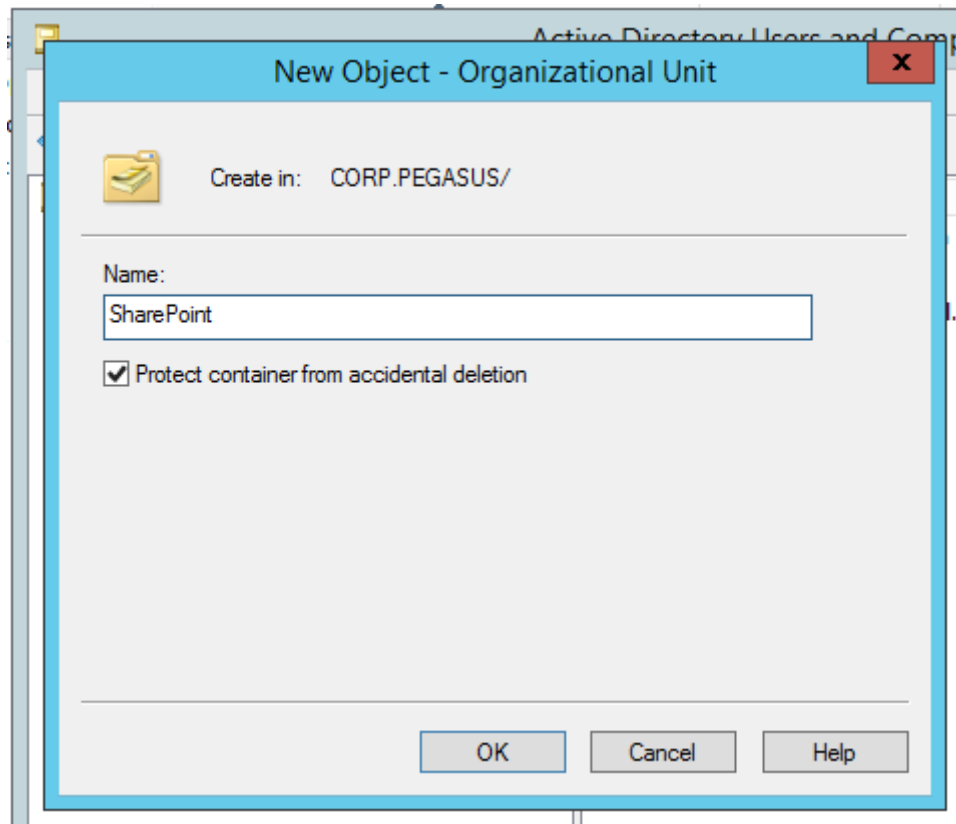
I use to set it more restrictive. (It will prevent brute force attempt) I use to set a threshold of 5 attempts in 30 minute the account got locked out, but with the duration at 0 you need an administrator to unlock.



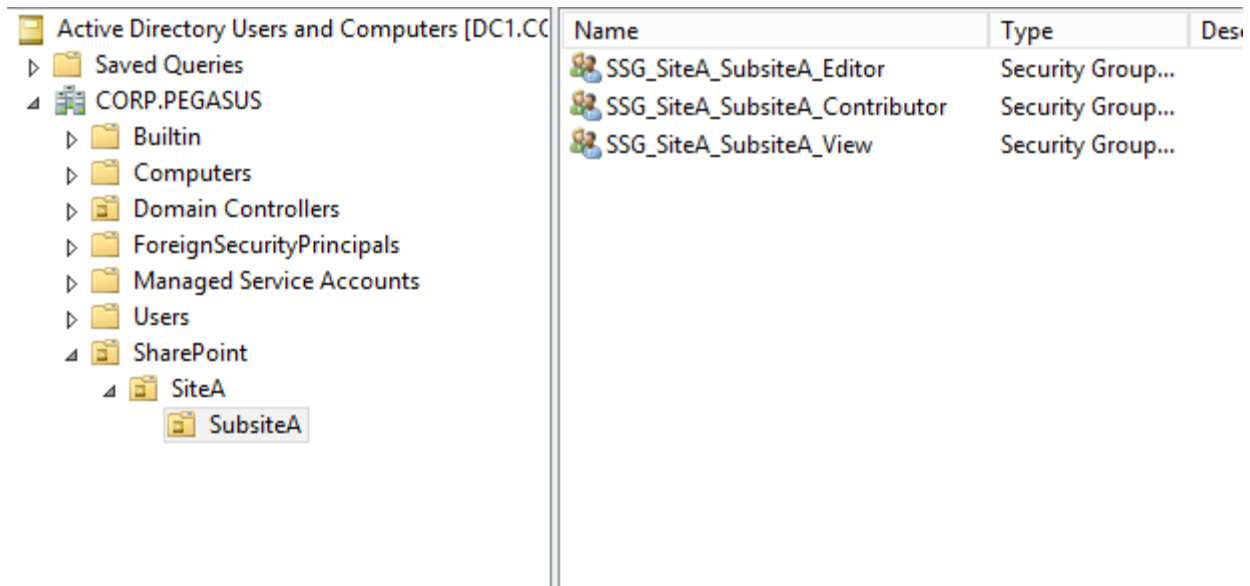
## Security's Design

In that small step I will show a small tip to design the OU for SharePoint. Open the **Active Directory User and Computer** MMC. Over the OU you want to create your SharePoint structure create a new OU.





In that OU you can have all your SharePoint sites and subsites. Here is an example:



In that folder you can create all your security group and manage who are member of them. I used the term SSG for SharePoint Security Group.

## SharePoint 2013 - Design Manager: Create a masterpage

### Introduction

SharePoint 2013 introduced a new functionality: the "**Design Manager**".

This Design Manager seems to be considered by Microsoft as the tool you have to use for your customizations.

"

*To simplify the process of integrating customized SharePoint pages, SharePoint Server 2013 includes a new feature called the SharePoint Design Manager.*

[...]

*We will look for opportunities to leverage SharePoint itself as the primary tool for customization and configuration tasks.*

"

### Where is this Design Manager?

This functionality is activated by default in the "**Publishing Portal**" site template:

Select experience version:

2013 ▼


Select a template:

Collaboration Enterprise **Publishing** Custom

**Publishing Portal**  
Enterprise Wiki  
Product Catalog

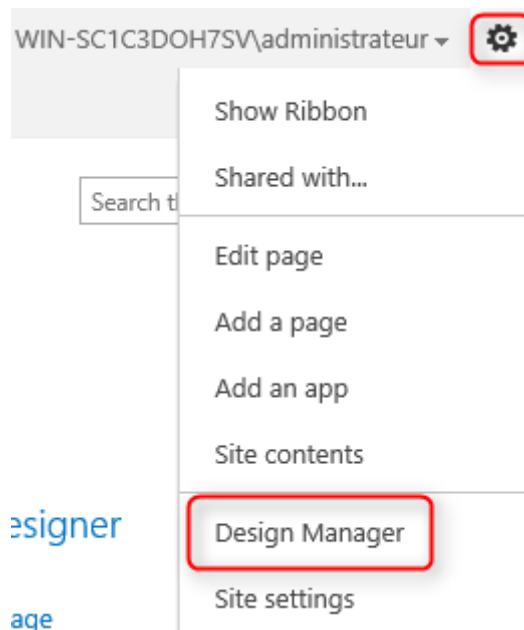
You can also activate it on the other sites by activating the Publishing feature:

---

	<b>SharePoint Server Publishing Infrastructure</b> Provides centralized libraries, content types, master pages and page layouts and enables page scheduling and other publishing functionality for a site collection.	<a href="#">Activate</a>
---	--	--------------------------

---

To launch the Design manager, in your site collection, click on the "**Settings**" icon, and then click on "**Design Manager**".



Or through the "**Site Settings / Design Manager**", in the "**Look and Feel**" section:

- Look and Feel
  - Design Manager**
  - Master page
  - Page layouts and site templates
  - Welcome Page
  - Title, description, and logo
  - Device Channels

## Steps to create a MasterPage with the Design Manager

The steps are the following:

- Create in your favorite HTML editor a web page which will be the template for the masterpage,
- Upload the elements (HTML page, CSS, images) in the masterpage gallery,
- SharePoint 2013 converts the page to a masterpage,
- You decide which SharePoint components (menus, webparts, ...) you want to add in this masterpage,
- The Design Manager generate the HTML code for each component you integrate in the uploaded HTML page,
- Each time the page is modified, SharePoint recreate the masterpage.

### Step 1: Build your HTML page

Build a HTML page, as you want, with the tool you want.






You can build this page by your own, get it from a web agency or from your neighbor, that doesn't matter, you must finally get a folder with the following elements:

- HTML page,
- Images,
- CSS files,
- etc.

For this article, I choose the easy way and downloaded a « ready to use » template:



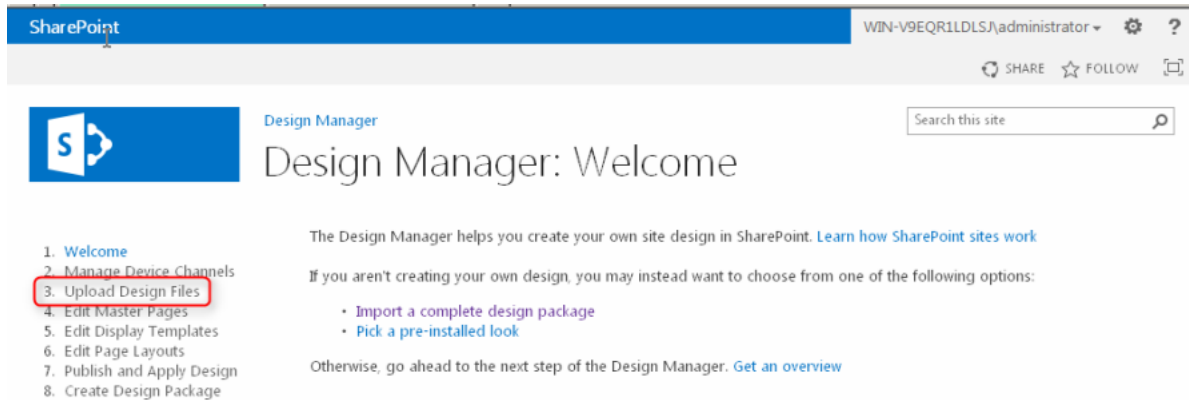
Folder contents:

Nom	Modifié le	Type
 images	17/01/2009 14:37	Dossier de fichiers
 style.css	17/01/2009 14:37	Document de feuille de style en cascad
 index.html	17/01/2009 14:32	Document HTML
 Terms of use.txt	09/10/2008 22:05	Document texte
 unitpngfix.js	15/07/2008 09:37	Fichier de script JScript

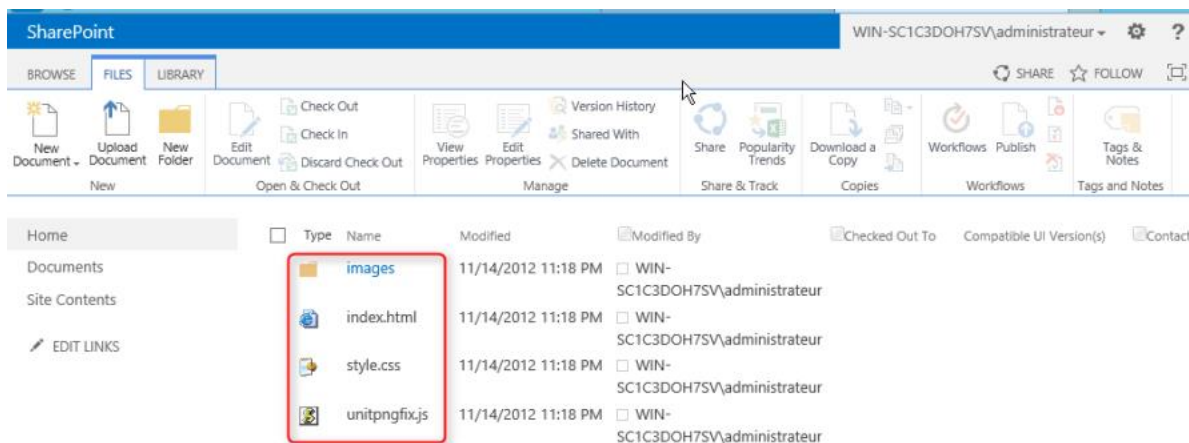


## Step 2: Upload the files to SharePoint

On the Design Manager's home page, click on "**Upload Design Files**" to upload the folder contents in the MasterPage gallery.



Thanks to **webdav** this step is just a formality:



## Step 3: Preview your MasterPage

Let's get down to business! In this step, SharePoint will convert your HTML page into a MasterPage.

Click on the "**Convert ...**" link:

SharePoint

WIN-SC1C3DOH7SV\administrateur

SHARE

FOLLOW

test2

EDIT LINKS

Search this site

## Design Manager: Edit Master Pages

1. Welcome

2. Manage Design Channels

3. Upload Design Files

4. Edit Master Pages

5. Edit Display Templates

6. Edit Page Layouts

7. Publish and Apply Design

8. Create Design Package

A master page defines common elements across all the pages of your site. You can use the network drive you mapped earlier to edit your master pages using any HTML editor. To preview your master page, click on its file name or status. While previewing your HTML master page, use the Snippet Gallery to get code snippets for SharePoint functionality that you can copy and paste into your HTML file.

Convert an HTML file to a SharePoint master page

Create a minimal master page

Name	Status	Approval Status
oslo	...	Conversion successful. Draft
seattle	...	Conversion successful. Draft

Browse the MasterPage gallery, select your HTML page and click **"Insert"**:

Select an Asset

Current Location: CustomTheme at http://win-sc1c3doh7sv:2010/sites/test2/\_catalogs/masterpage/CustomTheme

Content and Structure Reports

Documents

Form Templates

Reusable Content

Site Assets

Site Collection Documents

Site Collection Images

Site Pages

Style Library

Workflow Tasks

Html Design Files

Click to add new item

Name	Approval Status	
images	...	Approved
index.html	...	Draft

Location (URL): /sites/test2/\_catalogs/masterpage/CustomTheme/index.html

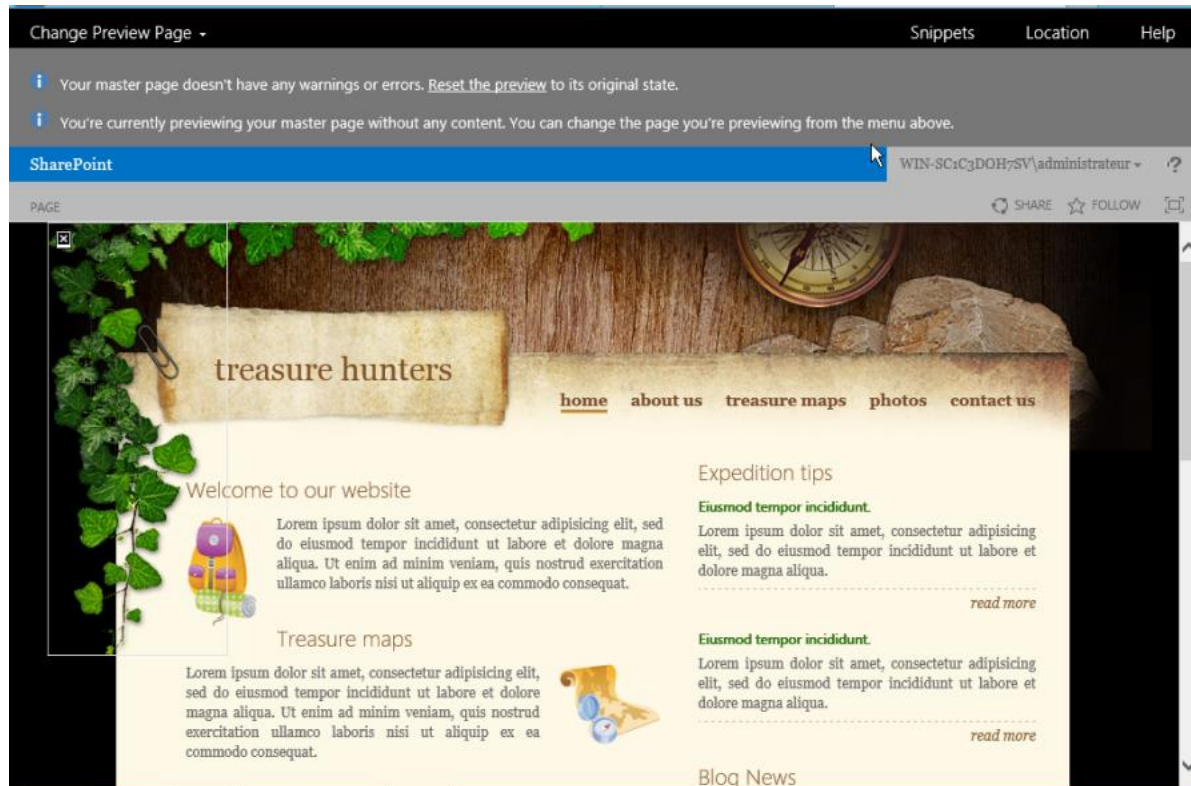
Insert

Cancel

Then the page is converted (here with success!):

Name	Status	Approval Status
index	...	Conversion successful. Draft
oslo	...	Conversion successful. Draft
seattle	...	Conversion successful. Draft

Click on the link to preview the MasterPage:



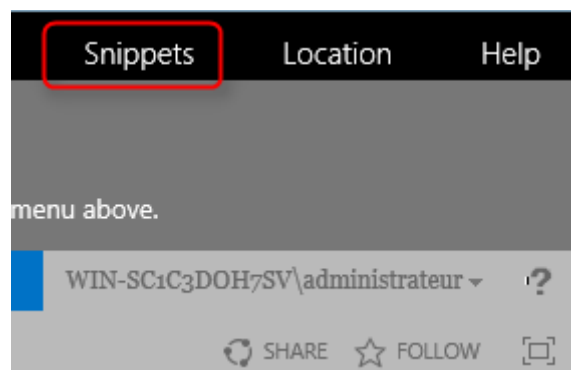
#### Step 4: Insert SharePoint controls

If you observe the screenshot above, we must now insert all the SharePoint controls (menus, site title, webparts ...).

Just keep in mind that the "**ContentPlaceHolderMain**" div (visible in the bottom of the MasterPage) is the key of the design, since it contains all the page content.

This div, which you should delete, represents the content area that your Page Layouts and pages will fill. Design your Master Page around this content placeholder.

Click on "**Snippets**", in the top right-hand corner:

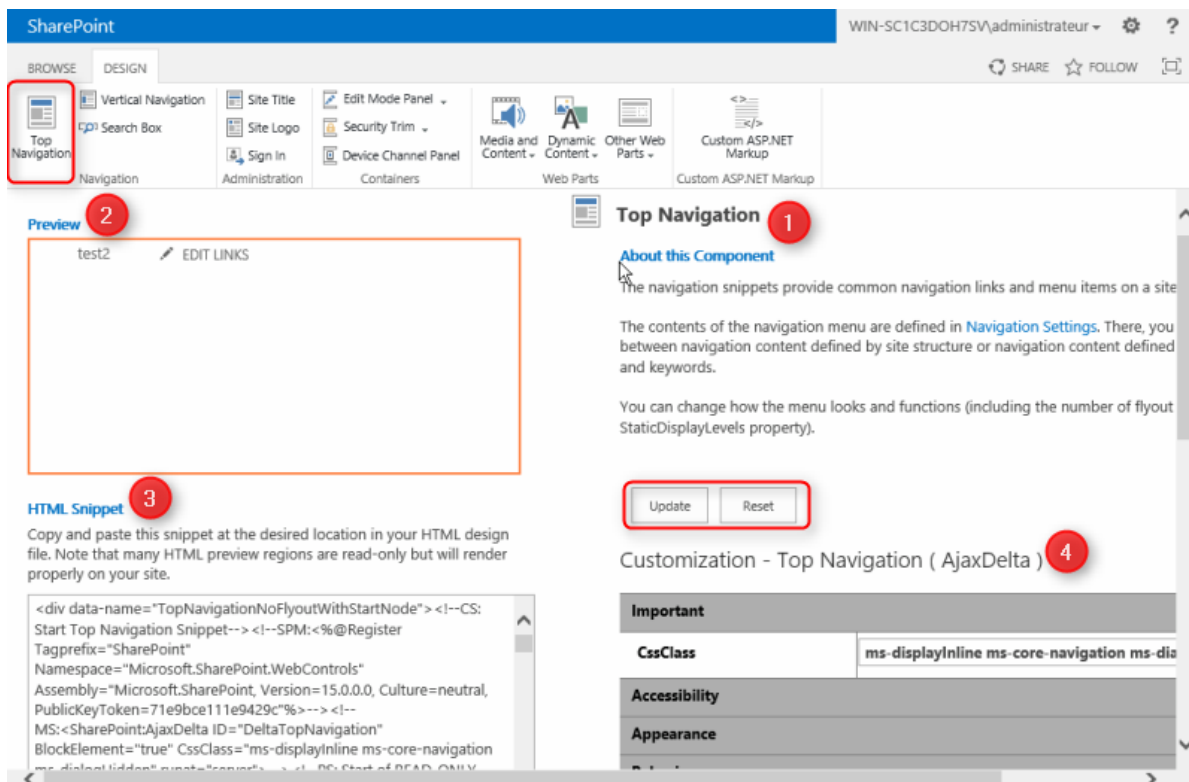


Then you access the page which will allow you to insert the controls; for example, click on "**Top Navigation**" to insert a menu in the MasterPage.

They are a lot of available controls; it's difficult not to find what you're looking for!

The displayed page is composed of different parts:

- Part 1 : A description of the control,
- Part 2 : A preview,
- Part 3 : The generated code that you have to paste in your HTML page,
- Part 4: The properties you can modify ("Update" button).



When your control is ready to go, click on the button below and paste the code in your HTML page (uploaded in Step 2).

To make it simple, use an editor and modify directly the HTML page with webdav.

### HTML Snippet

Copy and paste this snippet at the desired location in your HTML design file. Note that many HTML preview regions are read-only but will render properly on your site.

```
<div data-name="TopNavigationNoFlyoutWithStartNode"><!--CS:
Start Top Navigation Snippet--><!--SPM:<%@Register
Tagprefix="SharePoint"
Namespace="Microsoft.SharePoint.WebControls"
Assembly="Microsoft.SharePoint, Version=15.0.0.0, Culture=neutral,
PublicKeyToken=71e9bce111e9429c"%>--><!--
MS:<SharePoint:AjaxDelta ID="DeltaTopNavigation"
BlockElement="true" CssClass="ms-displayInline ms-core-navigation
ms-dialogHidden" runat="server">--><!--PS: Start of READ-ONLY
PREVIEW (do not modify)--><!--PE: End of READ-ONLY PREVIEW--
```

Copy to Clipboard

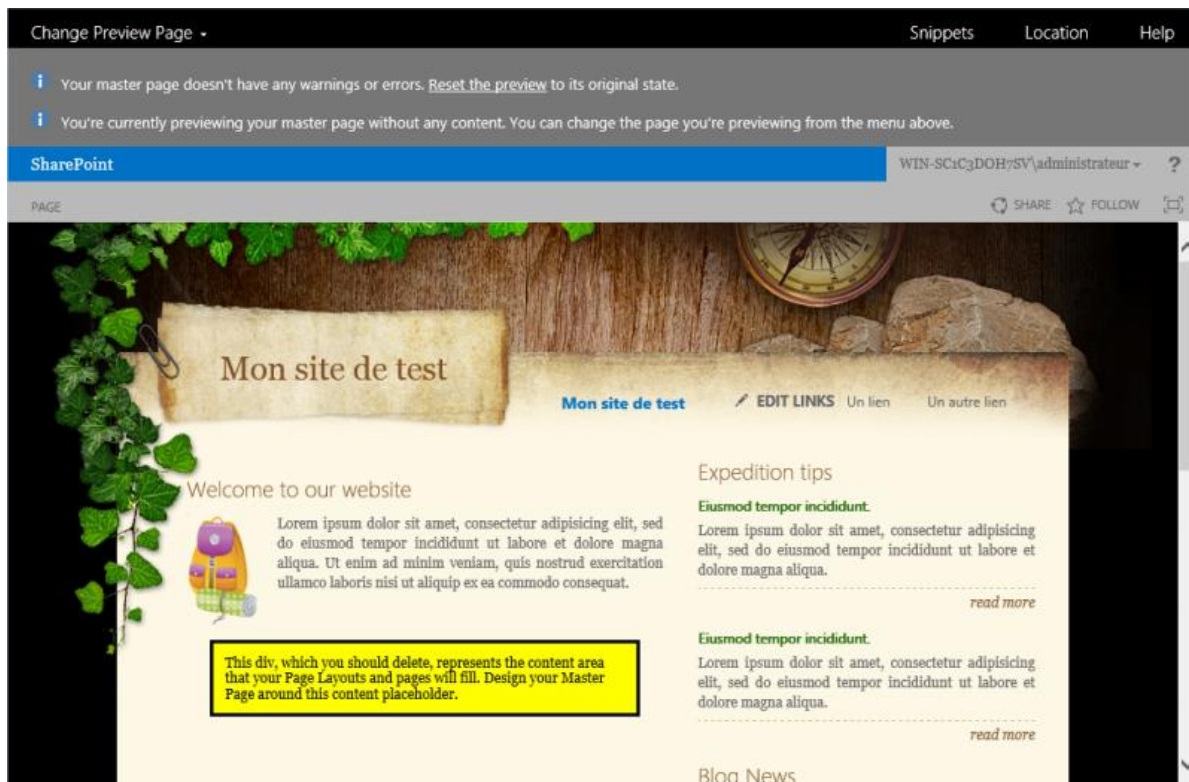
Then SharePoint synchronize your modifications by converting automatically the HTML page into a MasterPage.

In the initial HTML page, SharePoint adds the following comment:

**"This HTML file has been associated with a SharePoint Master Page (.master file) carrying the same name. While the files remain associated, you will not be allowed to edit the .master file, and any rename, move, or deletion operations will be reciprocated.**

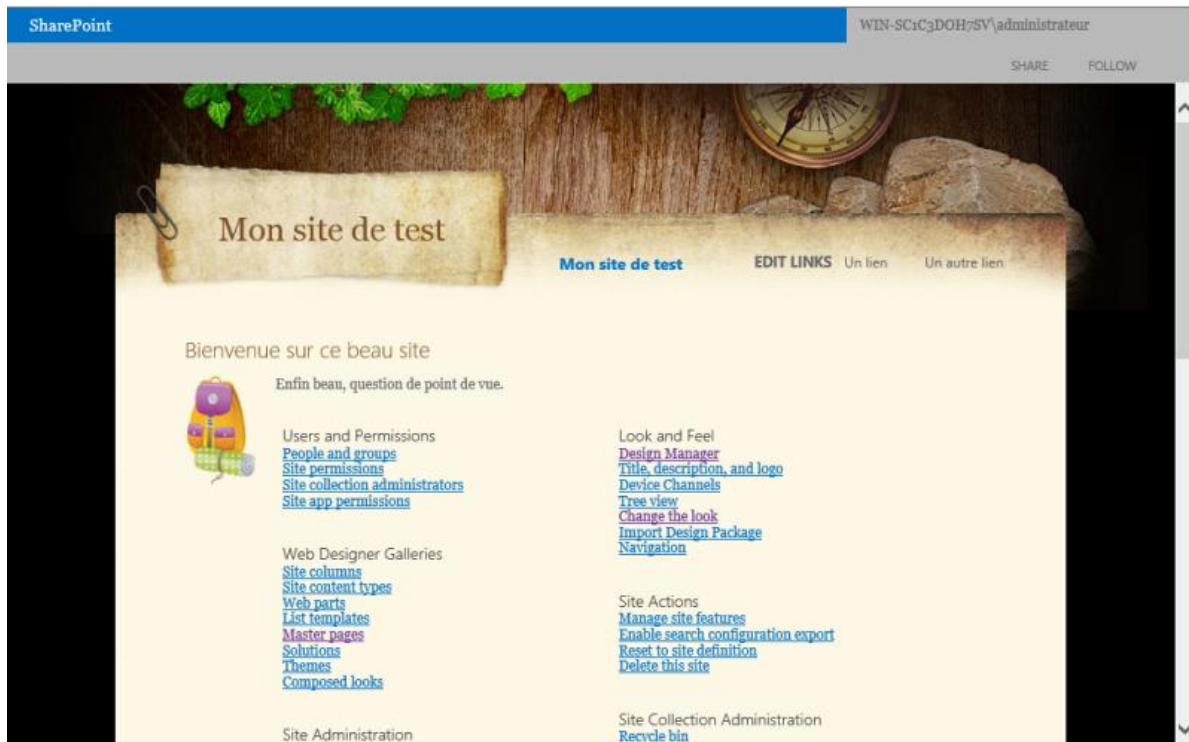
**To build the master page directly from this HTML file, simply edit the page as you normally would. Use the Snippet Generator at [....] to create and customize useful SharePoint entities, then copy and paste them as HTML snippets into your HTML code. All updates to this file will automatically sync to the associated Master Page."**

Repeat this step with all the controls, with keeping the yellow div in the middle of the page:



Once your HTML page (and also your MasterPage) is ready, publish a major version of the MasterPage, and set it on your site.

The "**Site settings**" becomes (with just a "Top Navigation" and a "Site Title" controls):



## SharePoint 2013 - Design Manager: Use the Display Templates

### Display Templates?

If you've never heard of, it is quite normal, as it is new in SharePoint 2013.

These Display Templates can dynamically change the display of search results, making them particularly match the "**Result Types**".

### The use of XSLT? Done!

These Display Templates allow you to free yourself from the use of XSLT, since you can edit using the HTML / JavaScript / CSS trio.

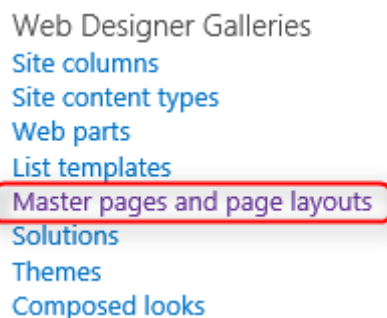
For those who have already handled (or experienced) the XSLT, it's a good news.

### Access to the Display Templates

You can access to Display Templates via:

- The Design Manager, "**Edit Display Templates**" link - To view the list of templates,
- The "Site Settings", "**Master pages and page layouts**" link - To add / edit a template.

I will detail here this second link.



Web Designer Galleries  
Site columns  
Site content types  
Web parts  
List templates  
**Master pages and page layouts**  
Solutions  
Themes  
Composed looks

Click on the "Display Templates" folder:



# Master Page Gallery ⓘ

<input type="checkbox"/>	Type	Name	Modified	<input type="checkbox"/> Modified By
<input type="checkbox"/>	Folder	Display Templates	11/19/2012 8:22 AM	<input type="checkbox"/> System Account
<input type="checkbox"/>	Folder	Editing Menu	11/19/2012 8:22 AM	<input type="checkbox"/> System Account
<input type="checkbox"/>	Folder	en-us	11/19/2012 8:22 AM	<input type="checkbox"/> System Account
<input type="checkbox"/>	Folder	Preview Images	11/19/2012 8:23 AM	<input type="checkbox"/> System Account
<input type="checkbox"/>	Folder	Themable	11/19/2012 8:22 AM	<input type="checkbox"/> System Account



I choose here to open the "**Search**" folder:

## Master Page Gallery ▶ Display Templates ⓘ

<input type="checkbox"/>	Type	Name	Modified	<input type="checkbox"/> Modified By	<input type="checkbox"/> Checked Out To	Compatible UI Version(s)	<input type="checkbox"/> Contact	Hidden Page
<input type="checkbox"/>	Folder	Content Web Parts	11/19/2012 8:22 AM	<input type="checkbox"/> System Account				
<input type="checkbox"/>	Folder	Filters	11/19/2012 8:22 AM	<input type="checkbox"/> System Account				
<input type="checkbox"/>	Folder	Language Files	11/19/2012 8:22 AM	<input type="checkbox"/> System Account				
<input type="checkbox"/>	Folder	Search	11/19/2012 8:22 AM	<input type="checkbox"/> System Account				
<input type="checkbox"/>	Folder	Server Style Sheets	11/19/2012 8:22 AM	<input type="checkbox"/> System Account				
<input type="checkbox"/>	Folder	System	11/19/2012 8:22 AM	<input type="checkbox"/> System Account				

You will find the Display Templates, each being defined by:

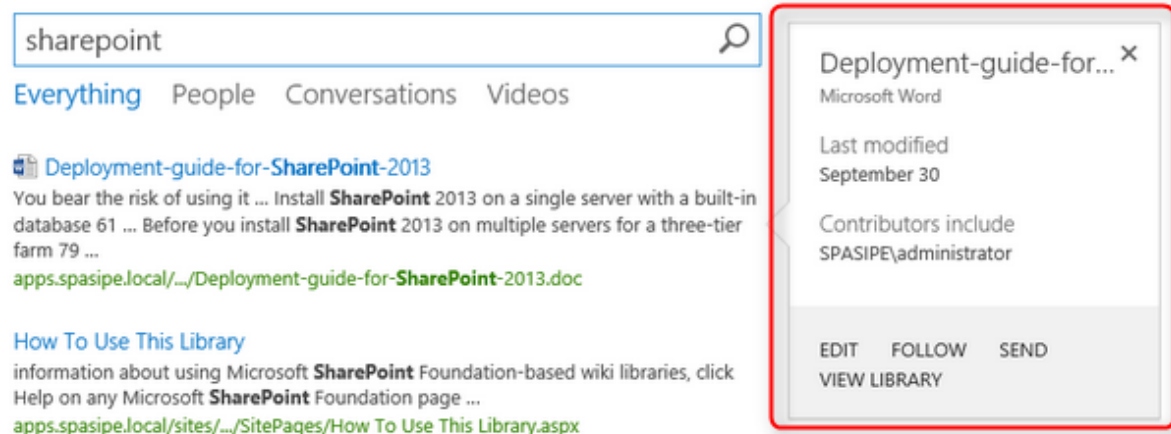
- A HTML file: its definition, this is the file you need to edit (or create) to define views,
- A js (**JavaScript**) file: this file is generated by SharePoint through the HTML file. You must not edit this file, it is always the HTML file you need to modify, SharePoint converting the js file on the fly.

	Item_Word_HoverPanel.html	11/19/2012 8:22 AM	<input type="checkbox"/> System Account	
	Item_Word_HoverPanel.js	11/19/2012 8:22 AM	<input type="checkbox"/> System Account	15

File names are relatively speaking, above we can deduce that the Display template controls the display of Word documents "Hover Panel".



We will change this "**Hover Panel**" later in this article:



## Use of "Result Types"

The "**Display Templates**" are closely related to another SharePoint 2013 new functionality: the "Result Types".

In summary, a "**Result Type**" it is a set of rules that are used when displaying search results.

When you run a search, and when the results are displayed on the results page, each result is verified to see if it meets one of the rules: If this is the case, the "Display Template" associated with this rule (this "**Result Type**") is used to display the item.

For example, you can define a rule (a Result Type) that combines a display (a Display Template) especially for Word documents containing "SharePoint" in their title - This is the example that will be used later in this article.

## Example of use



In this example, the scenario is that you need to display a customized "Hover Panel" for any Word document containing "**SharePoint**" in its title.

To do this, I will:

- Duplicate the "**Item\_Word\_HoverPanel.html**" file to customize the Hover Panel (I added a text "**Submit for approval**" at the bottom of the window - it's late, I lack inspiration...))
- Duplicate the "**Item\_Word.html**" file to use the above file.

The steps are as follows:

1. Download the "**Item\_Word\_HoverPanel.html**" file

	Item_Word_HoverPanel.html	11/19/2012 8:22 AM	<input type="checkbox"/> System Account	15
	Item_Word_HoverPanel.js	11/19/2012 8:22 AM	<input type="checkbox"/> System Account	

2. Modify it and upload it again in the gallery as "**Item\_Word\_HoverPanel\_SPAsipe.html**"

Add a master page

Choose a file

C:\temp\Item\_Word\_HoverPanel\_SPAsipe.html

Browse...

[Upload files using Windows Explorer instead](#)  
☒ Add as a new version to existing files

Destination Folder

/Display Templates/Search/

Choose Folder...

Version Comments







OK


Cancel

3. Fill the properties (note the '**Target Control Type**' parameter)

## Master Page Gallery - Item\_Word\_HoverPanel\_SPAsipe.html

EDIT

 Save	 Cancel	 Paste	 Cut	 Copy	 Delete Item
Commit		Clipboard		Actions	

 The document was uploaded successfully. Use this form to update the properties of the document.

Content Type

Item Display Template 

Item Display Templates allow you to specify what managed properties are used and how they appear for a result. They are used by Content By Search and Search Results web parts.

Name \*

Item\_Word\_HoverPanel\_SPAsipe.html

Title

Word Hover Panel - SPAsipe

Description

Displays a result hover panel tailored for a Microsoft Word document - Modified by SPAsipe.

Hidden Template

☐

Hide this Display Template where people select from an available list of search Display Templates.

Target Control Type (Search)

- ☐ SearchResults
- ☒ SearchHoverPanel
- ☐ Content Web Parts
- ☐ Refinement
- ☐ SearchBox
- ☐ Custom

Select the search controls that will use this Display Template.

4. Similarly, download "**Item\_Word.html**" and rename it "**Item\_Word\_SPAsipe.html**".





Open the file with an extremely powerful tool (Notepad for example) and change the link to the customized "Hover Panel" (note that this is the .Js file that is referenced, not the html one).

```

<div id="Item_Word">
<!--#_
    if(!$isNull(ctx.CurrentItem) && !$isNull(ctx.ClientControl)){
        var id = ctx.ClientControl.get_nextUniqueId();
        var itemId = id + Srch.U.Ids.item;
        var hoverId = id + Srch.U.Ids.hover;
        var hoverUrl = "~sitecollection/_catalogs/masterpage/Display Templates/Search/Item_Word_HoverPanel_SPAsipe.js";
        $setResultItem(itemId, ctx.CurrentItem);
        ctx.CurrentItem.csr_Icon = Srch.U.getIconUrlByFileExtension(ctx.CurrentItem);
        ctx.CurrentItem.csr_OpenApp = "word";
        ctx.currentItem_ShowHoverPanelCallback = Srch.U.getShowHoverPanelCallback(itemId, hoverId, hoverUrl);
        ctx.currentItem_HideHoverPanelCallback = Srch.U.getHideHoverPanelCallback();
    }
#-->

```

5. Upload this file in the gallery, and note that the Js files associated with the html files have been generated during the upload.

<input type="checkbox"/> Type	Name	Modified	<input type="checkbox"/> Modified By
	Item_Word_HoverPanel_SPAsipe.html	11/20/2012 2:20 PM	<input type="checkbox"/> SPASIFE\administrator
	Item_Word_HoverPanel_SPAsipe.js	11/20/2012 2:20 PM	<input type="checkbox"/> SPASIFE\administrator
	Item_Word_SPAsipe.html	11/20/2012 2:28 PM	<input type="checkbox"/> SPASIFE\administrator
	Item_Word_SPAsipe.js	11/20/2012 2:28 PM	<input type="checkbox"/> SPASIFE\administrator

6. If you start the Design Manager, "**Edit Display Templates**" link, you see that the two html files are marked as having been converted.

	Word Hover Panel	Item_Word_HoverPanel_SPAsipe	...	Conversion successful.	Item Display Template	SearchHoverPanel
	Word Item - SPAsipe	Item_Word_SPAsipe	...	Conversion successful.	Item Display Template	SearchResults

7. It is now time to create a Result Type for our needs.

Go to the Site Settings, click on "**Result Types**".

[Search](#)  
[Result Sources](#)  
[Result Types](#)  
[Query Rules](#)  
[Schema](#)  
[Search Settings](#)  
[Searchable columns](#)  
[Search and offline availability](#)  
[Configuration Import](#)  
[Configuration Export](#)

8. The list of existing Result Types appears, click on "**New Result Type**"



Search

## Site Settings » Manage Result Types

Tailor the look of important result types by crafting a [display template](#) in HTML and defining a rule that controls when to show it. Rules higher in the list take priority. [Learn more](#) about how to configure result types.

[New Result Type](#)

Manage site collection result types

Priority	Name	Modified	Result Conditions	Result Actions
<b>Provided by the search service (31)</b>				
1	Person	11/19/2012	Returned from result source Local People Results  Always matches for this source	Display results with this template People Item
2	Microsoft Access	11/19/2012	Match these types of content Microsoft Access	Display results with this template Office Document Item
3	Microsoft Excel	11/19/2012	Match these types of content Microsoft Excel	Display results with this template Excel Item
4	Microsoft OneNote	11/19/2012	Match these types of content	Display results with this template

9. Conditions must be defined: here we want the items using our new **"Hover Panel"** to be Word documents having "SharePoint" in their title.

Conditions

Which source should results match?

All Sources

What types of content should match? You can skip this rule to match all content

Microsoft Word

[Add value](#)

◀ Show more conditions

Which custom properties should match?

Title

sharepoint

[Add value](#)

[Add property](#)

Contains any of...

10. It only remains to associate this condition with our template

Actions

What should these results look like?

Word Item - SPAsipe

Note: This result type will automatically update with the latest properties in your display template each time you visit the Manage Result Types Page.

Display template URL

~sitecollection/\_catalogs/masterpage/Display Templates/Search/Item\_Word\_SPAsipe.js

☐ Optimize for frequent use

## 11. The Result Type is created

Site Settings › Manage Result Types

Tailor the look of important result types by crafting a [display template](#) in HTML and defining a rule that controls when to show it. Rules higher in the list take priority. [Learn more](#) about how to configure result types.

[New Result Type](#) Manage site collection result types


Priority	Name	Modified	Result Conditions	Result Actions
<b>Defined for this site (1)</b>				
1	SPAsipe - Word Document	11/20/2012	Match these types of content Microsoft Word Match when Title contains sharepoint	Display results with this template Word Item - SPAsipe
<b>Provided by the search service (31)</b>				
1	Person	11/19/2012	Returned from result source Local People Results Always matches for this source	Display results with this template People Item
2	Microsoft Access	11/19/2012	Match these types of content	Display results with this template

## Result

1. The document chosen for the test has "**SharePoint**" in its title, and you can see that the customized Hover Panel that displays

sharepoint

Everything People Conversations Videos

 **Deployment-guide-for-SharePoint-2013**

You bear the risk of using it ... Install **SharePoint** 2013 on a single server with a built-in database 61 ... Before you install **SharePoint** 2013 on multiple servers for a three-tier farm 79 ...

[apps.spasipe.local/.../Deployment-guide-for-SharePoint-2013.doc](#)

[How To Use This Library](#)

information about using Microsoft **SharePoint** Foundation-based wiki libraries, click Help on any Microsoft **SharePoint** Foundation page ...

[apps.spasipe.local/sites/.../SitePages/How To Use This Library.aspx](#)

Deployment-guide-for-... ✕

Microsoft Word

Last modified  
September 30

Contributors include  
SPASIFE\administrator


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Soumettre pour approbation

2. If I choose an another Word document, the default "Hover Panel" displays

Seemless integration of Exchange and **SharePoint** to provide best of both world and end user ... **SharePoint** Server 15 enhances the workload experiences by enabling new compelling ...

[apps.spasipe.local/Documents/Ig15\\_SP\\_IT\\_M01V1\\_introduction.pptx](#)

 **Déploiement de contenu**

les processus permettant de migrer du contenu **SharePoint** d'un site à un autre, et ce même ... Assembly: Microsoft.**SharePoint**.dll Namespace: Microsoft.**SharePoint**.Deployment ...

[apps.spasipe.local/.../Administration - Déploiement de contenu.doc](#)

[How To Use This Library](#)

information about using Microsoft **SharePoint** Foundation-based wiki libraries, click Help on any Microsoft **SharePoint** Foundation page ...

[farmiwe.spasipe.local:45521/.../How To Use This Library.aspx](#)

Déploiement de conte... ✕

Microsoft Word

Last modified  
Thursday, July 16, 2009

Contributors include  
TF1, SPASIFE\administrator

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## Webpart Parameters

The Display Templates are configurable (among others) in the "**Search Results**" webpart properties:

Search Results

Properties for Search Results

Search Criteria

Help

Query results provided by

This Web Part (Search Results)

Change query

Use the "Change Query" dialog to configure what's being searched and which result source to use.

Display Templates

Help

Settings

Help

By default the rules (**Result Types**) are used, but you can change this behavior.



☐ **Display Templates** [Help](#)

Results Control Display Template

Default Result

Customize [control display templates](#)

☒ Use result types to display items

Result type for item

Use result type rules to display items

Configure [result types](#)

☐ Use a single template to display items

Item Display Template

Best Bet Item

Configure [item display templates](#)

Hit-highlighted properties (JSON)

["Title", "Path", "Author", "Secti

## Conclusion

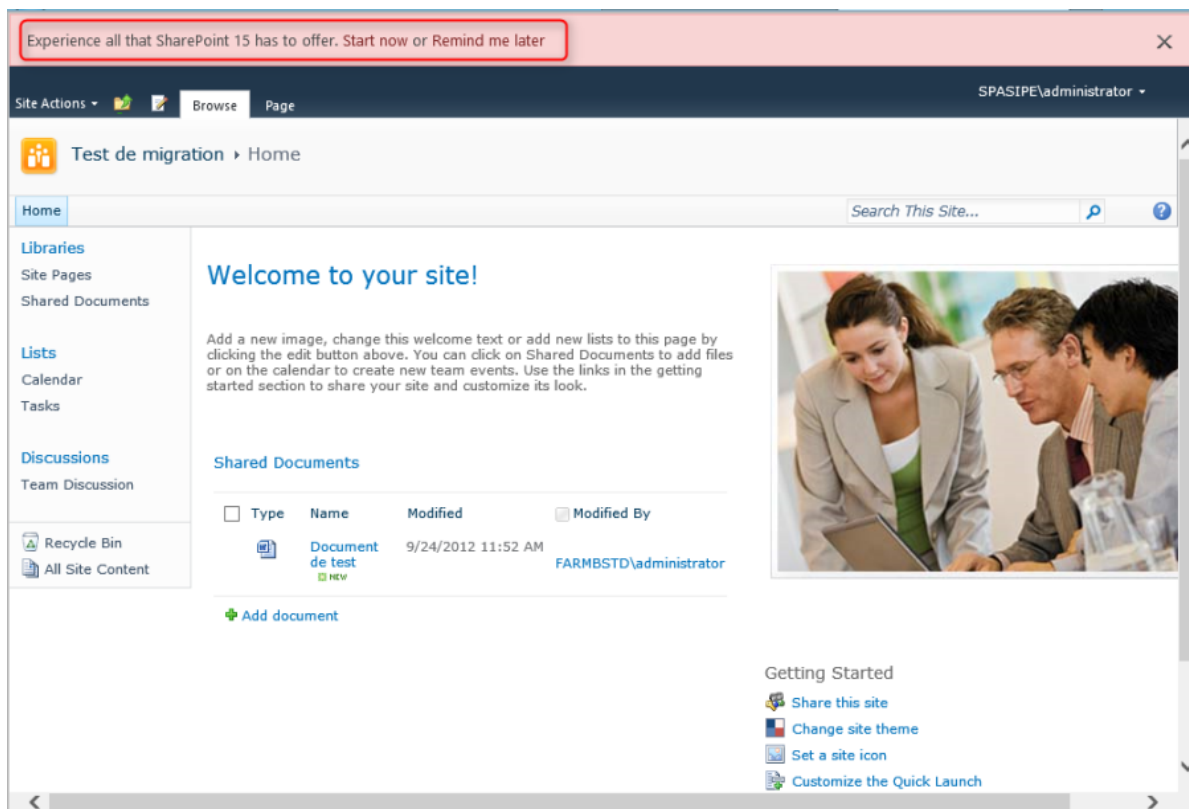
Beyond this example a bit trivial, these features allow much opportunity, especially for future "**search-driven**" applications.

Personally, I find this feature very interesting.

## How To - SharePoint 2013 - Upgrade a site collection to SharePoint 2013 (UI and PowerShell)

This article will explain how to upgrade a site collection to SharePoint 2013, by using the user interface and PowerShell.

I consider here that my site collection has already been migrated to the SharePoint 2013 server and is in actually in "**SharePoint 2010**" mode, like this:



I divided the functionalities in different "**Points**", each of them having a **\* PowerShell \*** section which will detail the available modifications or interactions by using PowerShell.

## Point 1: Self-service site upgrade

To access the self-service upgrade options, your site collection must be eligible, and must also respect 2 rules defined at the web application level:

- A maximal size (10 MB by default),
- A maximum number of sites (10 by default).

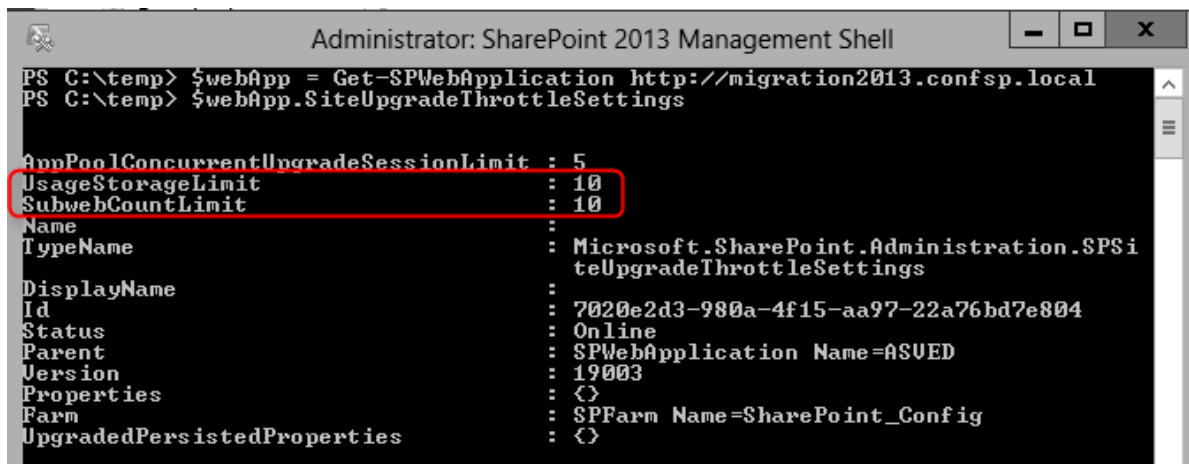
Si one rule isn't respected; you had to migrate via PowerShell.

*\* PowerShell \**

- Get the web application parameters

```
$webApp = Get-SPWebApplication < Web Application URL >
```

```
$webApp.SiteUpgradeThrottleSettings
```



```
Administrator: SharePoint 2013 Management Shell
PS C:\temp> $webApp = Get-SPWebApplication http://migration2013.confsp.local
PS C:\temp> $webApp.SiteUpgradeThrottleSettings

AppPoolConcurrentUpgradeSessionLimit : 5
UsageStorageLimit                     : 10
SubwebCountLimit                     : 10
Name                                  :
TypeName                             : Microsoft.SharePoint.Administration.SPSiteUpgradeThrottleSettings
DisplayName                           :
Id                                    : 7020e2d3-980a-4f15-aa97-22a76bd7e804
Status                               : Online
Parent                               : SPWebApplication Name=ASUED
Version                              : 19003
Properties                            : {}
Farm                                 : SPFarm Name=SharePoint_Config
UpgradedPersistedProperties            : {}
```

- Modify web application parameters

```
$webApp = Get-SPWebApplication -URL < Web Application URL >
```

```
$webApp.SiteUpgradeThrottleSettings.UsageStorageLimit = <value>
```

```
$webApp.SiteUpgradeThrottleSettings.SubwebCountLimit = <value>
```

```
$webApp.Update()
```

## Point 2: Notification bar

The notification bar at the top of the site displays a message indicating that the site can be migrated.

Two options are available:

- "Start now": Access to the page which allow to migrate the site or request an evaluation site,
- "Remind me later": Hide the notification bar, for 30 days (by default).

*\* PowerShell \**

1. Prevent users from using the self-service upgrade:

```
$site = GetSPSite <URL>
```

```
$site.AllowSelfServiceUpgrade = $FALSE
```

2. Changer the reminder delay / force upgrade

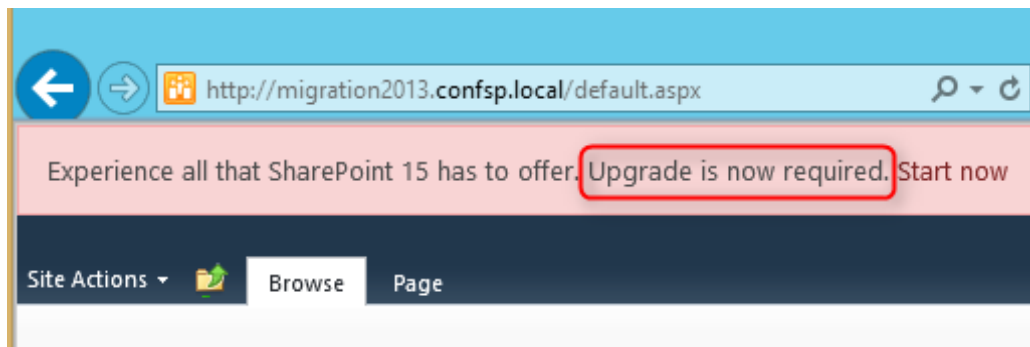
```
$webApp = Get-SPWebApplication < Web Application URL >
```

```
$webApp.UpgradeReminderDelay <Number of days>
```

```
$webApp.Update();
```

If you set the "UpgradeReminderDelay" parameter to 0:

- The link to hide the notification bar is removed,
- The message indicates that the upgrade is now required.



### Point 3: Health Checks

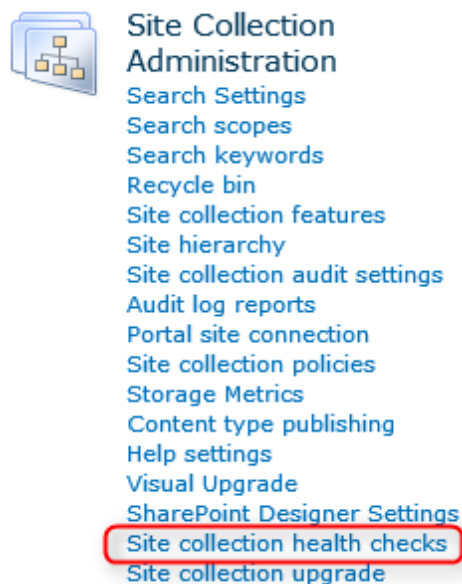
The "**Health Checks**" are a major step of the migration, because they will identify the potentials problems:

- Conflicting content types,
- Customized/unghosted files,
- Missing galleries,
- Missing parent content types,
- Missing site templates,
- Unsupported language pack references,
- Unsupported MUI (multi-user interface) references.

Note that these Health Checks can be executed before **and after** the site collection upgrade.

To execute the "Health Checks":

1. Click on "Site collection health checks" link in the "Site Settings":



2. Click on "**Start checks**" to launch the process.

#### Run site collection health checks

The Site Collection Health Checks have never run for this version of the site collection. Click Start checks to run the health checks now.

Start checks

3. A summary is displayed, in our case 2 problems have been found:

- The "**Video**" content type is in conflict with the new one – Delete or rename it,

- A webpart definition is considered as customized file – In this case you can fix this problem by clicking on **"Reset page to default"**.

## Unfortunately we found some problems

Try it again

You should consider fixing these before upgrading, or make note of them as potential sources for issues after upgrading. We recommend trying out the fixes on a copy of your site collection before you make changes to your production site.

Consider fixing the following problem(s) either before or after upgrading:	
<b>Conflicting Content Types</b> The names of the following content types on your site conflict with new content types that may be added during upgrade: <ul style="list-style-type: none"> <li>• Video</li> </ul> Please resolve any content type conflicts by renaming or removing these content types.	Tell me more
<b>Customized Files</b> The following files have been customized from their default and may present some unexpected visuals or behavior after upgrade: <ul style="list-style-type: none"> <li>• <a href="http://migration2013.confsp.local/_catalogs/wp/DisplayImageWP.webpart">http://migration2013.confsp.local/_catalogs/wp/DisplayImageWP.webpart</a> <b>Reset page to default</b></li> </ul> Reset specific pages to default to make the page lose customizations and any embedded data. Normally, you should do this only if you are having difficulty using the page after upgrade.	Tell me more
<b>You might want to know about the following check(s) that ran successfully:</b>	
<b>Missing Galleries</b> No issues were found with any of your galleries.	Tell me more
<b>Missing Parent Content Types</b> No issues were found with missing parent content types.	Tell me more
<b>Missing Site Templates</b> No issues were found with any of your sites.	Tell me more
<b>Unsupported Language Pack References</b> No issues were found with any of your existing language pack references.	Tell me more
<b>Unsupported MUI References</b> No issues were found with any of your existing MUI language references.	Tell me more

When you click on the **"Reset page to default"** link, you can choose to reset a specific page or all pages in the site by using the existing site template.

### Reset to Site Definition

If you want to remove all customizations from a page (such as changes to Web Part zones or text added to the page) you can use this feature to reset to the version of the page included with the site definition.

You can reset a single page within your site to use the version of the page included in the site definition, or you can reset all pages.

Caution: When you reset to the site definition version, you will lose all customizations made to the current version of the page. No backup copy of the page will be made before the page is updated, and no new version is created.

☐ Reset specific page to site definition version

Local URL for the page

Example: "http://server/site/default.aspx"

☒ **Reset all pages in this site to site definition version**

Reset

Cancel

*\* PowerShell \**

- Test-SPSite : Launch the Health Checks on a site collection, with the ability to choose a specific rule to be verified.

Test-SPSite -Identity <SiteURL> [-Rule <RuleID>]

- Repair-SPSite : Launch the repair, with the ability to choose a specific rule to be repaired.

Repair-SPSite -Identity <SiteURL> [-Rule <RuleID>]

#### Point 4: Access the migration / Evaluation site collection request page

Click on "Start now":

Experience all that SharePoint 15 has to offer. [Start now](#) or [Remind me later](#)

To access the migration page:

## Prepare for takeoff!

We'll start with a few pre-flight checks, and then prevent any changes to your sites while you're upgrading.

[Upgrade this Site Collection](#)

From project sites to team mailbox, SharePoint's got a hundred new ways to help you work smarter.

[LEARN MORE](#)

Before you take the leap, try a demo upgrade to see how it will turn out. We can set it up in 1-2 days.

[TRY A DEMO UPGRADE](#)

#### Point 5: Evaluation site request

One new capability in SharePoint 2013 is to request an upgrade evaluation site, which will be a copy of your site, in SharePoint 2013 version.

This site will be available during 30 days (by default and configurable), before being deleted by a timer job (1 for each web application).

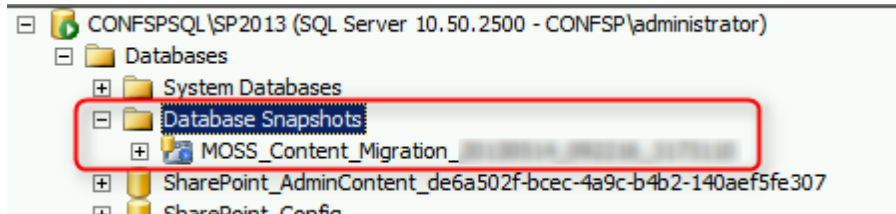
## Job Definitions

Web Application: <a href="http://migration2013.confsp.local/">http://migration2013.confsp.local/</a>   View: <a href="#">Web Application</a>		
Title	Web Application	Schedule Type
<a href="#">Audit Log Trimming</a>	ASVED	Monthly
<a href="#">Bulk workflow task processing</a>	ASVED	Daily
<a href="#">Cell Storage Data Cleanup Timer Job</a>	ASVED	Daily
<a href="#">Change Log</a>	ASVED	Weekly
<a href="#">Content Organizer Processing</a>	ASVED	Daily
<a href="#">Content Type Subscriber</a>	ASVED	Hourly
<a href="#">Create Upgrade Evaluation Site Collections job</a>	ASVED	Daily
<a href="#">Dead Site Delete</a>	ASVED	Disabled
<a href="#">Delete Upgrade Evaluation Site Collections job</a>	ASVED	Daily

Note: No data will be replicated from the « source » site to the copy, or the opposite; users should also be aware of the fact that this site is "short-lived".

Concerning the evaluation site creation, 2 possibilities:

- You SQL Server version supports snapshots (**Enterprise or Datacenter version**) and in this case a snapshot will be used,



- If not, a backup-restore will be used, and your site collection will be read-only during the backup phase.

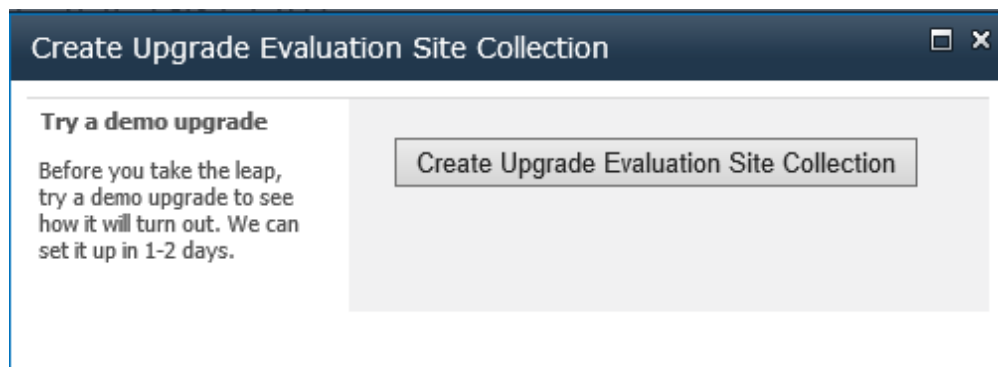
From the interface:

1. Click on "**TRY A DEMO UPGRADE**" to request a site evaluation request:

Before you take the leap, try a demo upgrade to see how it will turn out. We can set it up in 1-2 days.

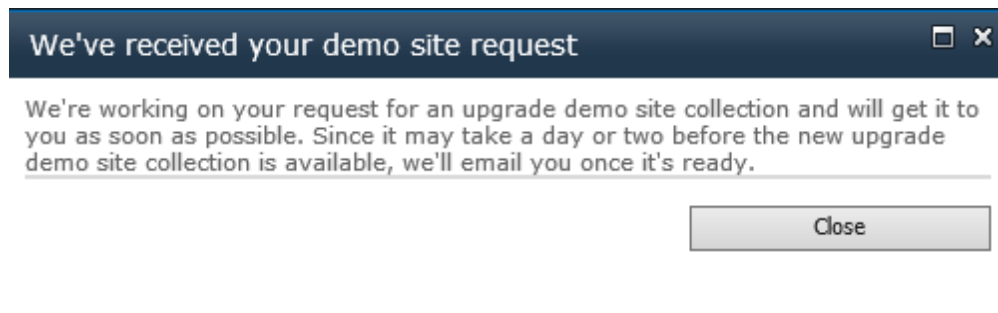
[TRY A DEMO UPGRADE](#)

2. Click on the button:



3. Site collection administrator(s) is/are alerted by email when the upgraded copy is available.





Why a day or two? Because the creation process are managed by timer jobs (1 for each web application) which runs once a day:

## Edit Timer Job ⓘ

### Job Title

Create Upgrade Evaluation Site Collections job

### Job Description

Creates upgrade evaluation site collections

### Job Properties

This section lists the properties for this job.

Web application:

ADMIN

Last run time:

5/14/2013 2:22 AM

### Recurring Schedule

Use this section to modify the schedule specifying when the timer job will run. Daily, weekly, and monthly schedules also include a window of execution. The timer service will pick a random time within this interval to begin executing the job on each applicable server. This

This timer job is scheduled to run:

☐ Minutes

Starting every day between

☐ Hourly

1 AM ▼ 00 ▼

☒ Daily

and no later than

☐ Weekly

1 AM ▼ 30 ▼

☐ Monthly

*\* PowerShell \**

- Evaluation site request

Request-SPUpgradeEvaluationSiteCollection -Identity <Site collection URL>

## Point 6: Site upgrade

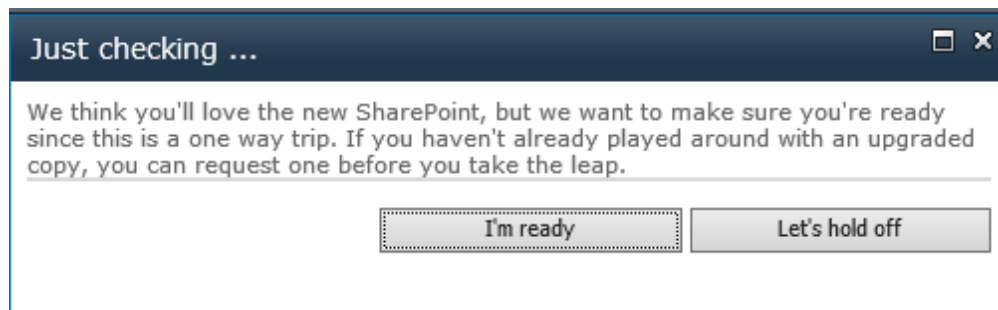
1. On the migration page, you can launch the upgrade by clicking on "Upgrade this Site Collection"

### Prepare for takeoff!

We'll start with a few pre-flight checks, and then prevent any changes to your sites while you're upgrading.

Upgrade this Site Collection

2. A message is displayed, inviting the user to request an evaluation copy, if he hasn't "played" with it before.



3. The migration starts, with the possibility to add a link in the status bar, with the **"UpgradeMaintenanceLink"** web application property.

Example:

```
Administrator: SharePoint 2013 Management Shell
PS C:\temp> $webApp = Get-SPWebApplication http://migration2013.confsp.local
PS C:\temp> $webApp.UpgradeMaintenanceLink="http://www.microsoft.fr"
PS C:\temp> $webApp.Update()
```

Giving:

We're doing work to improve the site. Please bear with us if you experience temporary delays or glitches. [More information](#)

Note: The link opens in the current page.

## Point 7: End of the migration

1. The migration ends, a summary page is displayed:

# Site Settings › Site Collection Upgrade › Upgrade Stat

## Upgrade Completed Successfully

- Status: Upgrade Completed Successfully
- Errors: 0
- Warnings: 1
- Upgrade Started: 9/24/2012 12:22 PM
- Last Updated: 9/24/2012 12:24 PM
- Upgrade Completed: 9/24/2012 12:24 PM
- Log File: [20120924-122211-909.txt](#)

What's New

Let's see the new site




With:

- A link to log files (verbose + errors/warnings), stored in a hidden library named "Maintenance Log Library",

## Maintenance Log Library ⓘ

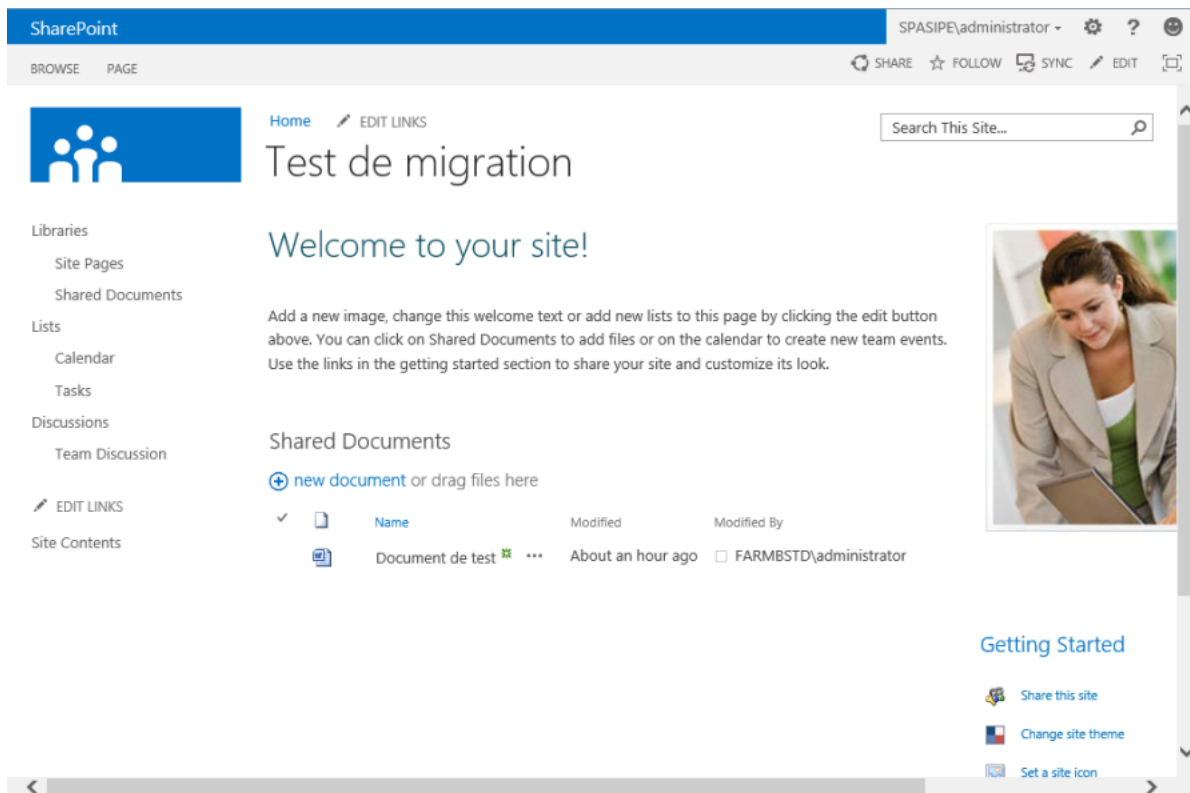
 [new item](#) or drag files here

All Documents ...

✓		Name		Modified	Modified By
		20130514-053948-562 ✖	...	3 minutes ago	<input type="checkbox"/> CONFSP\administrator
		20130514-053948-562-error ✖	...	3 minutes ago	<input type="checkbox"/> CONFSP\administrator

- A "What's New" button which opens a help page,
- A "Let's see the new site" button which opens the homepage.

2. The upgraded site is displayed correctly



*\* PowerShell \**

- Launch a site collection upgrade, even if throttling limits are reached,

Upgrade-SPSite <Site collection URL> -VersionUpgrade -Unthrottled

- Launch a site collection upgrade, with queuing the upgrade

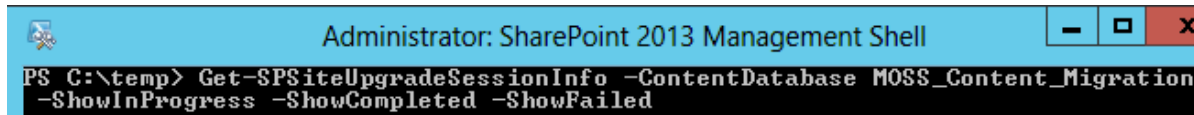
Upgrade-SPSite < Site collection URL > -VersionUpgrade **-QueueOnly**

## Point 8: Upgrade queue management

Last but not least, the SharePoint administrator can manage the upgrade queue, only with PowerShell!

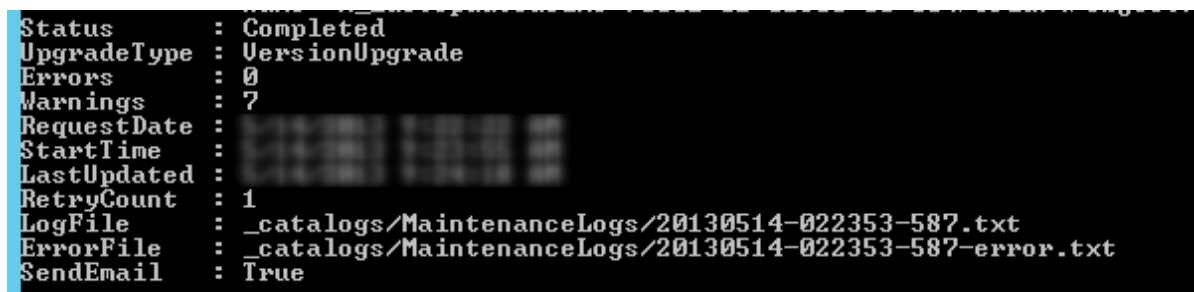
- Site collections in the queue (Note the ShowInProgress / ShowCompleted / ShowFailed parameters)

Get-SPSiteUpgradeSessionInfo -ContentDatabase <Database name> -ShowInProgress -ShowCompleted -ShowFailed



```
Administrator: SharePoint 2013 Management Shell
PS C:\temp> Get-SPSiteUpgradeSessionInfo -ContentDatabase MOSS_Content_Migration
-ShowInProgress -ShowCompleted -ShowFailed
```

Several informations are displayed (the image is just an extract):



```
Status           : Completed
UpgradeType      : VersionUpgrade
Errors           : 0
Warnings         : 7
RequestDate      : 
StartTime        : 
LastUpdated      : 
RetryCount       : 1
LogFile          : _catalogs/MaintenanceLogs/20130514-022353-587.txt
ErrorFile        : _catalogs/MaintenanceLogs/20130514-022353-587-error.txt
SendEmail        : True
```

- Site collection upgrade status

Get-SPSiteUpgradeSessionInfo -Site < Site collection URL>

For the informations displayed, see the screenshot above.

- Add a site collection in the queue

Upgrade-SPSite < Site collection URL> -VersionUpgrade -**QueueOnly**

- Remove a site collection from the queue (if it's not being upgraded)

Remove-SPSiteUpgradeSessionInfo -Identity < Site collection URL>

## Point 9: Throttling

- Number of simultaneous upgrades allowed per application pool

```
$wa = Get-SPWebApplication -URL < Web Application URL >
```

```
$wa.SiteUpgradeThrottleSettings.AppPoolConcurrentUpgradeSessionLimit=<Value>
```

- Number of simultaneous upgrades allowed per database

```
$db = Get-SPContentDatabase <Database name>
```

```
$db.ConcurrentSiteUpgradeSessionLimit
```

- Maximum size to allow self-service upgrade

```
$wa.SiteUpgradeThrottleSettings.UsageStorageLimit=<Value>
```

- Maximum number of sub-sites to allow self-service upgrade

```
$wa.SiteUpgradeThrottleSettings.SubwebCountLimit=<Value>
```

## References

- [Use Windows PowerShell cmdlets to upgrade to SharePoint 2013 and to migrate data](#)

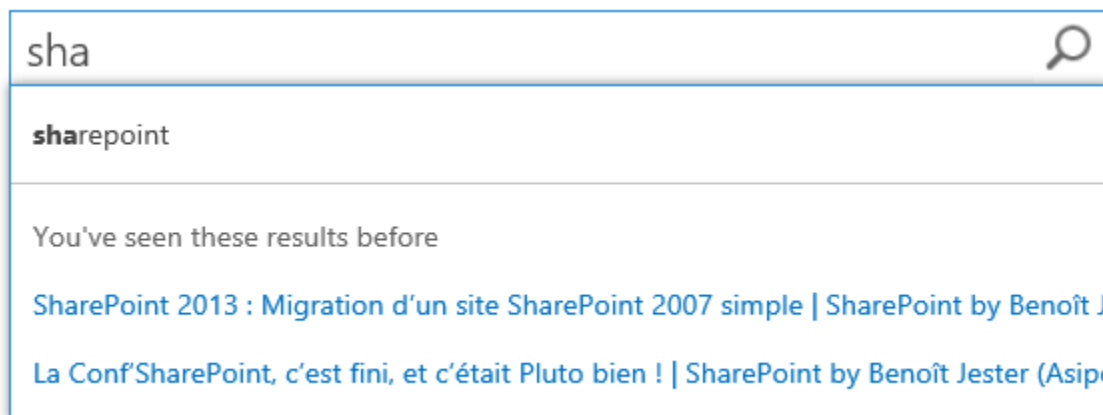
# SharePoint 2013 - Search: Configure the Query Suggestions

## Introduction

"Query Suggestions" are what their name points out: suggestions that are displayed when you search for something; these suggestions are terms or sentences that you already used or links/documents that you already displayed.

These suggestions are displayed in the bottom of the search box, when you begin typing a search term. For example, 2 things are displayed here:

- A term associated to the keyword you're typing ,
- 2 links you frequently visited, always in relation with the keyword you're typing.



These suggestions are managed in 2 ways:

- Automatic : SharePoint learns from your searches and build suggestions,
- Manual: you add or block suggestions lists.

Note: For this article I used search results issued from the crawl of my blog, but this obviously works with documents.

## "Automatic" suggestions (managed by SharePoint)

As I said in the introduction, SharePoint learns from your searches, including actions you perform on search results.

If you run a search (a query), and that for this query:

- You click 6 or more times on the search results (this can be 6 distinct elements), SharePoint will create a suggestion for this query,

- You click a few times (**I have not counted exactly**) on an element: this element will then enter your "Personal Favorites" and SharePoint will create a suggestion for this element in the "You've seen thesis results before" section.

These suggestions are generated daily, via a timer job named "Prepare query Suggestions"

Job Title	<div>Prepare query suggestions</div>	
Job Description	Prepares candidate queries for query suggestion and performs pre-computations for result block ranking.	
Job Properties	<div>Web application: N/A</div> <div>Last run time: 6/13/2013 7:51 AM</div>	
Recurring Schedule	<div>Use this section to modify the schedule specifying when the timer job will run. Daily, weekly, and monthly schedules also include a window of execution. The timer service will pick a random time within this interval to begin executing the job on each applicable server. This feature is appropriate for high-load jobs which run on multiple servers on the farm. Running this type of job on all the servers simultaneously might place an unreasonable load on the farm. To specify an exact starting time, set the beginning and ending times of the interval to the same value.</div> <div> <div>This timer job is scheduled to run:</div> <div> <input type="radio"/> Minutes           <input type="radio"/> Hourly           <input checked="" type="radio"/> Daily           <input type="radio"/> Weekly           <input type="radio"/> Monthly         </div> <div> <div>Starting every day between</div> <div>1 AM <input type="text"/> 00 <input type="text"/></div> <div>and no later than</div> <div>11 PM <input type="text"/> 30 <input type="text"/></div> </div> </div>	

This timer job uses the informations stored in the database (named here) "Search\_Service\_Application\_LinkStoreDB\_GUID", and in the table" **MSSQLLogPageClick** ".



It is important to note that these suggestions are handled in this case by "Result Source" and by site collection.



## Manual suggestions (managed by you)

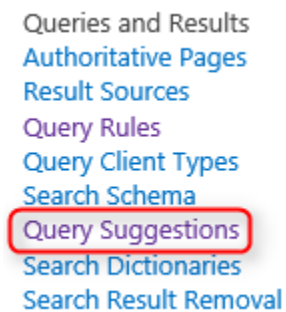
You (the SharePoint administrator) can manage manually suggestions in 2 ways, via:

- The search service application,
- PowerShell.

Warning: These two methods do not have the same behavior (see below and the next chapter).

In summary, using the central administration you will deploy on the entire farm while in PowerShell that will target a couple SPWeb / Result Source (not to mention suggestions file that the format differs).

1. For the first case, click on the Search service application, and then click on "Query Suggestions"



2. The screen is as follows, and is relatively simple, it is possible to:

- Enable or disable suggestions,
- Change the language for which you want to configure suggestions,
- Import / Export list of words / phrases to always suggest,
- Import / Export list of words / phrases to never suggest.

# Query Suggestion Settings

## Search Suggestions

Show search suggestions as users type in the search box (if not disabled by user).

☒ Show search suggestions

## Language for suggestion phrases

Choose the language for which to import and export query suggestion phrases.

Language:

English ▼

## Always suggest phrases

Always suggest the following list of phrases.

Always suggest phrases:

[Import from text file](#)

[Export to text file](#)

## Never suggest phrases

Never suggest the following list of phrases.

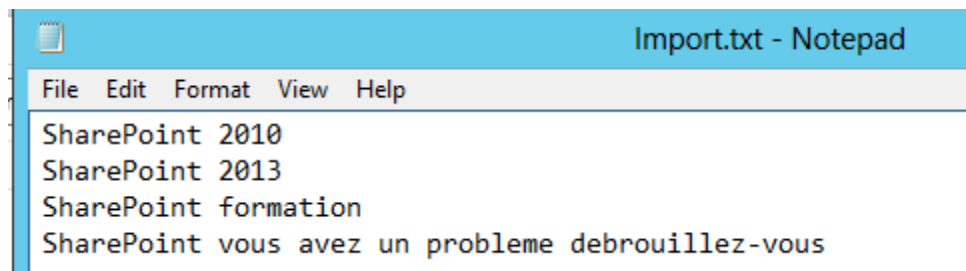
Never suggest phrases:

[Import from text file](#)

[Export to text file](#)

3. The suggestions update (those will be displayed or those that will be blocked) is done by uploading a formatted file as below.

(A subliminal message for users has been inserted in the suggestions ... In English: **"SharePoint you have a problem you have to cope on your own"**)



Each file upload overwrites suggestions list in use, the most **"secure"** method is:

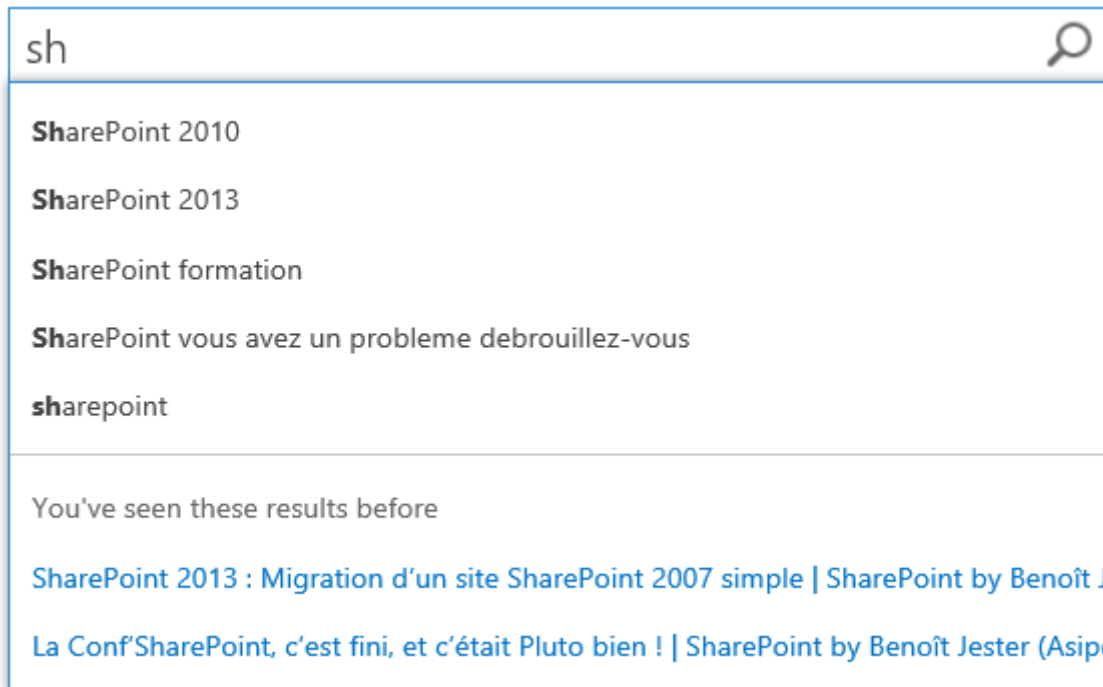
- Export the file,
- Modify it,
- Upload it again.

Note the difference with the "**automatic**" suggestions management: here the suggestions will be deployed on all the "Result Sources" and all site collections.

4. Once the file has been re-uploaded, there is an operation to do if you want to test immediately, which is it?

Force the execution of the "Prepare Query Suggestion" timer job, of course.

5. Result:



## Deploy a suggestions list with PowerShell

In the case of a PowerShell deployment, it is important to note two important points:

- The file format changes over the use through the central administration,
- The deployment is not global as a "Result Source" and a SPWeb are required parameters.

Concerning the suggestions file, it must be composed of the following fields, separated by a comma:

- Query Text: Your suggestion
- Query Count: The number of times the query has been executed,
- Click Count: The number of times the user has clicked on a result related to the keyword - Important! This parameter will influence the positioning of the suggestion in the list,
- LCID: The identifier of the language.

In addition, to the suggestions appear, the "Click Count" needs to be set at least set as 5.

1. The [Import-SPEnterpriseSearchPopularQueries](#) cmdlet will be your best friend for a suggestions deployment.

You will find at the bottom of this TechNet page the commands to launch to import a suggestions file.


2. And as usual, launch the timer job to start testing immediately!

Start-SPTimerJob -Identity "prepare query suggestions"

### Configuring the Search Center webparts

Other topic relevant to suggestions, the ability to change the search webparts configuration.

1. Concerning the search webpart, you can refer to the [Configure properties of the Search Box Web Part in SharePoint Server 2013](#) article for more information about it, but know that there is a section reserved for suggestions:

	<b>Query Suggestions</b>	<a href="#">Help</a>
<input checked="" type="checkbox"/>	Show suggestions	
<input type="checkbox"/>	Show people name suggestions	
Number of query suggestions		
<input type="text" value="5"/>		
Minimum number of characters		
<input type="text" value="2"/>		
Suggestions delay (in milliseconds)		
<input type="text" value="100"/>		
<input checked="" type="checkbox"/>	Show personal favorite results	
Number of personal favorites		
<input type="text" value="3"/>		

2. For the results webpart, have a look at this article: [Configure properties of the Search Results Web Part in SharePoint Server 2013](#).

As for the search webpart, you have the ability to display (or not) you're "Personal Favorites":

Settings

Help

Results settings

Number of results per page

10

☒

 Show ranked results

☒

 Show promoted results

☒

 Show "Did you mean?"

☒

 Show personal favorites

☐

 Show View Duplicates link

☐


 Show link to search center

Specify the search center in

Search Settings

The "**Personal Favorites**" appear like this in the webpart results:

SharePoint



sharepoint

French

Everything

People

Conversations

Videos

Result type

PDF

PowerPoint

SharePoint Site

Team Site

Web page

Author

System Account

Benoit Jester

CONFSP\administrator

Isha Kapoor (SharePoint...

Vesa Juvonen

SHOW MORE

You've seen this result before

SharePoint 2013 : Migration d'un site SharePoint 2007 sim...

SharePoint by Benoît Jester (Asipe) | SharePoint & to...

Catégories:SharePoint 2013 Tags:Office Web Apps Server, PDF, SharePoint 2013, Word Web App ... Lire des articles consacrés à SharePoint 2013 sur un blog c'est bien (surtout si c'est le ...

spasipe.wordpress.com

Vous cherchez | SharePoint by Benoît Jester (Asipe)

SharePoint 2013 : Migration d'un site SharePoint 2010 simple SharePoint 2013 : Migration d'un site SharePoint 2007 simple Migrer vers SharePoint 2013 ...

spasipe.wordpress.com/vous-cherchez/

About / Contact | SharePoint by Benoît Jester (Asipe)

en tant que développeur asp puis .net, je suis tombé dans la marmite SharePoint en 2005 ... ce blog pour partager mes infos sur les sujets SharePoint et ce qui peut graviter autour ...

spasipe.wordpress.com/contact/

## Conclusion

These "**Query Suggestions**" are really interesting in this SharePoint 2013 version search.

You can easily imagine an implementation of suggestions guided by business, to allow their users to more easily find documents and other information's.

Not to mention the jokes to do at your IT colleagues:

"I do not understand, I began to type 'doc', he proposed me 'Document with compromising photos of xxxx'".

## References

- [Manage query suggestions in SharePoint Server 2013](#),
- [Manage the Search Center](#).

# SharePoint 2013 - Search: User Segmentation

## Introduction

The concept of "User Segmentation" is a new feature in SharePoint 2013 that allows you to view search results based on user attributes, named "User Segments".

When I speak of attributes, these are not only attributes coming from the user's profile, they can be of any type as the type of browser used, as you must code what you choose to be the criterion, so you have a wide field of action.

The principle is a WebPart (you have developed) will attempt to match the value of the chosen attribute with the value of a Term specified as the "User Segment" of a Query Rule.

If the term is found, its ID is passed to the query and the action of the Query Rule is executed.

Note: If you did not understand the previous two sentences, I urge you to go read the following article (in French right now): [SharePoint 2013: Search – Presentation of Query Rules](#),

## Scenario chosen for this article

I choose for this article the "Function" field:

- "Job Title" Attribute in Active Directory,
- "SPS-JobTitle" Internal name in SharePoint.

I will display a different "Promoted Result" depending on whether the function of the person is a **"Tyrannical manager"** or **"Exploited employee"**.

## The steps

The 3 steps to implement this system are:

- Create a Term for each "User Segment",
- Develop a webpart inheriting the **ContentBySearchWebPart** and which will take into account these Terms,
- Create (or more) query rule (s) to treat different "User Segment".

## Step 1: Create the terms relating to the "User Segments"

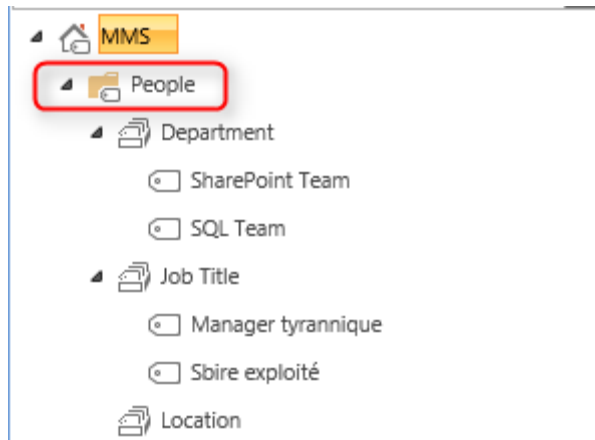
Create via the interface or code the Terms representing the values of the property on which you want to start, here **"Tyrannical manager"** and **"Employee"**.

You can create these Terms in several ways:

1. by matching user properties

Good news in this case, SharePoint 2013 uses a default Term Set named "**People**" to store the Department, Job Title and Location property values, issued from the User Profiles.

And it is precisely on this Term Set "Job Title" that I will base myself for this article.



2. Via the your site collection "**Site Settings**"

3. Via code

```
NavigationTerm term = navigationTermSet.CreateTerm("Tyrannique", NavigationLinkType.FriendlyUrl, Guid.NewGuid());
```

## Step 2: Create the Webpart

Note: If you cannot develop (or do not want to, it also works in this case), some articles located at the end of this article (in the "References" chapter) provide ready to use Visual Studio source code.

To develop this webpart, you will have to:

- Make it inherit ContentBySearchWebPart

```
namespace SPAsipe.Devs.UserSegmentation
{
    [ToolboxItemAttribute(false)]
    public class UserSegmentationWP : ContentBySearchWebPart
    {
    }
```

- Implement the "Onload" method as follows



```
protected override void OnLoad(EventArgs e)
{
    if (this.AppManager != null)
    {
        if (this.AppManager.QueryGroups.ContainsKey(this.QueryGroupName) &&
            (this.AppManager.QueryGroups[this.QueryGroupName].DataProvider != null))
        {
            // Définissez le nom de la méthode à utiliser, ici "GetUserJobTitle"
            this.AppManager.QueryGroups[this.QueryGroupName].DataProvider.
                BeforeSerializeToClient += new
                BeforeSerializeToClientEventHandler(GetUserJobTitle);
        }
    }
}
```

- Create the method that will attempt to match your property with one of the Terms, by specifying the property to be used and the name of the Term Set

```
private void GetUserJobTitle(object sender, BeforeSerializeToClientEventArgs e)
{
    // Variables locales
    DataProviderScriptWebPart dataProvider = sender as DataProviderScriptWebPart;
    string[] jobTitle = new string[1];
    string termID = string.Empty;

    try
    {
        // Service Context
        SPServiceContext ctx = SPServiceContext.Current;

        // Requête pour récupérer le "Title Job" de l'utilisateur courant, aka propriété "Title"
        string userJobTitle = UserProfileManager.GetStringSinglePropertyValueForUser(ctx, "Title",
                                                                                    SPContext.Current.Web.CurrentUser.LoginName);

        // Si une valeur est trouvée
        if (!string.IsNullOrEmpty(userJobTitle))
        {
            // On teste si le Term Set adéquat, ici "Job Title", existe
            TaxonomySession txSession = new TaxonomySession(SPContext.Current.Site);
            TermSetCollection tsCollection = txSession.GetTermSets("Job Title", 1033);

            // Si le Term Set est trouvé
            if ((tsCollection != null) && (tsCollection.Count > 0))
            {
                // On récupère le Term Set
                TermSet jobTitleTermSet = tsCollection[0];

                // On cherche le Term (le "Title Job" de l'utilisateur courant) dans le Term Set
                TermCollection termCollection = jobTitleTermSet.GetTerms(userJobTitle, false);

                // Si une valeur est trouvée
                if (termCollection.Count > 0)
                {
                    termID = termCollection[0].Id.ToString();
                }
            }
        }
    }
}
```

- Compile, build, and deploy your WSP

```
Administrator: SharePoint 2013 Management Shell
PS C:\Users\administrator.CONFSP> Add-SPSolution -LiteralPath C:\Temp\SPAsipe.Devs.UserSegmentation.wsp

Name                               SolutionId                         Deployed
----                               -
spasipe.devs.usersegmentati... 4f49b345-fc21-4f00-a92d-4021b630d6c0 False

PS C:\Users\administrator.CONFSP> Install-SPSolution -Identity SPAsipe.Devs.UserSegmentation.wsp -WebApplication http://migration2013.confsp.local -GACDeployment
PS C:\Users\administrator.CONFSP>
```

- Insert the webpart, and insert a second webpart : your custom webpart or a **"Content Search"** that you configure as follows (it retrieves the results of your custom webpart)

☐ [Settings](#)

Query results provided by

Search User Segmentation - Search

Result Table

SpecialTermResults

### Step 3: Create the Query Rule(s)

1. Create a Query Rule and click on **"Add User Segment"** in the boxed section below

☒ [Context](#)

You can restrict this rule to queries performed on a particular result source, from a particular category of topic page, or by a user matching a particular user segment. For instance, restrict a rule to the Local Video Results source so that it only fires in Video search.

Query is performed on these sources

☒ All sources

☐ One of these sources

Recommended Items [remove](#)

[Add Source](#)

Query is performed from these categories

☒ All categories

☐ One of these categories

[Add Category](#)

Query is performed by these user segments

☐ All user segments

☒ One of these user segments

[Add User Segment](#)

2. Enter a title and click on **"Add user segment term"**

## Add User Segment

Title:

Manager

[Add user segment term](#)

Save

Cancel

3. Select your Term and click on **"Save"** in the 2 windows

## Import from term store

Find term sets that include the following terms.



Save

Cancel

4. In the **"Query Conditions"** section, click on **"Remove Condition"**

### Query Conditions

Define when a user's search box query makes this rule fire. You can specify multiple conditions of different types, or remove all conditions to fire for any query text. Every query condition becomes false if the query is not a simple keyword query, such as if it has quotes, property filters, parentheses, or special operators.

Query Matches Keyword Exactly

Query exactly matches one of these phrases (semi-colon separated)

[Remove Condition](#)

[Add Alternate Condition](#)

This has the effect of triggering the rule on all requests

### Query Conditions

Define when a user's search box query makes this rule fire. You can specify multiple conditions of different types, or remove all conditions to fire for any query text. Every query condition becomes false if the query is not a simple keyword query, such as if it has quotes, property filters, parentheses, or special operators.

This rule fires on any query text.

[Add Condition](#)

5. Add your Promoted Result (or whatever) and click on "**Save**".

In the end:

Defined for this site (2)

[PE](#)

7/21/2013

Add Promoted Results

Ton prochain employeur si tu finis pas tes dossier...

[Bahamas](#)

7/21/2013

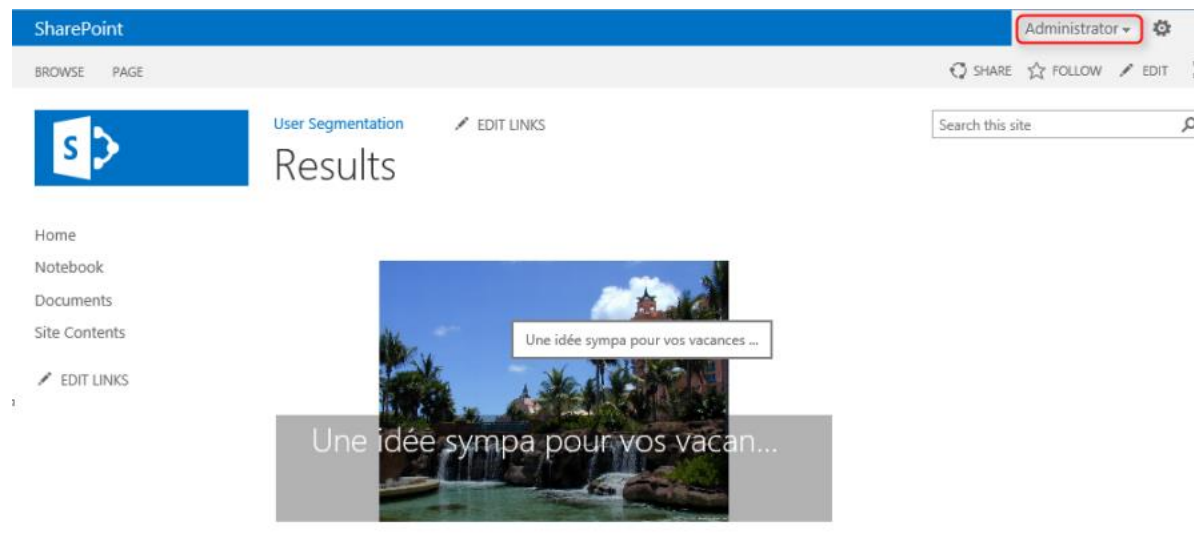
Add Promoted Results

Une idée sympa pour vos vacances ...

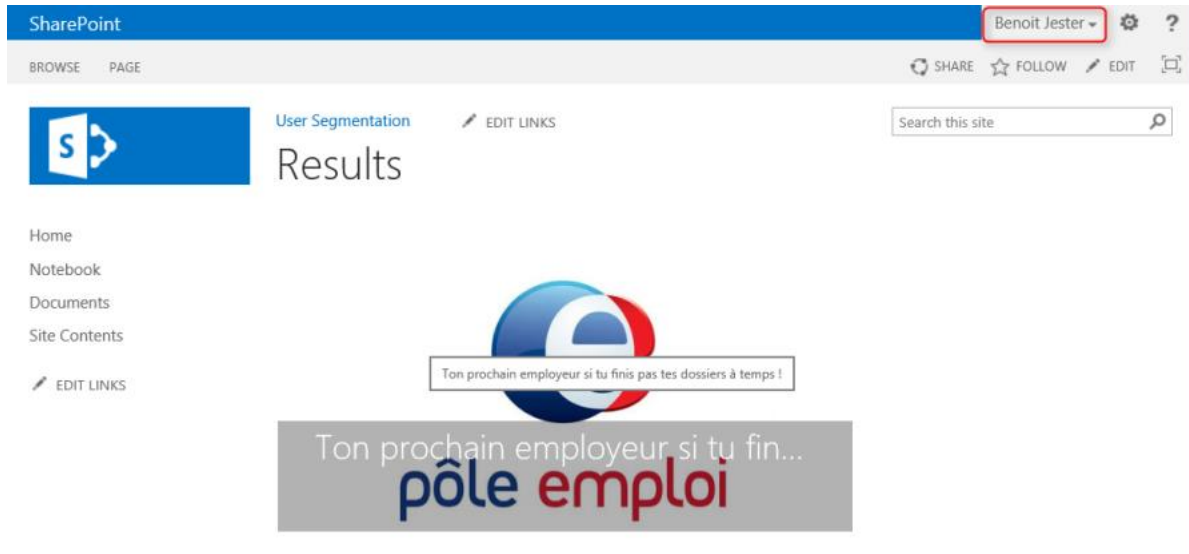
Here, a "Tyrannical manager" will see a holiday image (Bahamas), while a "**Employee**" will see the logo of the French agency managing unemployed people, with an encouragement message : "Finish your work, or you will go the agency !" ...

### Result

1. I launch my page as an "**Administrator**" (the manager), and I see the picture configured in the Query Rule



2. I then log in as myself (the employee!), and I see my "**custom**" picture...



### Anonymous access

I recommend the reading of [this article](#) from **Waldek Mastykarz**, on problems using "Content Search Web / User Segments / Anonymous Search Results Cache".

In summary:

It seems that at this moment it is not possible to use Anonymous Cache Search Results with User Segments.

### References

- [User segmentation in SharePoint 2013](#),
- [Using User Context \(AKA Segmentation\) in Search with SharePoint 2013](#)
- [Set up User Segmentation to drive adaptive experiences in a Product Catalog in SharePoint 2013](#)
- [Using the Anonymous search results cache on SharePoint 2013 public-facing websites](#)
- [Adaptive experiences in a Product Catalog in SharePoint 2013 using Facebook location data](#)
- [User Context Sensitive Searching In SharePoint 2013 Part 1](#)

## Yammer - How to train and certify?

If you have not heard of Yammer - especially lately - it's time for you to read some news!

Yammer is "**The Enterprise Social Network**", acquired by Microsoft last year.

### Introduction

The purpose of this article is not to explain what Yammer is, but to provide you with resources to train and ... to certify. Because yes, there are Yammer certifications!

Here are some links to start (some of them are in French):

- [Intégration Yammer et SharePoint Online \(Office 365\), étape 1 ...](#)
- [Integrate Yammer with on-premises SharePoint 2013 environments](#)
- [La stratégie "Social" de Microsoft autour de SharePoint 2013 et Yammer...](#)
- [Du RSE à l'entreprise sociale avec Yammer](#)
- ["Emploi et Numérique", comment le RSE Yammer peut aider les DRH](#)
- <http://fr.wikipedia.org/wiki/Yammer>
- [Le microblogging d'entreprise selon Yammer](#)
- [SharePoint & Yammer : roadmap pour les mois à venir](#)

### Resources provided by Yammer

Yammer provides 2 types of resources:

- Training and certifications,
- A site providing resources on the product.

Let's start with the certifications.

You will find on the [dedicated website](#) 4 available certifications:



For all certifications, exams are preceded by training (Course & Exam).

For the "**Power User**" and "**Administrator**" certifications, a test is optional for certification.

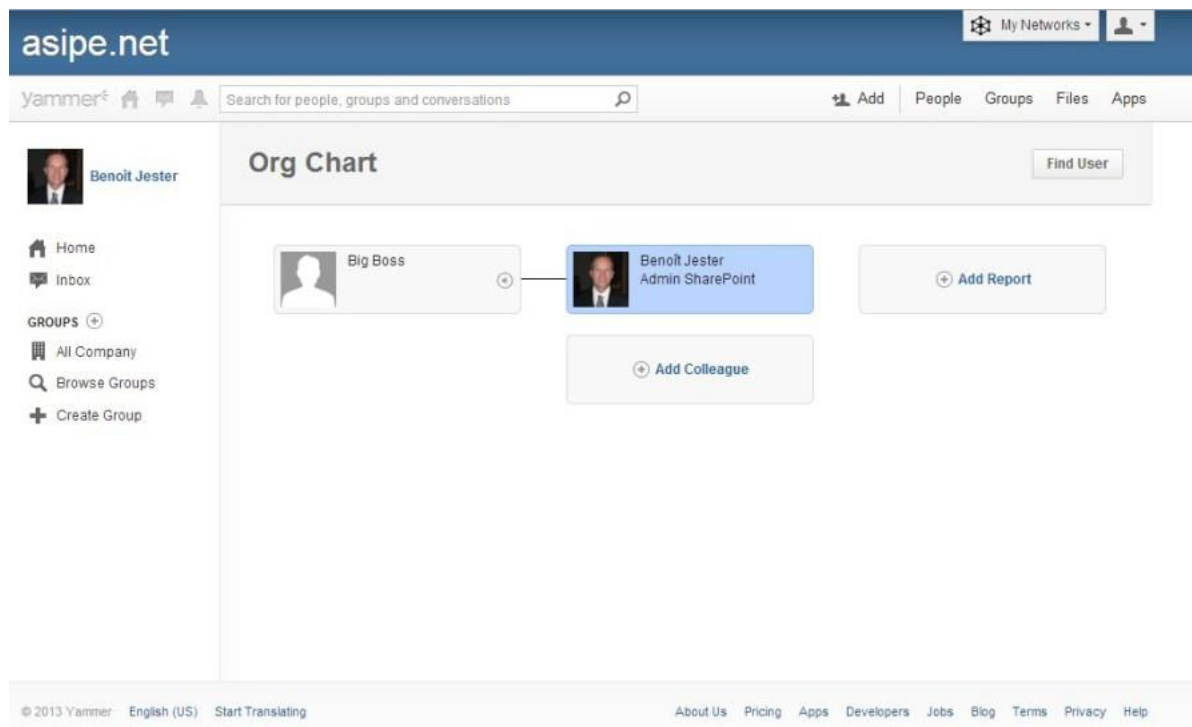


So maybe you're like my colleague to whom I presented the "Power User" certification and whose response was "299\$ is expensive to learn FaceBook!"?

The fact is that Yammer is not just for posting and tagging people.

Do you know for example that Yammer allows to:

- Manage a hierarchy as a chart



- Create a note and ask your colleagues to check or edit it

asipe.net

Yammer

Search

Add People Groups Files Apps

Big Boss

Home

Inbox

GROUPS

All Company

Browse Groups

Create Group

Notifications

Benoit Jester published a new Note **Ma super note**.  
Posted in All Company • Notes  
1 minute ago

Benoit Jester wants you to edit the Note **Ma super note**.  
2 minutes ago

GETTING STARTED

20%

- Complete your profile
- Invite your team
- Get Yammer for desktop
- Get the mobile app

SUGGESTED PEOPLE

Benoit Jester  
Admin SharePoint  
Follow

Add people to this network

SUGGESTED GROUPS

Customer Stories  
Join

HR  
Join

COMPANY RESOURCES

Network admins can post files and Notes here for quick access by everyone in their network. Upgrade your network to become a network admin.














Upgrade Your Network

Online Now

- See which apps are the most used by members of your network

All Apps

All Yammer

Name	Developer	Users	
 Android	Yammer, Inc.	 and 253 others are using this app	<a href="#">Learn More</a>
 BlackBerry	Yammer, Inc.	 and 10 others are using this app	<a href="#">Learn More</a>
 Chrome Extension	Yammer, Inc.		<a href="#">Learn More</a>
 Desktop	Yammer, Inc.	 and 1018 others are using this app	<a href="#">Learn More</a>
 iPad	Yammer, Inc.	 and 382 others are using this app	<a href="#">Learn More</a>
 iPhone	Yammer, Inc.	 and 575 others are using this app	<a href="#">Learn More</a>
 Salesforce.com	Yammer, Inc.	 are using this app	<a href="#">Learn More</a>

Online Now



If this is not the case, then perhaps that training would be beneficial for you, to learn a little more about the product!

To do so, I will present later in this article sites and free resources that will help you to take a look at the Yammer universe.

Firstly the second point that I quoted at the beginning of this chapter: the Yammer "Success Center": <http://success.yammer.com>




There is a lot of information in the different menus.

### **Grovo.com**

On the Grovo.com site, especially on the [Yammer section](#), you will find a list of 25 (short) videos, each of them ending with a quiz that will verify that you did not fall asleep during the video.

During the (free) three days after you register, you can take access to all resources:

## Become an expert in minutes with Yammer videos

**Yammer**  
 **Total Lessons:** 25 |  **Duration:** 56:50

1. Why is Yammer So Popular?	14. Collaborate with contractors
2. Create a Profile You're Proud of	15. Connect with HootSuite, IFTTT and more, in...
3. How do I Use the Yammer Home Feed?	16. Display Your Social Media Expertise
4. Why Should I Use Yammer with Co-workers?	17. Easily See your Company's Connections
5. How do I Remove Employees From a Netw...	18. Upload a File in One Click
6. Why Should I Follow People on Yammer?	19. Get a Document in the Right Hands
7. Explain Yammer Messages in 60 Seconds	20. Keep your Uploaded Files Current
8. Manage Feeds	21. Take Notes Together
9. Import RSS Feeds	22. Get Live Feedback on a note
10. Assign and Follow Topics	23. How Can I Get Updates About a File?
11. Why Do I Get So Many Yammer Emails?	24. How Do I Turn Off Notifications?
12. Search Yammer, in a Flash	25. How Do I Install the Yammer app?
13. Why are Yammer Groups So Useful?	

I found the content interesting, in any case you will learn a lot of things.

And if you're studious, you will pick the Holy Grail, namely your Grovo certification (which has no value).



### Vodecllic.com

On the Vodecllic.com site, you have a [Yammer section](#) (in French), again with a free period (30 days this time), but for which we still have to enter a credit card number.



**Yammer**

2h38 de pédagogie - 27 formations



- Publié le Mars 2013

I have not tested for not adhering to this principle, but at worst you have three video on the homepage for you to notice.

### Videos

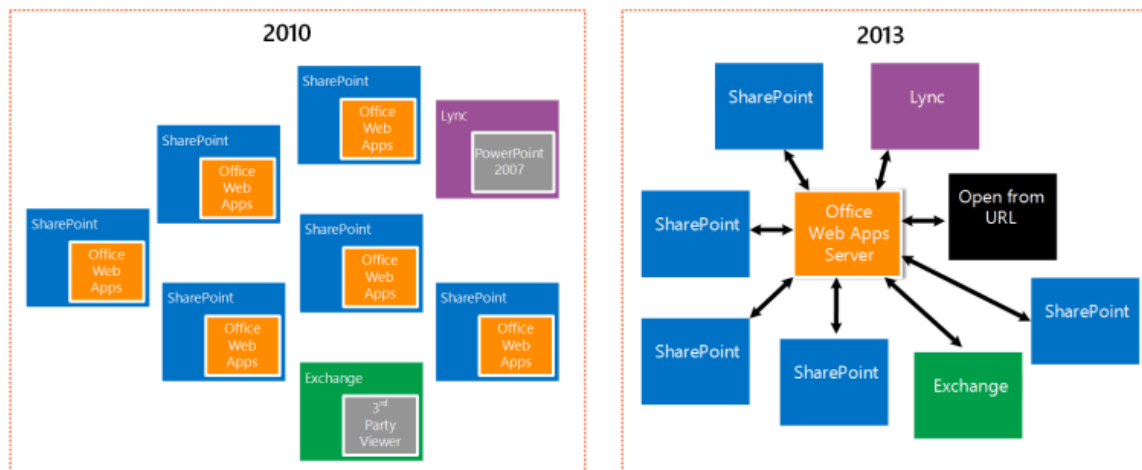
- [Yammer: The Power of Social Networking Inside Government Agencies](#)

# Troubleshooting article - Office Web Apps Installation & configuration issues

## Introduction

Office Web Apps 2013 server can be used for SharePoint 2013, Exchange Server 2013 or Lync 2013. You have to create an Office Web App Farm. After that, you can use your new farm by simple binding on the client server.

### Office Web Apps then and now



## Troubleshooting

### Issue 1:

You executed the command to bind your Office Web App farm with your SharePoint farm but you don't have any feature for open document using your Office Web App server.

### Resolution:

- Check if the binding is executed correctly with the command: **Get-SPWOPIBinding**

```

Application      : Word
Extension        : DOC
ProgId           :
Action           : attend
IsDefaultAction  : False
ServerName       : srv-iox-win.cloudapp.net
WopiZone         : external-https

Application      : Word
Extension        : DOCM
ProgId           :
Action           : attend
IsDefaultAction  : False
ServerName       : srv-iox-win.cloudapp.net
WopiZone         : external-https

Application      : Word
Extension        : DOCX
ProgId           :
Action           : attend
IsDefaultAction  : False
ServerName       : srv-iox-win.cloudapp.net
WopiZone         : external-https

Application      : Word
Extension        : DOT
ProgId           :
Action           : attend
IsDefaultAction  : False
ServerName       : srv-iox-win.cloudapp.net
WopiZone         : external-https

Application      : Word
Extension        : DOTM
ProgId           :
Action           : attend
IsDefaultAction  : False
ServerName       : srv-iox-win.cloudapp.net
WopiZone         : external-https

Application      : Word
Extension        : DOTX
ProgId           :
Action           : attend
IsDefaultAction  : False
ServerName       : srv-iox-win.cloudapp.net
WopiZone         : external-https

```

Check if all information is correct. If some information are wrong follow this steps:

- Change the **WOPIZone**: use the **Set-SPWOPIZone** command to change it
- Change the server name: use **Remove-SPWOPIBinding** and after **new-SPWOPIBinding** to recreate it.

After that, if the feature is still not available check your certificate for https connection (if you're using https transport, it's recommended for production farm)

If you get an error on your https certificate you need to correct it.

To control if your certificate is valid, you can simply open your browser and open the webpage: <https://my-owa-server/hosting/discovery> (replace my-owa-server by the name of your server)

If your problem is not solved, try to get more information's in the Office Web App logs.

## Issue 2

Your Binding is correct but you got "something went wrong" error message when you try to show a document preview or open document using Office Web App Farm.

### Resolution

- You can't use the Office Web App viewer feature with SharePoint farm account. Check if you are logged in with user account and not service account.
- If your problem is not solved, control the service availability of your Office Web App farm by using your browser for example and open the <https://my-owa-server/hosting/discovery> (replace my-owa-server by the name of your server)
- To get more information about your problem and maybe find help on SharePoint Community forums, you can try to identify the error directly in the logs of your Office Web App farm.

## Issue 3

Your SharePoint farm is bind with your Office Web App farm but when you try to open document it use the client application by default and not Office Web App.

### Resolution

You need do disable the "open in client application" feature, when this feature is disabled; all the office documents will be open using Office Web App farm by default.

## Issue 4

Your binding between your SharePoint farm and your Office Web App is working fine and you can open some document using Office Web App but you can't edit any documents

### Resolution

- Open a PowerShell terminal on your Office Web App server as administrator
- **Execute Set-OfficeWebAppsFarm -EditingEnabled**

Note: To edit documents using Office Web App you need to turn on user licensing. If you have a licensing issue please execute this command in PowerShell as administrator on your Office Web App server

```
$UL = New-SPUserLicenseMapping -Security Group "SP Users" -License OfficeWebAppsEdit
$UL | Add-SPUserLicenseMapping
Enable-SPUserLicensing
New-OfficeWebAppsFarm -Verbose -InternalUrl https://my-owa-server-name -ExternalUrl https://owa-fqdn -CertificateName "My cert" -ClipartEnabled -TranslationEnable -EditingEnabled
```

## Issue 5

Your Office Web App farm is inaccessible via SharePoint

### Resolution

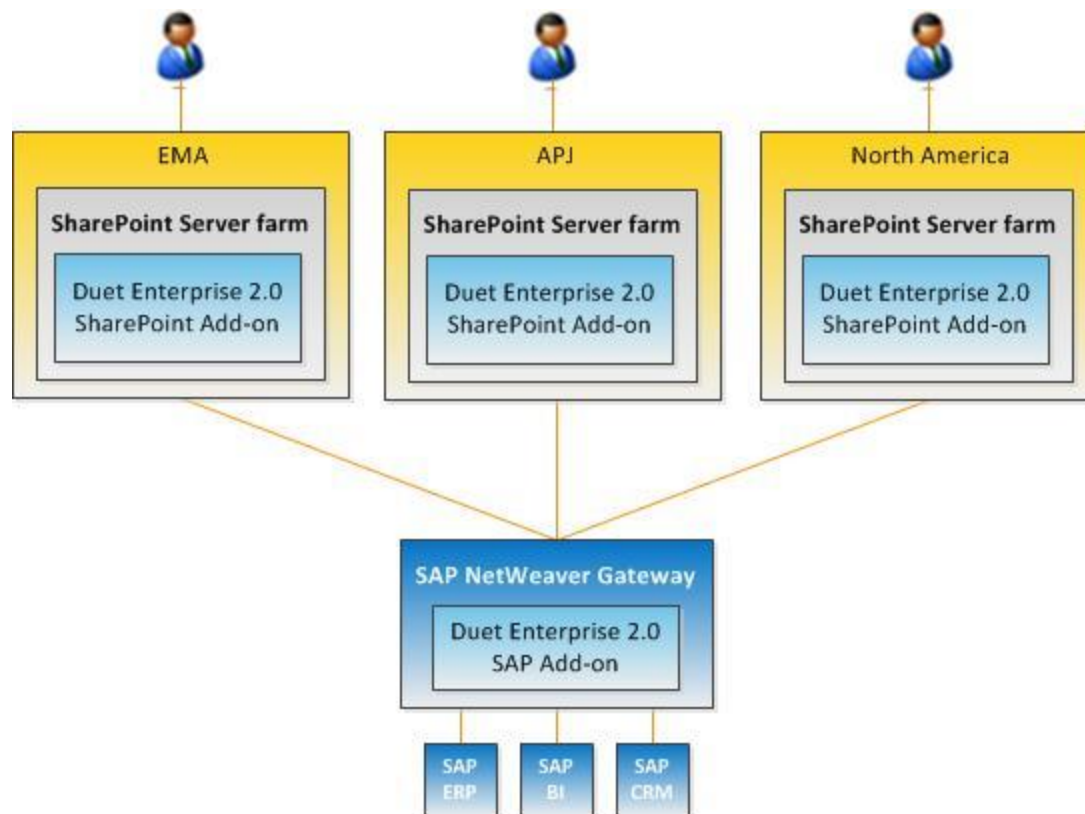
- Check if your server is in good state
- Check all Office Web App services are correctly started
- Control the proxy parameter is correct
- Check your firewall rules applied on your server environment
- Try to identify the problem directly in the Office Web App logs

## Troubleshooting article - Duet 2.0 Issues

### Introduction

**DUET** 2.0 is a solution developed by SAP & Microsoft to provide some features for interaction with SAP system using SharePoint. In the package we can find an SSO provided feature, some web parts, OData service provisioning...

**DUET** must be installed on SAP side for OData service provisioning and others features and of course on the SharePoint Side.



### Troubleshooting

#### Issue 1:

You installed DUET 2.0 on your SharePoint farm but some services do not work properly.

#### Resolution:

- Check the configuration of DUET using the **DuetConfig.exe -CheckConfiguration** (you can find duetconfig.exe directly in the installation directory: %ProgramFiles%/Duet Enterprise/2.0/ )

```

Directory: C:\Program Files\Duet Enterprise\2.0

Mode                LastWriteTime         Length Name
----                -
d-----         26/09/2013         21:11         BDC Models
d-----         26/09/2013         21:11         Solutions
d-----         26/09/2013         21:11         Supportability
-a-----         1/10/2012         20:34        112264 DuetConfig.exe
-a-----         1/10/2012         20:34        34464 DuetConfig.Intl.dll
-a-----         1/10/2012         20:34        20616 OBA.Server.Logging.Resources.dll

PS C:\Program Files\Duet Enterprise\2.0> .\DuetConfig.exe -CheckConfiguration
Please wait while the check configuration result is retrieved and written to the output file. This operation can take several minutes to complete...

```

- DuetConfig will generate an html report, you need to get all green points on the report to validate your installation.

## Duet Enterprise Configuration Check

### Overall Status

Status	Message
Success	Configuration check was successful. Please review individual checks for further details.

### Farm-scoped Features

Status	Feature	FarmId
Success	<b>Role Sync</b> <a href="#">Diagnostic checks...</a>	f3c77628-f768-4970-86f9-75592f7ac300
Success	<b>Validate Root Authority Certificate</b> <a href="#">Diagnostic checks...</a>	f3c77628-f768-4970-86f9-75592f7ac300
Success	<b>Security</b> <a href="#">Diagnostic checks...</a>	f3c77628-f768-4970-86f9-75592f7ac300

### WebApplication-scoped Features

Status	Feature	Web Application
Success	<b>Publishing Settings</b> <a href="#">Diagnostic checks...</a>	
Success	<b>Reporting</b> <a href="#">Diagnostic checks...</a>	

- Check the installation directory if you have all required files





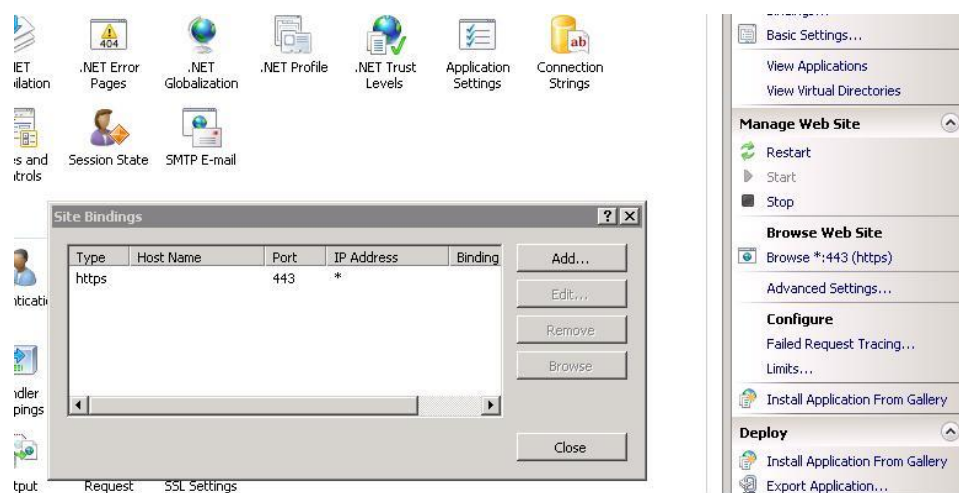
## Issue 2

You got an error concerning publishing site, the duet configuration report alert about publishing feature can't work properly

Failure	PublishingUrl	Checks and validates the PublishingUrl configuration setting.	The Duet Enterprise Publishing URL ( ) is not managed under the configured web application.	Configure Duet Enterprise with a valid publishing URL which belongs to the configured web-application.
---------	---------------	---	---	--

## Resolution:

You need a webapp with publishing feature activated, you need to check if it's your case. After that you need to remove some host header on this web app to give the access on your duet feature.



If you need an access on multiple URL use **AAM** (Alternate Access Mapping available in SharePoint central administration)



### Issue 3

When you trying to import **BDCM** via **BCS** you get a Lob System returned authentication error.

#### Resolution

- Check if the configuration of DUET is in good state
- Check if the account that you use for the import have the rights in SAP System
- Your account need to be administrator of BCS to import BDCM
- You can try to get more information about your error directly in SAP Logs.
- If you using User Mapping in your SAP system, check if the mapping is correct and sure that you have only one way account mapping.

### Issue 4

When you trying to create an external content type using SAP WCF, you got an error during the creation "**authentication error**"

#### Resolution:

- You need to check if your account have the right in SAP system to use this SAP WCF
- When you entering you credential, don't put the domain.
- Check if your metadata url using HTTPS and the endpoint using HTTPS
- Check the certificate is valid for your https metadata url and endpoint.

### Issue 5

You want to use SSO provided by DUET but it do not work

Success	Role Sync			
	<a href="#">Diagnostic checks...</a>			
Failure	Validate Root Authority Certificate			
	<a href="#">Diagnostic checks...</a>			
	Result	Name of the check	Description	Message
	Failure	Validate Root Authority Certificate	Root authority certificate validation check	There was an error while checking root authority certificate configured in secure store service application. Please check the SharePoint logs for more details. Correlation Id: 00000000-0000-0000-0000-000000000000
Failure	Security			
	<a href="#">Diagnostic checks...</a>			
	Result	Name of the check	Description	Message
	Failure	RoundTripCheck	Round trip security, configuration and performance check	The Security check failed with error: Finder method call failed. Exception in invoking the ODataExtensionProvider of type 'OBA.Server.Canary.ObaOdataServerExtensionProvider'. Please check connectivity to the SAP system. Contact the SharePoint administrator for additional information.

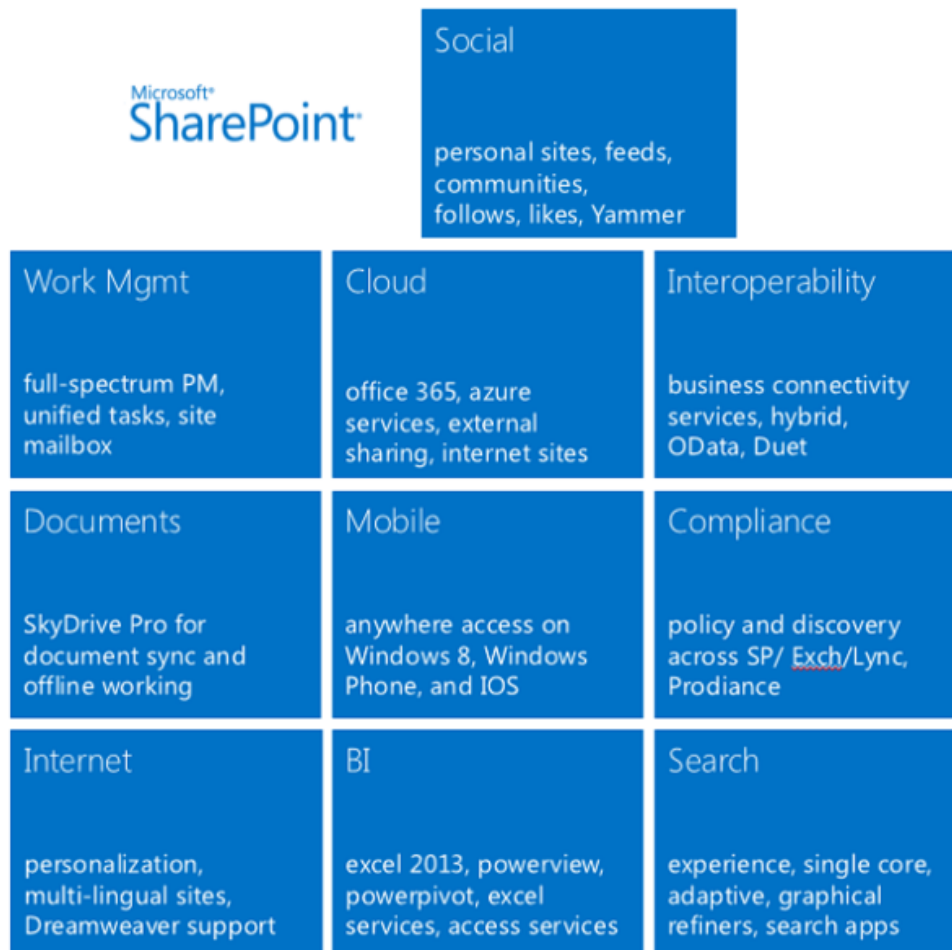
## Resolution

- Go to the SharePoint Central administration and check this points
  - You have Duet application in your secure store
  - The **SAP GW** Certificate is correctly installed and set in the secure store
  - The DUET certificate generated on SharePoint side is correctly installed on your **SAP environment**.

## Troubleshooting article - SharePoint 2013 General issues

### Introduction

SharePoint 2013 gives some great improvements on your SharePoint platform and your business. These solutions become the IT Access point with some great features perfectly integrated with some Microsoft environment already installed in companies.



## Troubleshooting

### Issue 1:

#### ⚡ Catégorie : Configuration (1)



Des dépendances côté serveur sont manquantes.

You get some missing dependency alert in your SharePoint farm health analyzer

#### Resolution:

Two ways to resolve this problem:

- Using **FeatureAdmin** tool provided by **CodePlex** Community (you can download it at this url: <http://featureadmin.codeplex.com/>)
- Using SQL on your SharePoint Databases (you need to back up your database and it not recommended, only for advanced SharePoint administrator)

#### [MissingSetupFile]

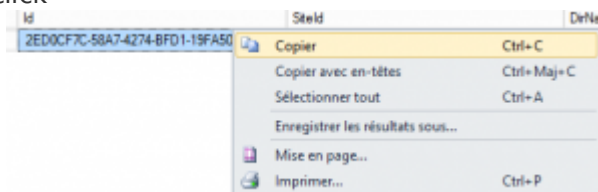
You need to get the URL of missing setup file in the alert in health analyzer. After that put in in this SQL Request and execute it.

- 1 **select** \* **from** AllDocs
- 2 **where** SetupPath like '%Features\MetroGrid\_Feature1\MetroGridResources\css\custom-theme\images\ui-icons\_cd0a0a\_256x240.png%'

This request will return all reference of this setupfile

Résultats		
Messages		
Id		
SiteId		
DeName		
1	2ED0CF7C-58A7-4274-BFD1-19FA50811519	C:\REDO02\0CC14AA2\B0E6\02BAEAF\2CF8 MetroGridResources\css\custom-theme\images

Copy the ID using right click



After that, execute the delete request.

- 1 **delete from** AllDocs **where** id = '2ED0CF7C-58A7-4274-BFD1-19FA50811519'

The reference has been removed and you can check by reanalyze action in your health analyzer.

**For the others problems it's the same procedure.**

#### [MissingFeature]

- 1 **select** \*
- 2 **from** features
- 3 **join** webs **on** (features.webid = webs.id)
- 4 **where** featureid = 'Missing Feature ID'

#### [MissingAssembly]

```

1 SELECT *
2 from EventReceivers event
3 join webs on (event.webid = webs.id)
4 join sites site on (site.id = event.siteid)
5 where Assembly = 'Missing assembly name'

```

### [MissingSiteDefinition]

```

1 select *
2 from webs
3 where webtemplate = 'Template ID'

```

### [MissingWebPart]

```

1 select *
2 from AllWebParts webpart
3 join alldocs doc on (webpart.tp_PageUrlID = doc.ID)
4 join sites site on (site.id = webpart.tp_siteid)
5 where tp_WebPartTypeid = 'Webpart ID'

```

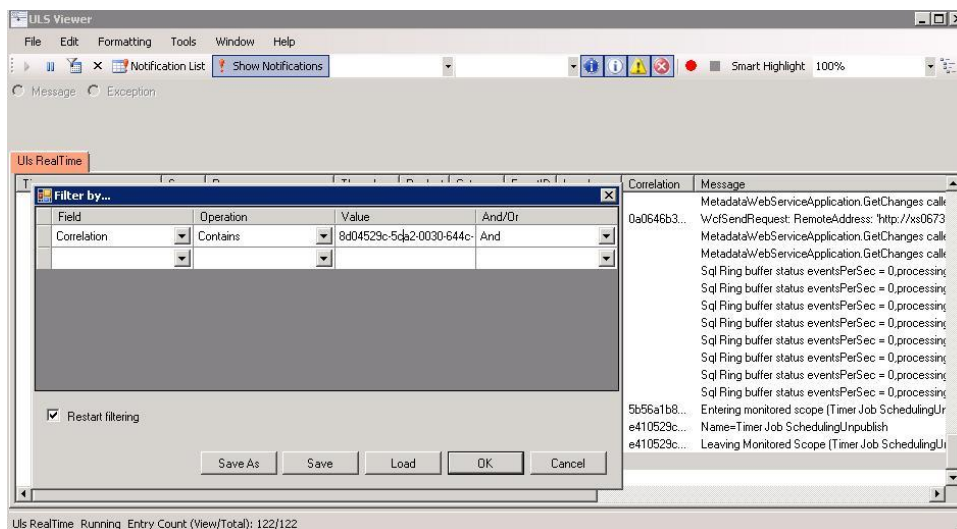
## Issue 2

ID de corrélation :8d04529c-5ca2-0030-644c-87c824cf7de7

You get a SharePoint error with correlation ID. You need to get more information about this problem.

## Resolution:

You can get more information about your problem directly in **SharePoint ULS Logs**. You can use a tool (for example: ULS viewer).



## Issue 3

In a document library, you want to use multiple document upload but the feature is unavailable

### Resolution:

To use multiple upload features you need to get some components like:

- ActiveX installed and activated on your browser
- A browser that support this feature
- The client integration activated in SharePoint Central Administration

Where you can activate the client integration?

Go to your SharePoint central administration and click on **Application management > Manage web applications**



Select your web application and click on authentication provider, scroll down and change the parameter Client integration to Yes

**Client Integration**

Disabling client integration will remove features which launch client applications. Some authentication mechanisms (such as Forms) don't work well with client applications. In this configuration, users will either have to use browser-based editors to edit their documents or work on them locally and upload changes. Note: If client integration is turned on in conjunction with Forms mode, anonymous access should also be turned on or Forms aware client applications may fail to authenticate correctly.

**Enable Client Integration?**  
☒ Yes ☐ No

Save

Cancel

## Issue 4

Your User Profile Service is correctly configured but when you launched a **full synchronization**, nothing is filled

### Resolution:

You have different way to synchronize accounts using user profile service. You can use the older method "**import AD**" that do not need to start the User Profile synchronizer. The other recommended method is to use this User Profile Synchronizer.

If you choose the last option, please check if all your configuration is correct:

- The service account and password is correctly configure.
- Your service account have the rights on your AD forest to read it and read all children.
- Your synchronization connector is configured correctly.

You must configure this service using SharePoint Central Administration only! You can't edit parameters directly in the windows services!

If you always have an issue, try to get more information about this error using ULS logs.

## Issue 5

You developed a solution using **SSRS (SQL Server Reporting Service)** in SharePoint integrated mode. In your development you trying to put an SSRS report directly in SharePoint Application Page. When you trying to access it, you get an error or the report viewer showing blank page.

### Resolution

To use report viewer component with SharePoint SSRS integrated mode, you need to check first if you're SSRS integrated mode is correctly configured. You can use your browser to check if your configuration works fine.

**(http/https://my\_sharepoint/\_vti\_bin/ReportServer/)**

When you are developing your report you must deploy an .RDL file and not an .RDLC (created by visual studio)

To create a .RDL report you can use Report Builder 3 to create your report and test it directly using your SharePoint SSRS in integrated mode.

To put your report in your application page you must add some reference to the reporting service and add the component to your ASPX page (**rsweb:ReportViewer**) with Remote Server configuration and give the url of the Report Server integrated in SharePoint:

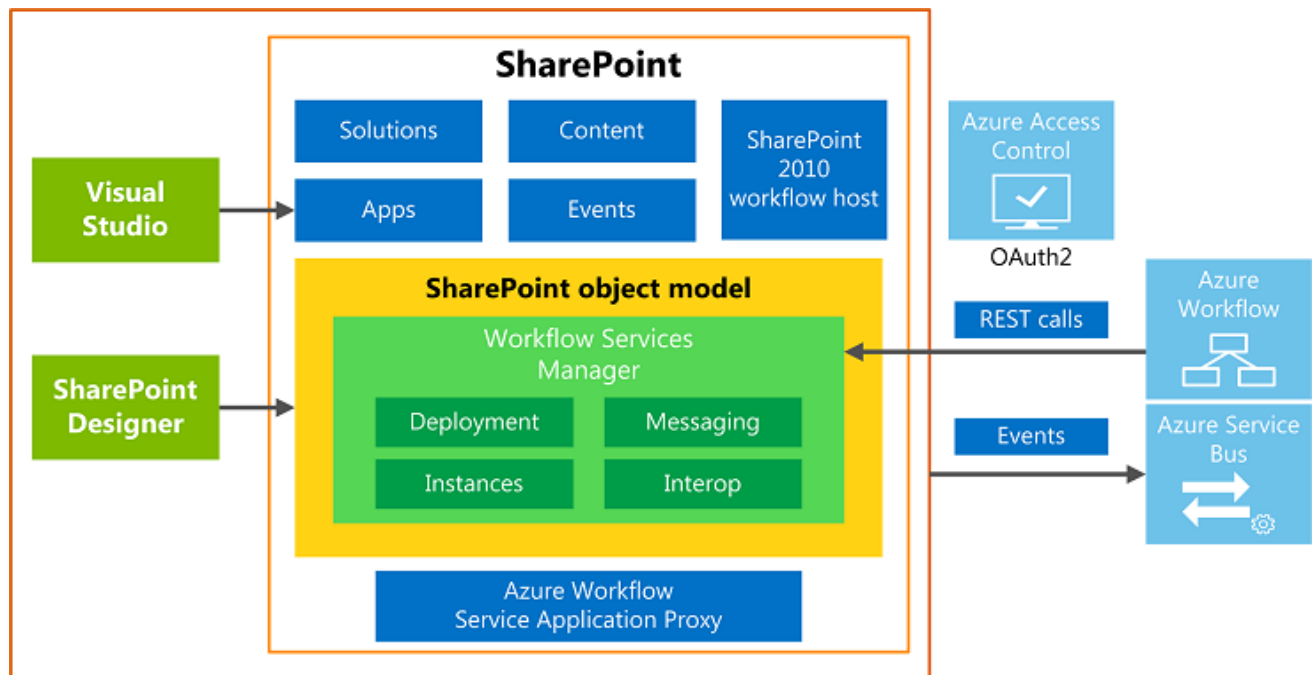
http/https://my\_sharepoint/\_vti\_bin/ReportServer/



# Troubleshooting article - Visual Studio / SharePoint Designer Developer issues

## Introduction

For SharePoint 2013 development, you can use SharePoint Designer 2013 tool for simple development and Visual Studio with Office 15 SDK to develop SharePoint 2013 Apps, solutions and workflow using workflow manager 1.0 farm.



In this article, will be explain different issues that you can get during your development.

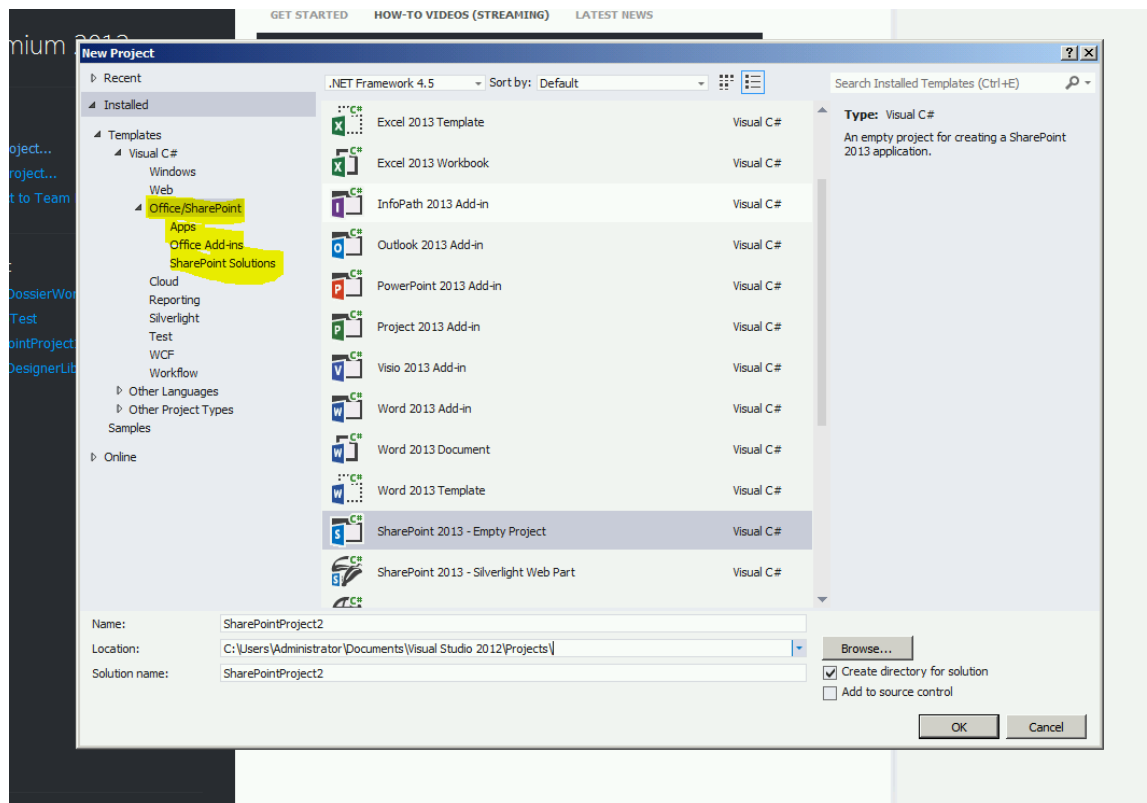
## Troubleshooting - Visual Studio

### Issue 1

You want to develop a SharePoint solution but when you try to create a project, you doesn't have any project template for SharePoint 2013 development.

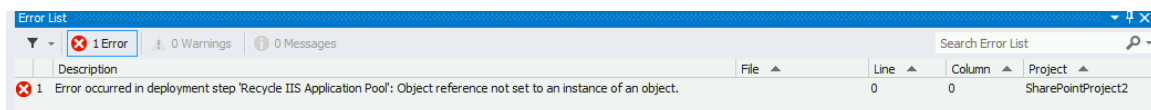
### Resolution:

You need to get the office 15 SDK for office and SharePoint development. You can get this package directly on Microsoft website <http://msdn.microsoft.com/en-US/office/hh133430>  
You need to install this package and restart your visual studio tool, after that you will get some SharePoint 2013 projects

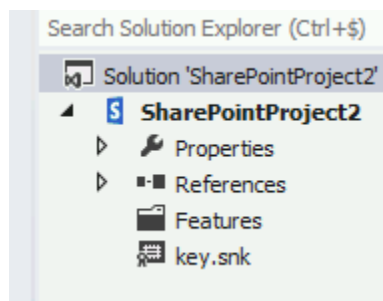


## Issue 2:

You are using TFS (Team Foundation Server) for source code control. You create a SharePoint solution and you check in your code for the first time on you TFS. When you get the latest version of your project, the package folder has been deleted from file system and you get this error when you try to deploy your solution



When you control your project folder the package folder is missing and it missing in your solution explorer too.



## Resolution

You have two ways to resolve this problem:

The first is to recreate your visual studio project, drag and drop all you development in the new project.

Delete all old project files from your TFS server and check in to your TFS the new project.

The second solution is to edit in text editor the CSProj file of your project.

You need to localize the <itemGroup> and just add:

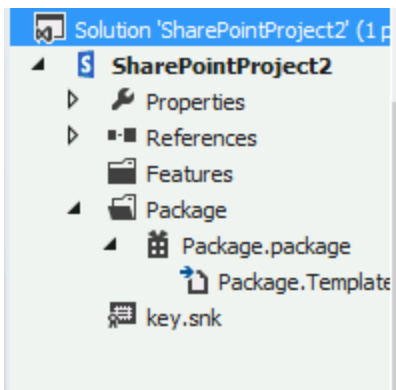
```
<None Include="Package\Package.package">
  <PackageId>{GUID}</PackageId>
</None>
<None Include="Package\Package.Template.xml">
  <DependentUpon>Package.package</DependentUpon>
</None>
```

You will get this result:

```
<ItemGroup>
  <None Include="key.snk" />
  <None Include="Package\Package.package">
    <PackageId>{2bae92e3-a0e0-4220-8c43-02197dc86596}</PackageId>
  </None>
  <None Include="Package\Package.Template.xml">
    <DependentUpon>Package.package</DependentUpon>
  </None>
```

You need to restore the package folder from the trash of your server.

After that, you can reopen your SharePoint project and you can get your package folder back.



### Issue 3:

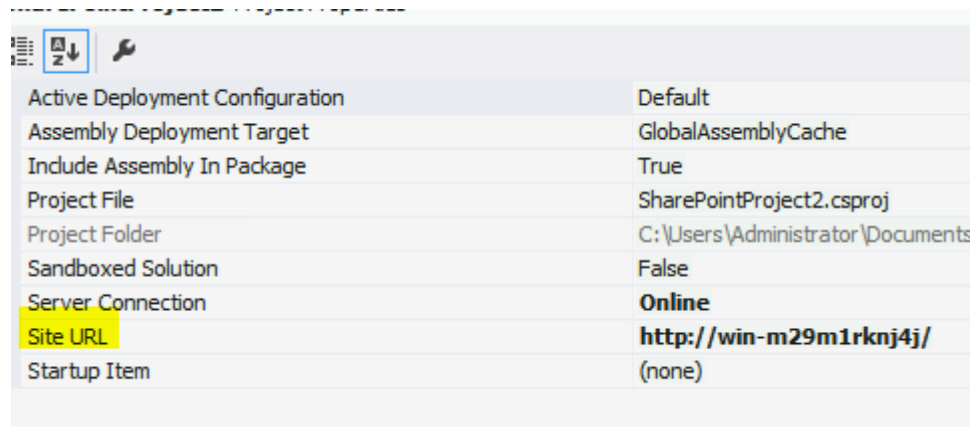
You want to debug your SharePoint solution and you got an error message about web application configuration error.

It's an web.config file error, maybe the web.config file is malformed.

### Resolution:

You can control if the file is correctly formed using advanced text editor to get colored syntax or simply restore the last backup of your web.config file.

If you need to debug quickly and you prefer to take your time to find the problem in your web.config file, you can just create a new SharePoint web application and modify the url for debug your solution on this new web app

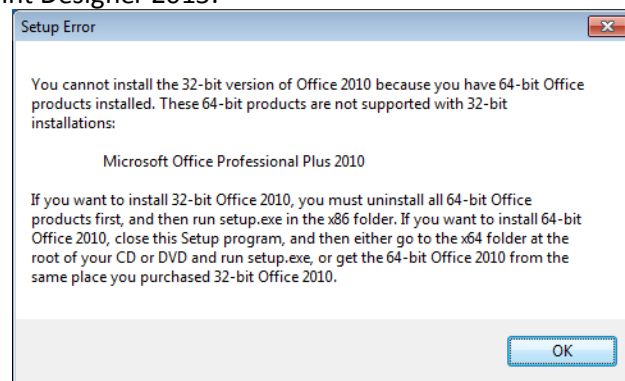
A screenshot of the 'Deployment Configuration' window in Visual Studio. The window has a toolbar with icons for a list, a download, and a refresh. Below the toolbar is a table with configuration settings. The 'Site URL' row is highlighted in yellow.

Active Deployment Configuration	Default
Assembly Deployment Target	GlobalAssemblyCache
Include Assembly In Package	True
Project File	SharePointProject2.csproj
Project Folder	C:\Users\Administrator\Documents
Sandboxed Solution	False
Server Connection	Online
Site URL	http://win-m29m1rk4j/
Startup Item	(none)

## SharePoint designer

### Issue 4:

When you want to use multiple SharePoint designer release (2007, 2010 & 2013), you got an error when you try to install SharePoint Designer 2013:



SharePoint Designer 2007 do not exist in 64bits release.

## Resolution

You need to uninstall all versions of office or SharePoint designer and install SharePoint designer in this order:

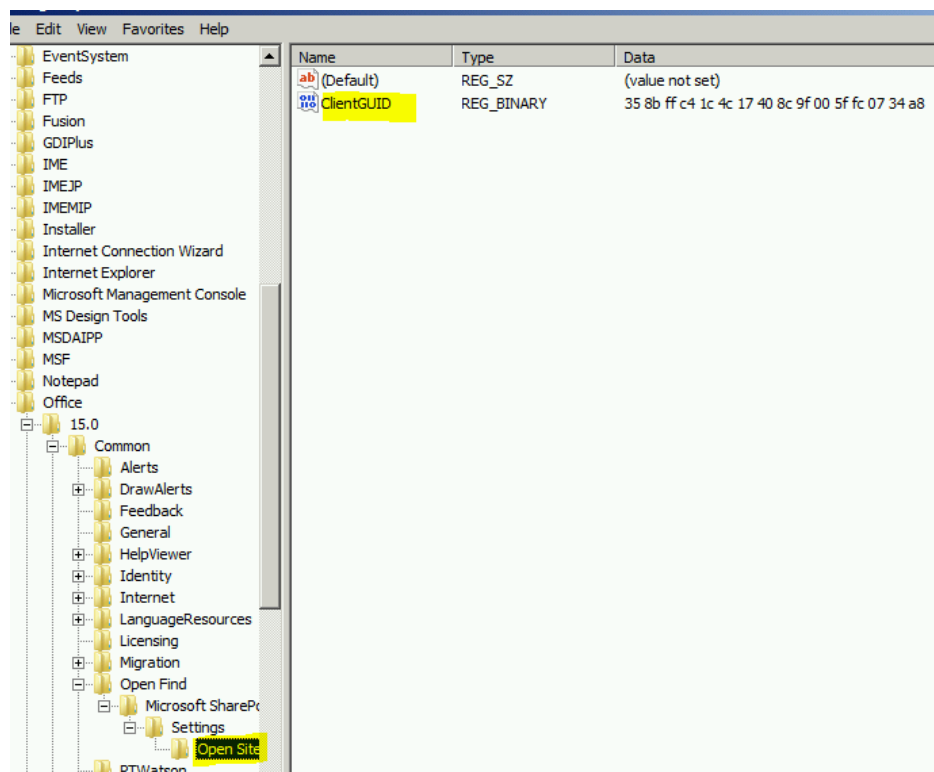
- Install of SharePoint Designer 2013 x64
- Install of SharePoint Designer 2010 x64
- Install of SharePoint Designer 2007 x32

## Issue 5:

When you trying to open site from SharePoint designer 2013, it crashing.

## Resolution:

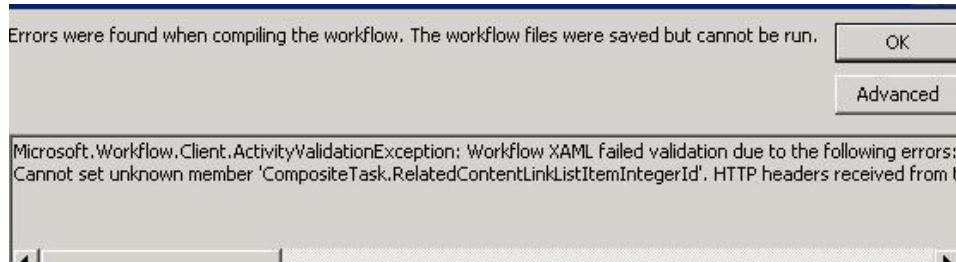
- Open **Regedit**
- Search for the key Open Site  
(HKEY\_CURRENT\_USER\Software\Microsoft\Office\15.0\Common\Open Find\Microsoft SharePoint Designer\Settings\Open Site)
- Delete the ClientGUID key



- Try to open your site by SharePoint Designer

## Issue 5:

When you try to develop and publish workflow 2013 using visual studio 2013 or SharePoint Designer you got this error:



## Resolution

If you made several modifications on your farm for example an update, you need to "**resync**" your farm using PowerShell

```
Register-SPWorkflowService -SPSite "SiteURL" -WorkflowHostUri 'WorkflowHostURL' -Force
```

This command will re-registered your workflow manager machine with SharePoint 2013 and after that you can just reopen your development tool.

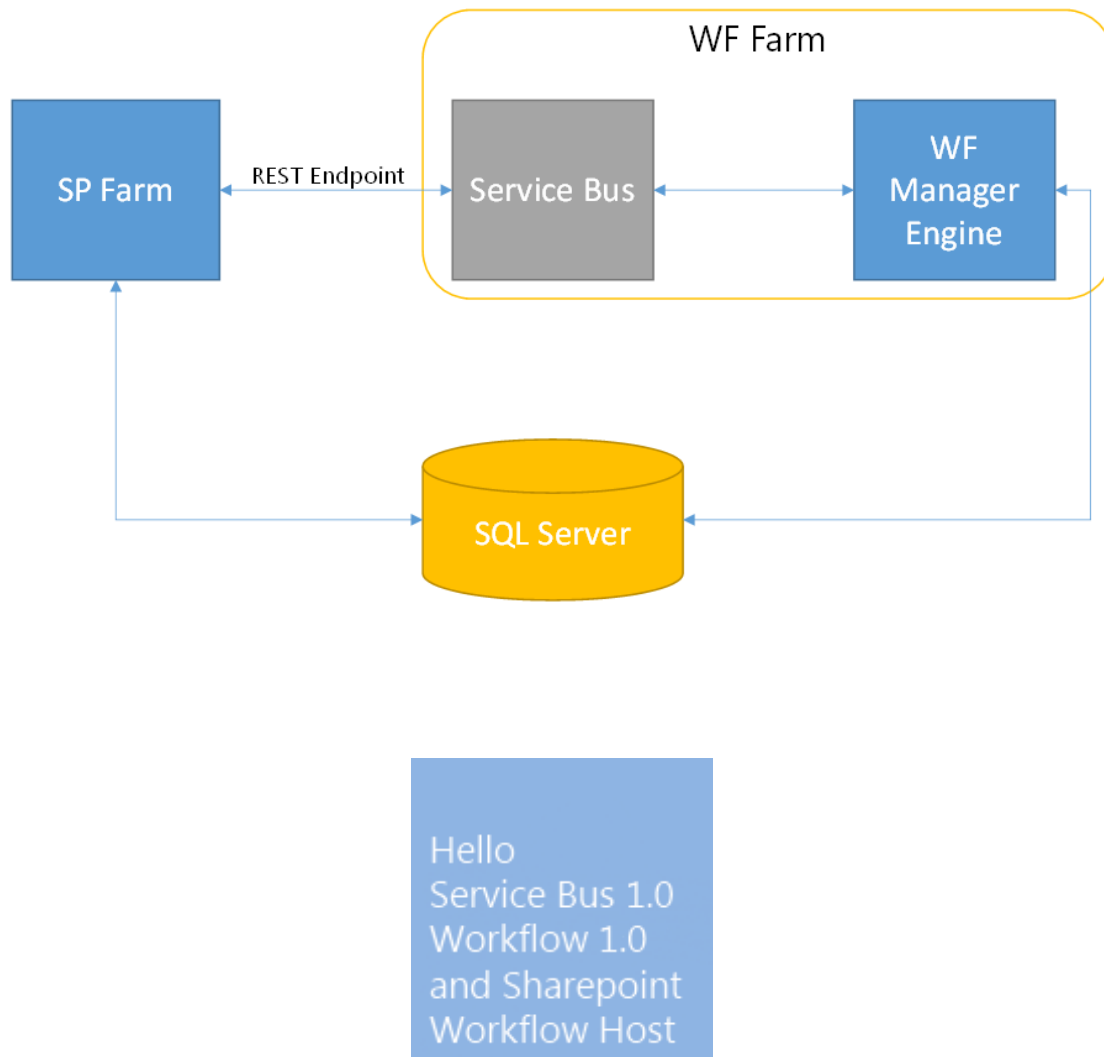
- Visual Studio 2012
- SharePoint Designer 2013

## Troubleshooting article - Workflow manager 1.0

### Introduction

If you want to use the new workflow SharePoint 2013, you need to install a workflow manager farm because there are not included in SharePoint Solution.

The workflow manager farm work with IIS for service exposure, service bus for the communication between SharePoint farm and Workflow manager farm, workflow manager client to get an application proxy in your SharePoint farm and SQL Server to store some workflow related data.



## Troubleshooting

### Issue 1:

When you install your workflow manager farm and you try to bind your SharePoint farm with your workflow manager farm, PowerShell term return an error: "**Command not found**" or an assembly problem.

```
Register-SPWorkflowService : Could not load file or assembly  
'Microsoft.Workflow.Client, Version=2.0.0.0, Culture=neutral,  
PublicKeyToken=31bf3856ad364e35' or one of its dependencies. The system cannot  
find the file specified.  
At line:1 char:1
```

### Resolution:

- Check if you have the SharePoint standard or enterprise edition, Foundation can't use workflow 2013.
- You need to install workflow manager client on your SharePoint farm machine from web platform installer.



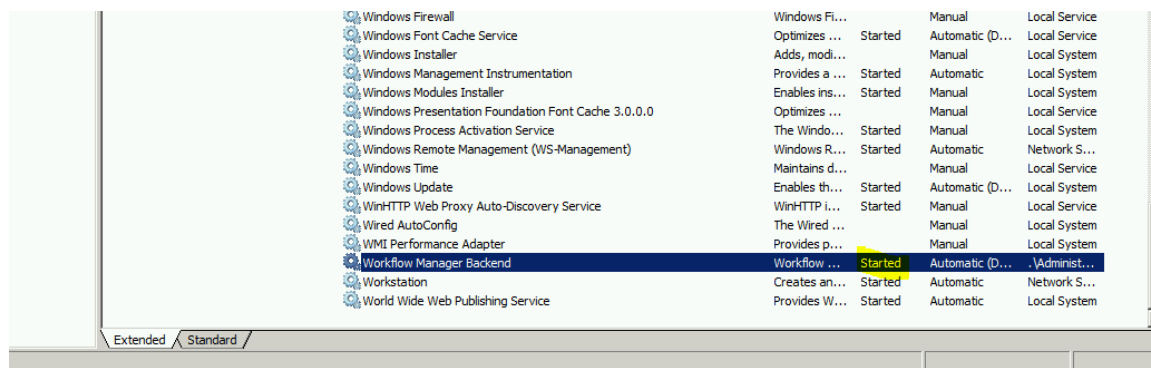
### Issue 2:

When your workflow manager farm is install and you try to access on the endpoint by http or https protocol, workflow manager return an internal server error.

### Resolution:

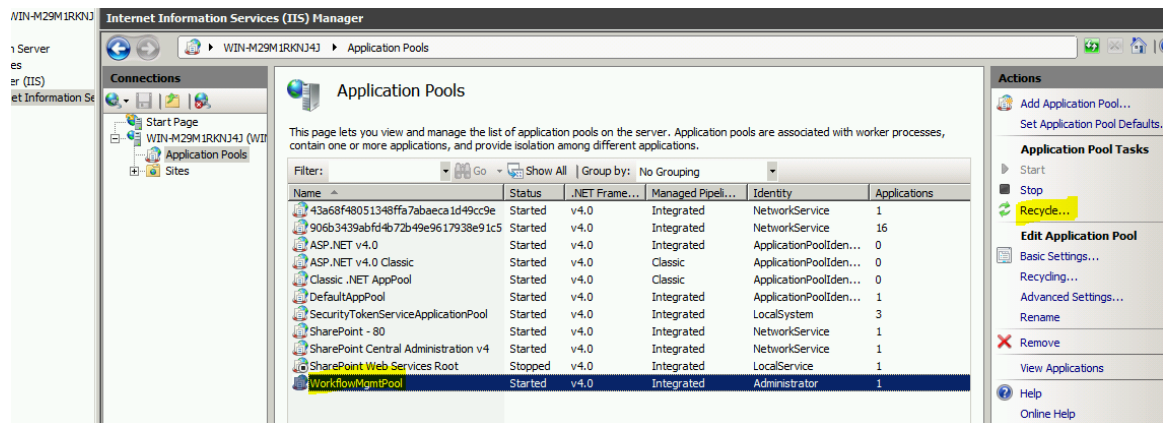
For an unknown reason, you need to reinstall your workflow manager farm. But before that you need to try these following steps:

Check if all the service of workflow manager are correctly started (workflow manager backend, service bus message broker, service bus gateway, windows fabric host service) by using **services.msc** command.

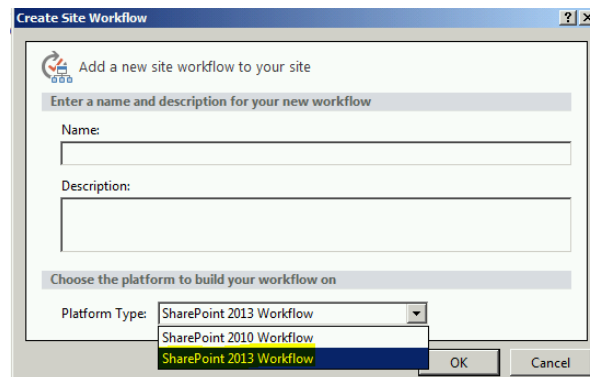


Try to resolve your problem by recycling the workflow management pool by IIS.





### Issue 3:



You trying to create new workflow SharePoint 2013 from SharePoint Designer 2013. You don't have the SharePoint 2013 workflow option in the dropdown list.

### Resolution:

- Check if the your workflow manager farm is installed correctly and working fine by accessing to the url:
  - For HTTPS: <https://domain:12290>
  - For HTTP: <http://domain:12291>

You will get xml data with the scope, the farm configuration and farm administrators.

```
<ScopeInfo xmlns:i="http://www.w3.org/2001/XMLSchema-instance" xmlns="http://:
  <ChildScopeCount>1</ChildScopeCount>
  <DefaultWorkflowConfiguration/>
  <Description>Root Scope</Description>
  <LastModified>2013-10-10T11:30:00.45</LastModified>
  <LastRevised>2013-10-10T11:30:00.45</LastRevised>
  <Path>/</Path>
  ▼<SecurityConfigurations>
    ▼<ScopedSecurityConfiguration i:type="WindowsSecurityConfiguration">
      ▼<Name>
        Microsoft.Workflow.Management.Security.WindowsSecurityConfiguration
      </Name>
      <WorkflowAdminGroupName>BUILTIN\Administrators</WorkflowAdminGroupName>
    </ScopedSecurityConfiguration>
  </SecurityConfigurations>
  <Status>Active</Status>
</ScopeInfo>
```

- Check if your binding between your SharePoint farm and your workflow farm is completed and all services are started with "**Get-WFFarmStatus**" command

```
PS C:\Users\Administrator> get-wffarmstatus
```

HostName	ServiceName	ServiceStatus
WIN-M29M1RKNJ4J	WorkflowServiceBackend	Running
WIN-M29M1RKNJ4J	WorkflowServiceFrontEnd	Running

- If your binding do not exist run the PowerShell command:  
Register-SPWorkflowService -SPSite "<https://sharepoint.vlecerf.fr>" -WorkflowHostUri "<https://workflow.vlecerf.fr:12290>"

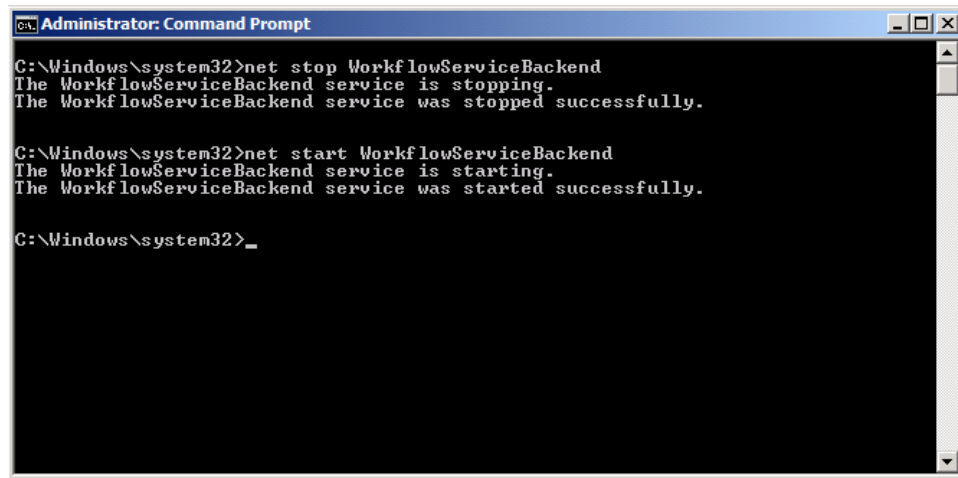
You can use HTTP binding by add the "-AllowOAuthHttp" argument in the command but it's not recommended for production environment.

#### Issue 4:

You published workflow via SharePoint Designer and your workflow stay in Not Started State.

#### Resolution:

- You can try to analyze the Workflow logs to get information about the error occurred
- Try to restart the different workflow services:



```
Administrator: Command Prompt

C:\Windows\system32>net stop WorkflowServiceBackend
The WorkflowServiceBackend service is stopping.
The WorkflowServiceBackend service was stopped successfully.

C:\Windows\system32>net start WorkflowServiceBackend
The WorkflowServiceBackend service is starting.
The WorkflowServiceBackend service was started successfully.

C:\Windows\system32>_
```

#### Issue 5:

You published a workflow in SharePoint 2013, your workflow stayed on "**Not Started**" status or is started but not terminated.

#### Resolution:

This problem has reported to Microsoft and will be fixed maybe in the next cumulative update of workflow manager.

The solution is to try to restart some workflow service or recreate the workflow manager farm.

You can try to remove your workflow directly in the workflow manager databases but I do not recommend this way.

The best way is to way a fix from Microsoft support but if you really need a fix the best way is to recreate your farm.

## Performance Issues with Search Service Application on SharePoint 2013

SharePoint 2013 has now as designed the architecture of FAST Search. This is one of the important reasons why more and more corporates are now switching to SharePoint 2013 and not to other collaboration platform's.

It sound perfect to have a SharePoint Server 2013 with fast; but if you're on a development environment with limited hardware resources, the chance exists that you're Virtual Machine became too slow or even worst it will not respond anymore and the only way is reboot your server



- Windows Server 2008R2
- AD Controller
- 512 Mo RAM

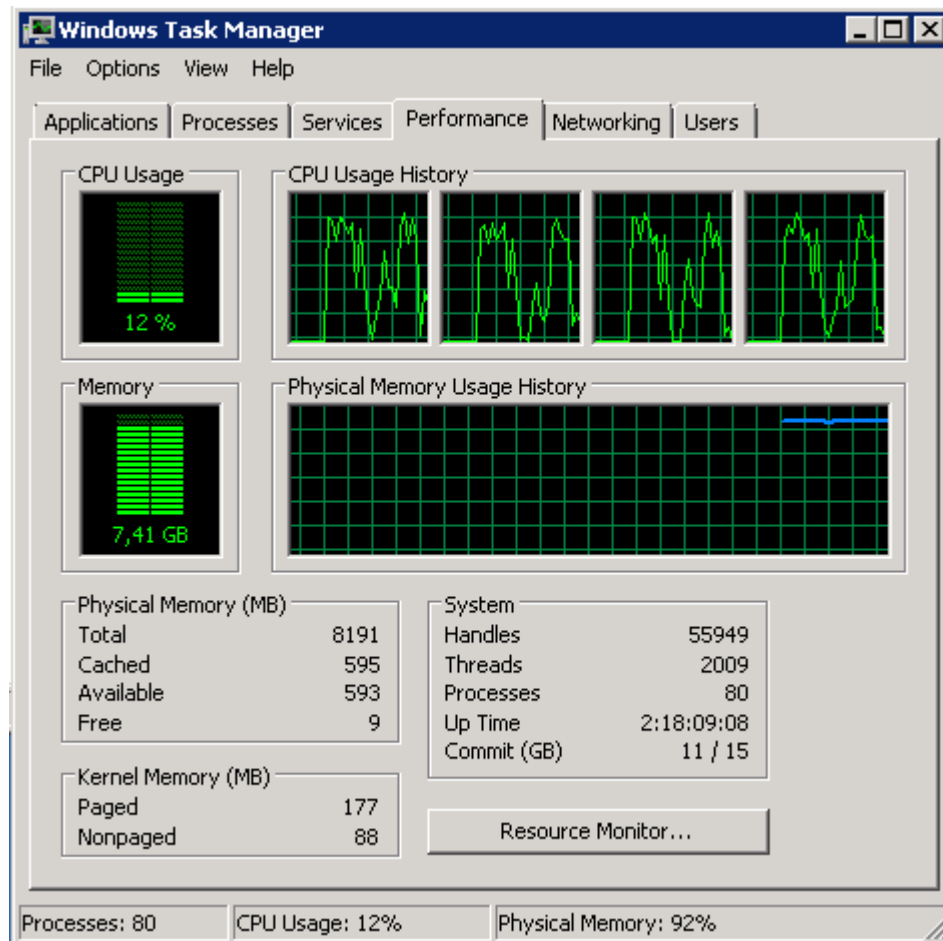


- Windows Server 2012
- SharePoint Server 2013 Enterprise
- 8 Go RAM

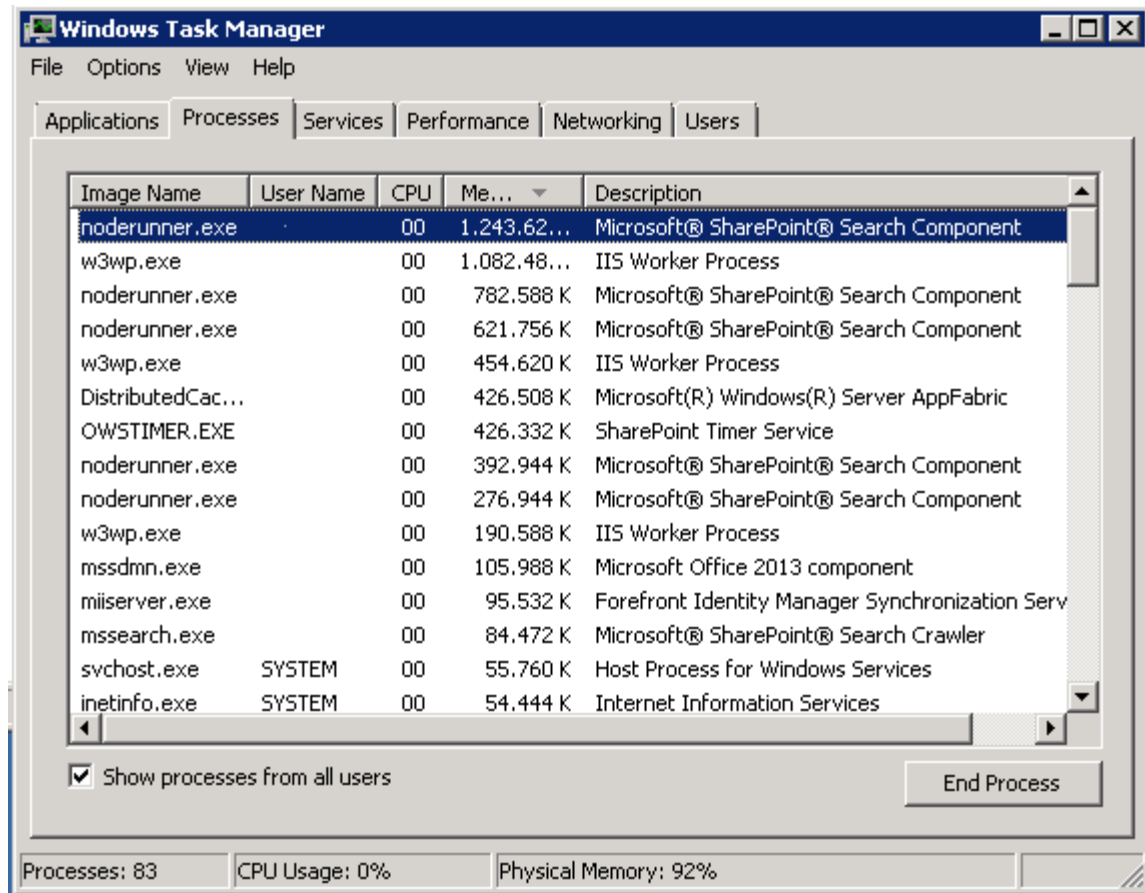
I have a SharePoint Farm installed on my laptop and only 2 Service Applications has been configured:

- Search Service Application
- Managed Metadata Service Application

Nobody is using or connected to the SharePoint Farm but the RAM has almost reached the Maximum

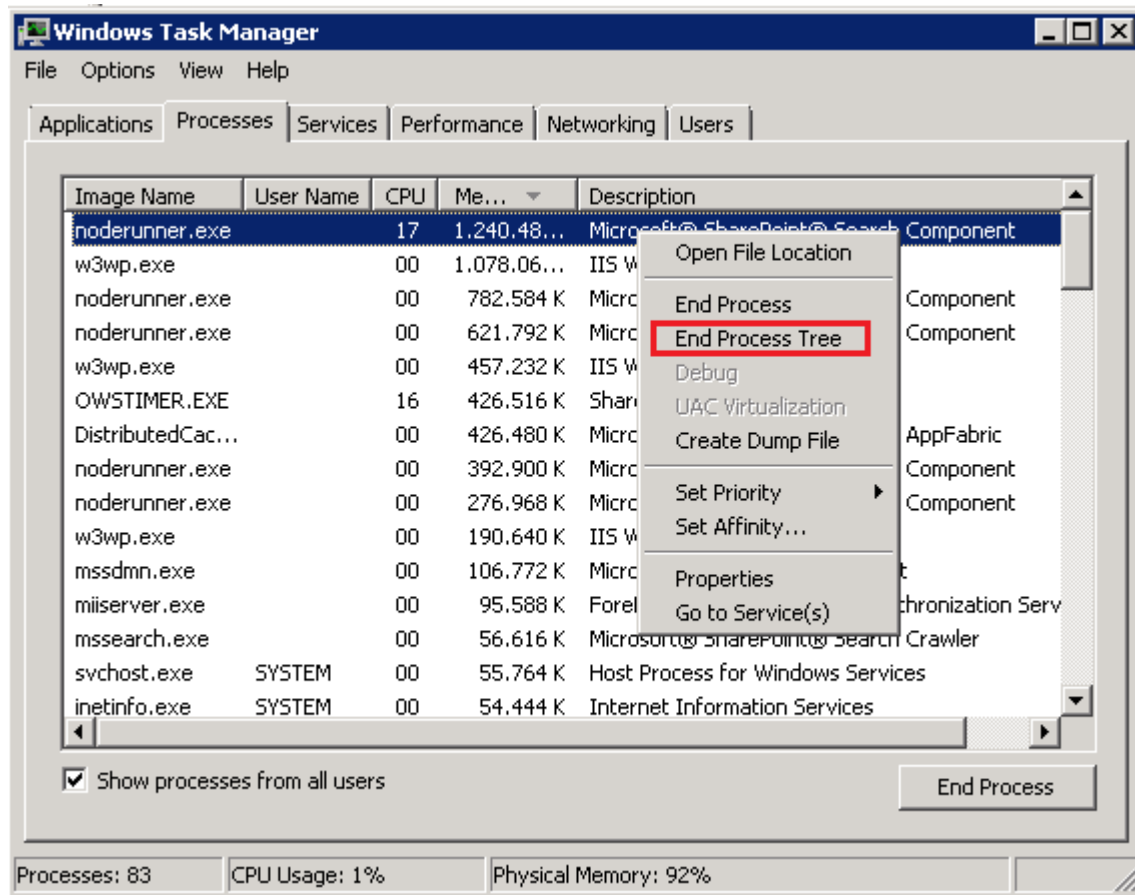


As you can see “**Noderunner.exe**” (Microsoft SharePoint Search Component) is itself consuming a lot of memory and the same Process is running multiple times. Noderunner.exe is the new executable of search service on SharePoint 2013. This process can’t turn it off because Search is one of essential service application in SharePoint 2013, and it is integrated in many features.



### Test: Warrior Way

Let's kill manually these services and see if my SharePoint site is still answering. Select your process and hit "End Process Tree". This will kill the Process and all children that are attached to him.



As I'm on my Development machine I'm doing the same operation on all the Processes.

Image Name	User Name	CPU	Me...	Description
w3wp.exe		00	688.896 K	IIS Worker Process
DistributedCac...		00	444.428 K	Microsoft(R) Windows(R) Server AppFabric
OWSTIMER.EXE		03	377.416 K	SharePoint Timer Service
w3wp.exe		00	343.616 K	IIS Worker Process
noderunner.exe		00	302.928 K	Microsoft® SharePoint® Search Component
noderunner.exe		00	269.848 K	Microsoft® SharePoint® Search Component
w3wp.exe		00	250.348 K	IIS Worker Process
noderunner.exe		00	193.328 K	Microsoft® SharePoint® Search Component
noderunner.exe		00	175.404 K	Microsoft® SharePoint® Search Component
noderunner.exe		00	151.288 K	Microsoft® SharePoint® Search Component

And **Strike!** Everything related to the Search (Content Search, Web Part ...) is broken. I can browse to my Website but can't execute anything related to the Search Service Application. As you can see this isn't the best approach to gain performance.

PS: I'm using the Search Service to make a rollup of all my sites in a site collection; please check: <http://gokanx.wordpress.com/2013/08/03/sharepoint-2013-cumulative-des-sites-grace-a-la-recherche-et-content-search/>

## Project Portal ①

Sorry, something went wrong.

HIDE DETAILS

Search has encountered a problem that prevents results from being returned. If the issue persists, please contact your administrator.

Correlation ID: 4aa1489c-f06f-f09c-100c-6ebc06a225cb

### Test: Official way

It's really annoying because the Search Service Application shouldn't not cause so much damage on our SharePoint Farm.

On SharePoint 2010 I knew we could configure the Search Service Performance Level with powershell.

### Powershell Cmdlet:

Get-SPEnterpriseSearchService | Set-SPEnterpriseSearchService –PerformanceLevel “PartlyReduced”

### Performance Level Explained:

- **Reduced:** Total number of threads = number of processors, Max Threads/host = number of processors
- **PartlyReduced:** Total number of threads = 4 times the number of processors , Max Threads/host = 16 times the number of processors
- **Maximum:** Total number of threads = 4 times the number of processors , Max Threads/host = 16 times the number of processors (threads are created at HIGH priority)

And in fact on SharePoint 2013 it's the same scenario. After searching a while I found on TechNet this article: <http://technet.microsoft.com/en-us/library/ff608126.aspx> who actually confirms my theory.



PerformanceLevel	Optional	System.String	<p>Specifies the relative number of threads for the crawl component performance:</p> <p><b>Reduced:</b> Total number of threads = number of processors, Max Threads/host = number of processors</p> <p><b>Partly Reduced:</b> Total number of threads = 4 times the number of processors, Max Threads/host = 16 times the number of processors</p> <p><b>Maximum:</b> Total number of threads = number of processors</p> <p>The type must be one of the following values: <b>Reduced, PartlyReduced, or Maximum.</b></p>
------------------	----------	---------------	--

Open PowerShell with a Domain Account who has Farm Administrator Rights and hit **Get-SPEnterpriseSearchService** and as imagined the **PerformanceLevel** is set up to Maximum.

```

Administrator: SharePoint 2013 Management Shell
PS > Get-SPEnterpriseSearchService

TypeName      : SharePoint Server Search
Id            : 5682cdeb-e45f-4d01-98e1-337fc3217883
ServiceName   : OSearch15
ProcessIdentity : 
ContactEmail  : 
Applications  : 
PerformanceLevel : Maximum
Status        : Online
  
```

To change this to reduced or partly reduced hit **Set-SPEnterpriseSearchService -PerformanceLevel Reduced** and restart the SharePoint Search if your Virtual machine is still answering. After this manipulation your SharePoint Server will be able to breathe and you can continue to work.

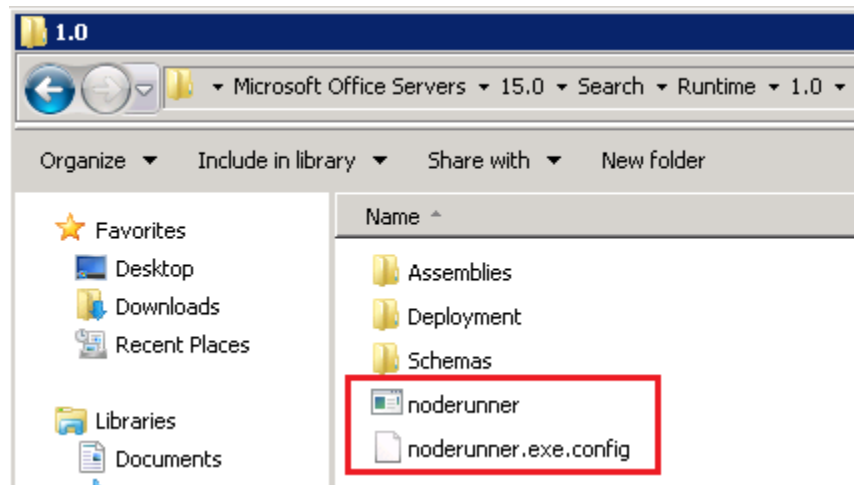
[Test: Not tested way](#)

You can also say that you want to have the Maximum Performance Level and refuse to change it to **reduced**.

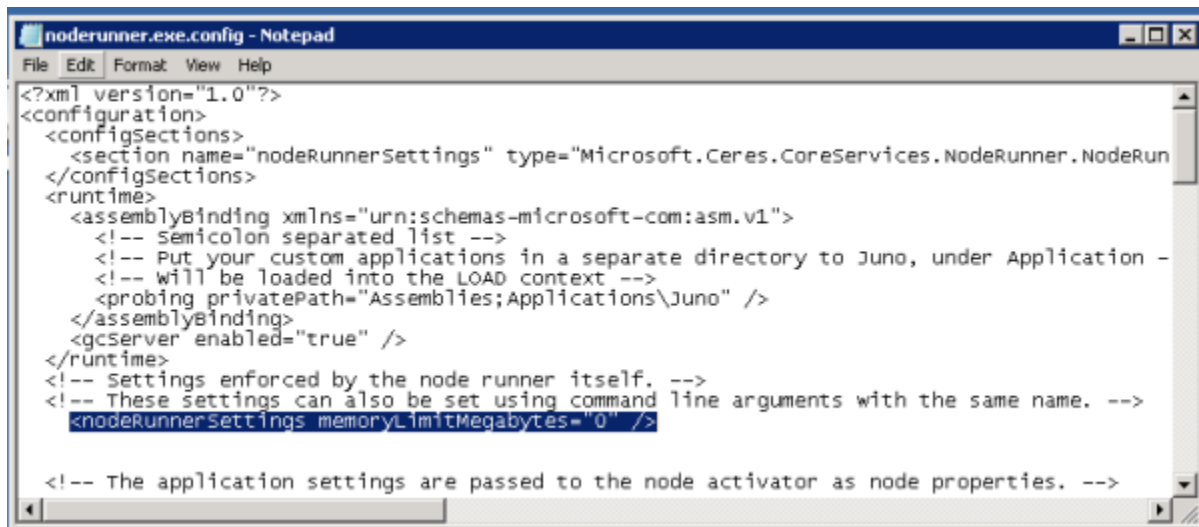
There is a Config file for **NodeRunner.exe's** configuration file that can limit RAM usage of a single process to specific value in megabytes.

You can find it under:

**C:\Program Files\Microsoft Office Servers\15.0\Search\Runtime\1.0\noderunner.exe.config.**



The configuration setting is called `memoryLimitMegabytes` and the default value is 0 (I guess **unlimited**). You can hit the value you want, save the file and restart your Search Service.



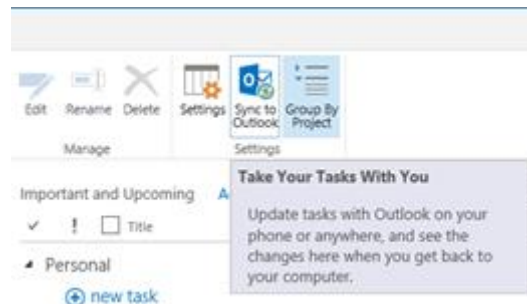
## Integration between SharePoint Server 2013 and Exchange Server 2013 can only be disabled on-premises

### Accessing the My Tasks feature

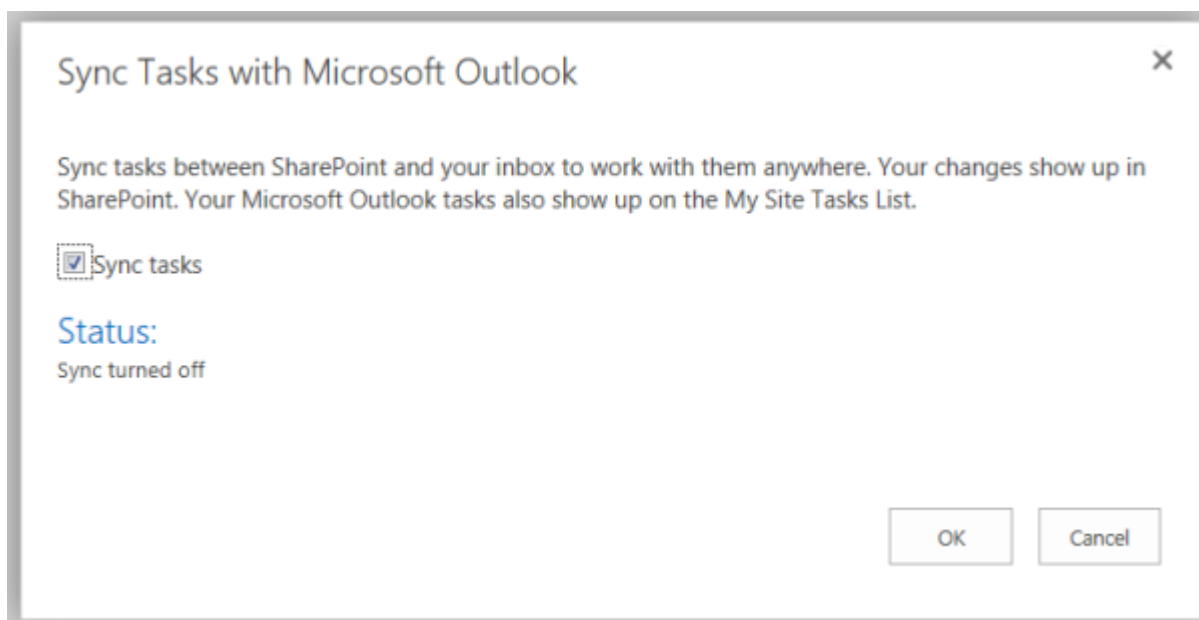
If the server is set with all the prerequisites, then the user can access the **My Tasks** page by navigating to his or her **Personal** page and then clicking the **Task** link in the left column.

### Issue from a PowerUser

When a user navigates to the SharePoint's **My Task** area, that user can find the **Sync to Outlook** button in the **Tasks** pane of the ribbon.

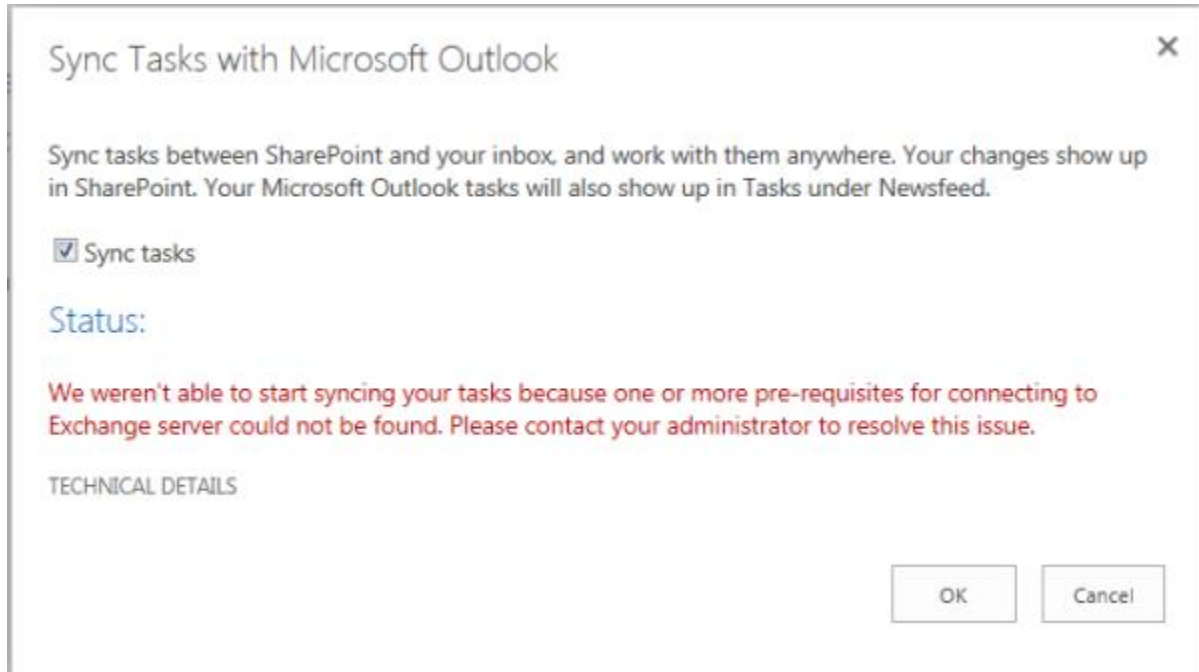


After clicking that button, the opt-in dialog box is shown. Select the **Sync tasks** check box to opt in.



When try to synchronize **My Tasks** with **Outlook 2010** you get the following error:

**We weren't able to start syncing your tasks because one or more prerequisites for connection to Exchange server could not be found. Please contact your Administrator to resolve the issue.**



According to some posts

A little search on the internet gave me this blog post:

(<http://netwovenblogs.com/2013/07/27/sharepoint-2013-outlook-tasks-synchronization-issue>) who confirms that I need the following prerequisites:

- You will need to have Exchange 2013 in your environment.
- You will also need to install Exchange 2013 Web Services Managed API 2.0

Strange issue isn't it? This is also meaning that all the corporates using Office 2007 or Office 2010 couldn't synchronize any task list anymore.

According to Microsoft TechNet

According to Microsoft TechNet: Before you begin this operation, we have review the following information about prerequisites:

- Task Synchronization requires that user profile synchronization be configured in the farm. For information about configuring user profile synchronization, see [Plan user profiles and identities \(SharePoint Server 2013\)](#), and [Manage user profile synchronization in SharePoint Server 2013](#).

- Task Synchronization requires that the work management service application be configured in the farm. For information about creating the work management service application, see [New-SPWorkManagementServiceApplication](#)
- **Task Synchronization requires Exchange Server 2013.**
- Secure Sockets Layer (SSL) is a requirement for web applications that are deployed in scenarios that support server-to-server authentication and app authentication. This is such a scenario. As a prerequisite for configuring Task Synchronization, the computer that is running SharePoint Server must have SSL configured. For more information, see [Create claims-based web applications in SharePoint 2013](#) and follow the steps for creating an SSL site collection and server certificate.

**Even TechNet confirms that we need Exchange Server 2013!**

## Resolution

After a while of searching we could found that Integration between SharePoint Server and Exchange Server can only be disabled on-premises who will resolve our issue.

To disable it, you turn off the **Farm Level Exchange Task Sync feature** by going to **Central Administration** è **Manage farm features**. This action deletes the timer job and disables the UI integration, bringing back the legacy sync behavior to Outlook.



## How does it work after deactivating the farm feature

Refreshing or accessing the **My Tasks** page launches the aggregator code, if the last time the aggregator ran was more than **five minutes** prior. This artificial delay is put in place to preserve performance.

There's no requirement to refresh the page after inline edits, as inline changes are instantly replicated on the original provider. The five-minute delay doesn't apply to them.

This value can be changed from on-premises deployments by altering the property on the WMA service application object by using Windows PowerShell: **minimumTimeBetweenProviderRefreshes 00:05:00**

## Reference

<http://social.technet.microsoft.com/Forums/sharepoint/en-US/bd7446be-cd01-4098-9ebd-6b67fc2cc1e2/error-when-trying-to-sync-tasks-to-outlook-from-sharepoint-2013?forum=sharepointgeneral>



## Distributed Cache (AppFabricCache) on SharePoint Server

This new way of caching was originally based on the “Cloud” of Microsoft (Azure) but has been integrated on the On Premise systems of Microsoft. The Distributed Cache can be deployed on 2 different ways

- **Dedicated Mode**
- **Collocated Mode**

On the dedicated mode only this service is running on the application server and all other services are stopped who is hosting the AppFabric Cache Service.

On The Collocated mode the Distributed Cache is running with all other Service Applications on the Application Server. This is the recommended mode for deploying Distributed Cache.

The SharePoint Prerequisites installation Wizard installs The AppFabric Cache who is needed for SharePoint 2013. Without these prerequisites you can't install or run SharePoint 2013. How do we configure it or how do we use this cache? Actually you have to do nothing, it's all made automatic. In a SharePoint Server 2013 farm, there must be at least one cache host running the Distributed Cache service.

What do we find on this cache?

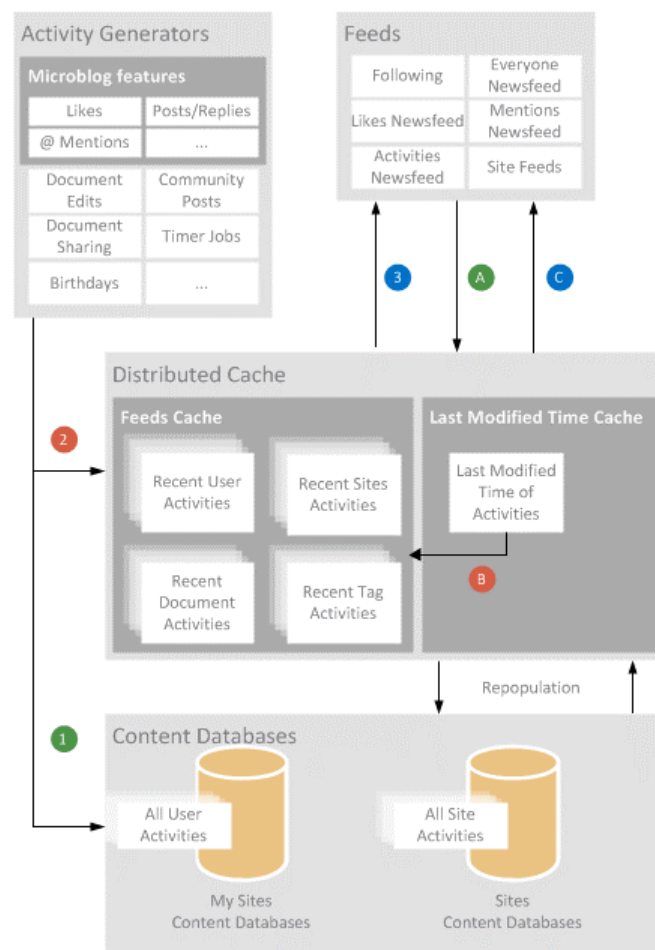
- Microblog activities
- Following activities
- User profile activities
- Document activities
- Claims, Security...
- Token

Check the following link to get a better overview of it: <http://technet.microsoft.com/en-us/library/jj219700.aspx>

## Benefits of using the microblog features, feeds, and the Distributed Cache

Some benefits of using microblog features, feeds, and the Distributed Cache include the following:

- Allows users to stay in touch with individuals and specific groups of people over time and distance.
- Allows users to stay informed about what's going in the organization.
- The focus of the interactions is around people or teams, and not so much the topic being discussed.
- It is difficult to keep track of activities related to documents, discussions, and lists in SharePoint without manually visiting the item regularly. Feeds collect and deliver information to users that they would otherwise have to spend time searching for.
- The feed gives users a single place where they can stay up-to-date with all of the content and people they work with.
- Allows quick conversations to take place.





For SharePoint Server 2013 you have to plan the capacity of Distributed Cache. It's not because it's installed automatically that you don't have to plan it...

As you know the AppFabric Cache stocks data on memory and uses when users try to access it. So if you have more than 500.000 users you need 12GB cache size of the Distributed Cache service. So if you give him only 1 GB, you will ensure some problems.

Deployment size	Small farm	Medium farm	Large farm
Total number of users	< 10,000	< 100,000	< 500,000
Recommended cache size for the Distributed Cache service	1 GB	2.5 GB	12 GB
Total memory allocation for the Distributed Cache service (double the recommended cache size above)	2 GB	5 GB	24 GB
Recommended architectural configuration	Dedicated server or co-located on a front-end server	Dedicated server	Dedicated server
Minimum cache hosts per farm	1	1	1

**Note:**

In a SharePoint Server 2013 farm, there must be at least one cache host running the Distributed Cache service.

#### Memory allocation

**Note:**

You should understand the Distributed Cache concepts discussed in [Overview of microblog features, feeds, and the Distributed Cache service in SharePoint Server 2013](#) before you read this section of the article.

## How is the memory allocated to the Distributed Service?

By Default it takes 5% of the physical memory of the server. You can't change this on the Central Administration by the UI but only by PowerShell: **Update-SPDistributedCacheSize**. This PowerShell command Specifies the memory size in megabytes (MB) that you want to allocate to the Distributed Cache service. The default value is 5 percent of total system random access memory (RAM). This value should not be more than 40 percent of total system RAM with a maximum limit of 16 gigabytes (GB).

More information about the PowerShell Command: <http://technet.microsoft.com/en-us/library/jj730453.aspx>

An example of changing the SPDistributedCacheSize

-----EXAMPLE-----

```
Update-SPDistributedCacheSize -CacheSizeInMB 2048
```

[Copy](#)

Important to know is that if you are using a Virtual Machine and not a Physical Machine for your SharePoint Farm(s) do not use Dynamic Memory Usage. The Memory Allocation for Virtual Machines should be on “Fixed” Memory.

When the Distributed Cache service runs in collocated mode, the physical memory of the server should be increased and all non-essential services stopped. It is not recommend that any of the following services or applications run on the same server as the Distributed Cache service:

- SQL Server 2008 or SQL Server 2012
- Search service
- Excel Services in SharePoint
- Project Server services

### Firewall configuration considerations

The Distributed Cache service uses the following communication ports:

- 22233 (CachePort)
- 22234 (ClusterPort)
- 22235 (ArbitrationPort)
- 22236 (ReplicationPort)

### Debug of Cache

Via Central Administration:

- Open Central Administration and hit **Application Management**
- From Service Applications, hit **Manage Services on Server**
- Select **Distributed Cache Service**
- Hit **START** or **STOP** to start or stop your service

Via PowerShell:

- \$instanceName = “SPDistributedCacheService Name = AppFabricCachingService”
- \$serviceInstance = Get-SPServiceInstance | ? {( \$\_.service.toString()) -eq \$instanceName -and ( \$\_.server.name) -eq \$env:computername
- \$serviceInstance.Provision()

Or

- \$serviceInstance.Unprovision()

## Allocate Memory on Distributed Cache Service

When SharePoint Server 2013 is installed, 10% of the total physical memory is allocated. The Distributed Cache service uses 50% of this memory as storage and the other to manage the memory. This cache size can be increased when:

- You add more memory on the Server
  - Be aware; when you add memory to the server, the Distributed Cache isn't updating by himself. You need to reconfigure the Cache Size.
- If you have a dedicated caching server
  - You should calculate it so :
    - Determine the total sum of physical memory. Let's take the example that your server has 16GB of memory.
    - You have to book 2GB of memory for other processes. So this means  $16\text{GB} - 2\text{GB} = 14\text{GB}$
    - Now we have to take the half of this amount and that size is our AppFabric Cache Size :  $14\text{GB} / 2 = 7\text{GB}$
    - Again, as said on the previously; the total size of memory should never be more than 16GB

## Change the Memory allocation

Use this procedure to reconfigure the memory allocation of Cache Size

- Use-CacheCluster
- Get-APCacheHostConfiguration -ComputerName -CachePort « 22233 »  
OR
- **Stop** the service via **Central Administration**
- Update-SPDistributedCacheSize -CacheSizeInMB CacheSize
  - If we take our example ; you have to fill 7000 MB for a server who has 16GB or RAM
- **Start** the service via **Central Administration**

## Add or Delete a server on a Distributed Cache Cluster

When you want to **delete** an AppFabric Server from the cluster, be aware that the service is stopped from the **Central Administration** and then execute the following commands via PowerShell:

- **Adding: Add-SPDistributedCacheServiceInstance**
- **Deleting: Remove- SPDistributedCacheServiceInstance**

## Graceful shutdown of the Distributed Cache Service

In SharePoint 2013, a cluster cache exists when one or many machines are running the Distributed Cache Service.

When you have to do maintenance on your platform, the possibility exists that you have to remove a server from the Distributed Cache Cluster. You have to run the following command (graceful) on the server that you want to remove.

- **Stop-SPDistributedCacheServiceInstance – Graceful**
- **Remove-SPDistributedCacheServiceInstance**

This operation can take more than 15 minutes. The graceful option will prevent losing any data.

## Change the Managed Account

When SharePoint Server 2013 is installed the Managed Account of Distributed Cache is the same as the Installation Account (PEGASUS\SPInstall\_GA). You can change this with Powershell commands:

- `$farm = Get-SPFarm`
- `$cacheService = $farm.Services | where {$_.Name -eq "AppFabricCachingService"}`
- `$account = Get-SPManagedAccount -Identity Pegasus\USER_NAME`
- `$cacheService.ProcessIdentity.CurrentIdentityType = "USER"`
- `$cacheService.ProcessIdentity.ManagedAccount = $account`
- `$cacheService.ProcessIdentity.Update()`
- `$CacheService.ProcessIdentity.Deploy()`

## Repair a Cache host

After an installation or maintenance of your cluster, the Distributed Cache can be non-operational. You can repair this again with PowerShell:

- `$Get-SPServiceInstance`
- `$var = Get-SPServiceInstance GUID OF APPFABRICK`
- `$var.delete()`
- `Add-SPDistributedCacheServiceInstance`

## What you need to retain? (Summary)

- Do not give more than 16GB for you Distributed Cache Service and not more than 16 machines for your cluster
- Pay attention when changing anything and use the Graceful option to prevent data loss
- Never give Dynamic memory but always static memory
- Never ignore alerts in Health Analyzer

## SPSessionGuid breaks all the functionality of the Output Cache

When you try to improve performance on your SharePoint Server it's a common practice to enable the Output Cache. SharePoint Server 2010 provides different types of caches that help improve the speed at which Web pages load in the browser:

- **The BLOB cache:** The BLOB cache is enabled and configured in the Web.config file in the Web application to which you want to apply the cache.
- **The page output cache and the object cache:** The page output cache and object cache are usually configured in the user interface at the site collection level; however certain settings for these caches can also be configured at the Web application level. The changes that you make to the Web.config file will be applied to all site collections and sites within the Web application, and will supersede any configuration made at the site collection level or below

On our corporate environment we found a strange cookie appearing. It's named the **SPSessionGuid** and contains some GUID value which changes on every request.

It causes the output cache to invalidate on every page request which makes caching useless on SharePoint!

### According to Microsoft

According to Microsoft, SharePoint sends that cookie when certain criteria are met with regard to the type of site being used and this is the reason we do not see it all the time.

This is related to a "Document workspace" tracking feature that cannot be turned off using the current administration tools available. Microsoft is however looking into the feature to see if it can change it in the future.

The **SPsessionguid** is the correlation ID that is associated with every task SharePoint is processing. If you get a SharePoint error message, you usually see a correlation ID associated with the error message.

This correlation ID is like a key correlating the operation conducted in the SharePoint UI with the log files which show you the operations taking place in the background to accomplish the task.

Wait, what means this in a human language?

These enable you to carry out some essential functions on your sites. They also help by minimizing the need to transfer information across the internet. They are not stored on your computer and they expire when you terminate your browser session.

### Result = None

The SPSessionGuid is assigned when you have “**Logging Correlation Data**” turned on to Verbose logging under the SharePoint Server and SharePoint Foundation categories in the “monitoring” section of Central Administration.

If you disable verbose logging, that SPSessionGuid should go away.

<input type="checkbox"/> SharePoint Server			
<input type="checkbox"/> Audit	Verbose	Verbose	
<input type="checkbox"/> Command Base Validators	Verbose	Verbose	
<input type="checkbox"/> Command Base	Verbose	Verbose	
<input type="checkbox"/> Database	Verbose	Verbose	
<input type="checkbox"/> Event Throttle	Verbose	Verbose	
<input type="checkbox"/> Feature Push Down Manager	Verbose	Verbose	
<input type="checkbox"/> General	Verbose	Verbose	
<input type="checkbox"/> Http Encoding Utility	Verbose	Verbose	
<input type="checkbox"/> Logging Correlation Data	None	None	
<input type="checkbox"/> OpenXml	Verbose	Verbose	
<input type="checkbox"/> Prepare to Move	Verbose	Verbose	
<input type="checkbox"/> Service Timer Job Handler	Verbose	Verbose	

See Also

- [http://technet.microsoft.com/en-us/library/cc261797\(v=office.14\).aspx](http://technet.microsoft.com/en-us/library/cc261797(v=office.14).aspx)
- <http://social.technet.microsoft.com/Forums/sharepoint/en-US/1ad56eb1-8762-4c4b-ac8f-f29692012a58>

## Search Alerts across multiples farms (Internet, Extranet, DMZ ...)

The main goal of Search Alerts is to get notified whenever something new gets indexed (Full crawl or Incremental crawl), based on a search term that you specify.

Now, if you're outgoing mail configuration is properly set on your SharePoint Farm, that works for any other mail related functionality but not for Search Alerts... what can you do?

### Enabling the Search Alerts Feature in SharePoint Server 2010 or SharePoint 2013

1. Verify that the user account that is performing this procedure is an administrator for the Search service application. (connect with the SharePoint Farm Global Administrator)
2. In Central Administration, in the **Application Management** section, click **Manage service applications**.
3. On the Manage Service Applications page, click the Search service application for which you want to configure search alerts.
4. On the Search Administration page, in the **System Status** section, locate **Search alerts status**.
5. The search alerts status displays as **Off** or **On**.
6. By default, search alerts are turned **On**. Click **Disable** to turn off search alerts or click **Enable** to turn on search alerts.

#### System Status

Crawl status	Online for crawling
Background activity	Computing ranking
Recent crawl rate	0.17 items per second
Searchable items	169,354
Recent query rate	0.25 queries per minute
Propagation status	Propagating...
Default content access account	MOYMUQU1_SearchDefault
Contact e-mail address	mailto:info@moymuqu.com
Proxy server	None
Scopes update status	Idle
Scopes update schedule	Automatically scheduled
Scopes needing update	0
Search alerts status	On <a href="#">Disable</a>
Query logging	On <a href="#">Disable</a>



After the search alerts feature is enabled, the SharePoint Farm Global Administrator must configure the outgoing mail service.



The Mail Settings dialog box is used to configure the outgoing mail service. It contains the following fields:

- Outbound SMTP server:** athena.corp.pegasus
- From address:** spfarmga@pegasus.local
- Reply-to address:** spfarmga@pegasus.local
- Character set:** 65001 (Unicode UTF-8)

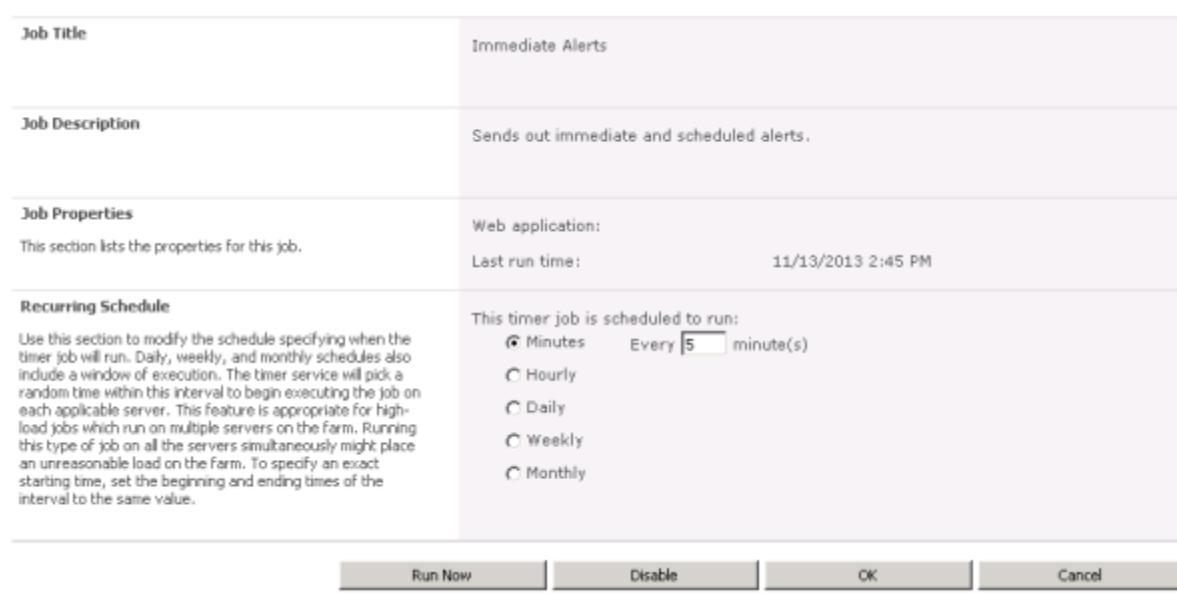
Buttons: OK, Cancel

The service account that you use must have special privileges. The privilege is the delegate (“**Send-As**”) permission to the mailbox listed in the “**from**” line. If this attribute permission is not configured, the email submission will fail.

For more information, see [Configure Outgoing E-Mail \(SharePoint Server 2010\)](#). The administrator must also ensure that the Timer Job service is running.

The SharePoint Farm Global Administrator should also have a look at the “Immediate Alerts” timer job to refine the schedule time.

The Immediate Alerts is a web application targeted timer job so be sure that you made the correction (if needed) on the correct one.



The Immediate Alerts timer job configuration is displayed in a table-like structure:

<b>Job Title</b>	Immediate Alerts
<b>Job Description</b>	Sends out immediate and scheduled alerts.
<b>Job Properties</b> This section lists the properties for this job.	Web application: Last run time: 11/13/2013 2:45 PM
<b>Recurring Schedule</b> Use this section to modify the schedule specifying when the timer job will run. Daily, weekly, and monthly schedules also include a window of execution. The timer service will pick a random time within this interval to begin executing the job on each applicable server. This feature is appropriate for high-load jobs which run on multiple servers on the farm. Running this type of job on all the servers simultaneously might place an unreasonable load on the farm. To specify an exact starting time, set the beginning and ending times of the interval to the same value.	This timer job is scheduled to run: <input checked="" type="radio"/> Minutes Every 5 minute(s) <input type="radio"/> Hourly <input type="radio"/> Daily <input type="radio"/> Weekly <input type="radio"/> Monthly

Buttons: Run Now, Disable, OK, Cancel

Search alerts in SharePoint 2010 or SharePoint 2013 is a pretty powerful feature but this is for “local use” (as designed).

If you’re in an environment where you have a search service application that’s shared between farms, you need to configure which farms the search service application should allow search alerts for. Tricky isn’t it?

How do we now that? Well for the first time the SharePoint Logs was clear enough to explain me what went wrong with the Timerjob.

**SearchServiceApplicationProxy::Execute–Error occurred:**

**System.ServiceModel.FaultException`1[System.ServiceModel.ExceptionDetail]**

**Error while processing search alert at search service application 'Search Service Application'.**

**Farm Id 'xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx' does not exist in the FarmIdsForAlerts property**

**or is not the local farm id 'xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx'.**

**(Fault Detail is equal to An ExceptionDetail, likely created by IncludeExceptionDetailInFaults=true, whose value is: System.InvalidOperationException:**

**Error while processing search alert at search service application 'Search Service Application'.**

**Farm Id 'xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx' does not exist in the FarmIdsForAlerts property**

**or is not the local farm id 'xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx'**

The SearchServiceApplication object has a property called FarmIdsForAlerts, which is a list of farm ids. All farms that should have search alerts must be listed here (not necessary to list the local farm). To add the first farm id to the list, you can use PowerShell:

```
$guid = new-object "System.Guid" -ArgumentList "{FARM.ID}"  
$app = Get-SPEnterpriseSearchServiceApplication  
-Identity "Search Service Application"  
$type = ("System.Collections.Generic.List" + "`" + "1") -as "Type"  
$type = $type.MakeGenericType("system.Guid" -as "Type")  
$list = [Activator]::CreateInstance($type)  
$list.Add($guid)  
$app.FarmIdsForAlerts = $list  
$app.Update()
```

## References

- <http://blogs.msdn.com/b/mcsnoiwb/archive/2011/10/14/how-to-enable-search-alerts-across-farms.aspx>
- [http://msdn.microsoft.com/en-us/library/hh161512\(v=office.14\).aspx](http://msdn.microsoft.com/en-us/library/hh161512(v=office.14).aspx)

## Release Distribution Process on SharePoint – Gotchas

### Release Distribution

A **Release Distribution Process** is actually not more than governance that you adopt depending your business needs and IT requirements.

A simple example can be; the business requirement is a new Secure (HTTPS) SharePoint site in the DMZ-Legacy zone for tomorrow with a few globally deployed solutions.

You can't do this at 3:00PM when everybody is using your SharePoint platform. Installing or Removing "not" targeted Web Application Solutions will perturb the Application Pools. This means potentially that there can be a "downtime" of few minutes.

A release distribution process can be:

- All modifications are done after 6:00PM
- Content Deployment is done after 8:00PM
- Only if I'm impacted by a problem and a Cumulative Update resolves it then we install it in the WK between 0:00AM and 0:00PM
- Only Emergency deploys can be done at 1PM ( during the lunch )
- Service Packs are installed every 6 months during the monthly reboot
- ...

This list can be very huge and long depending your IT and SharePoint governance. Not all Release Distributions processes are fitting the Best Practices of SharePoint and there is not a need too! If your Business is happy with a roll-out of a Service Pack during the work hours you don't have to wait until 6:00PM!

**A major rollout without downtime; this is the requirement of our business.** Unfortunately it's not possible to update your SharePoint Platform without having some amount downtime. But we can optimize our **Release Distribution Process** to **minimize downtime**.

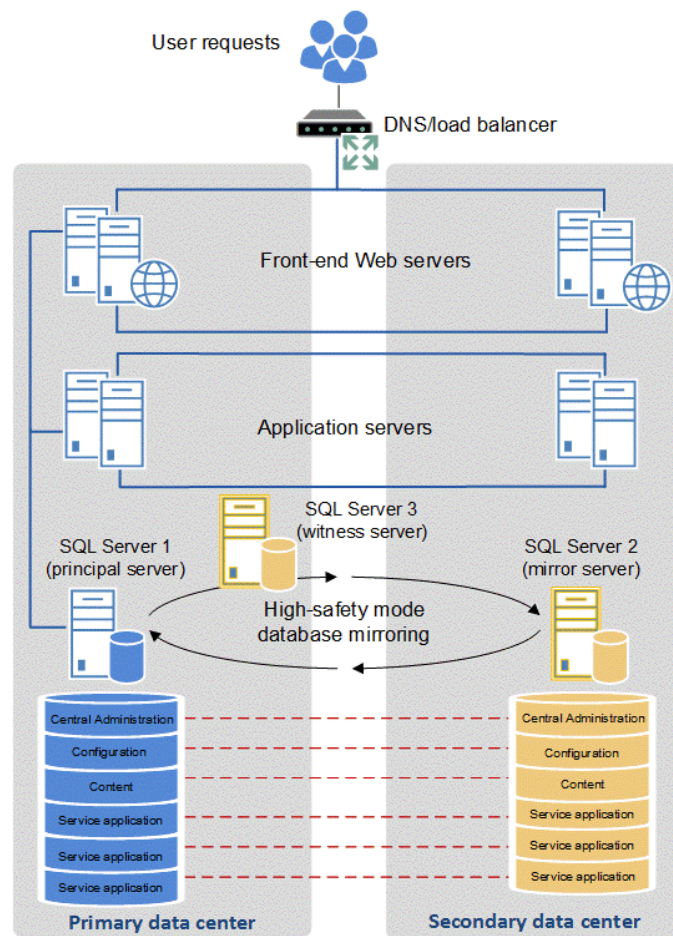
## Possible solutions

The use of a common data store for all SharePoint farm members and the dependency on IIS, means that you cannot update a SharePoint farm without “some” downtime unless a fully synchronized standby farm is available (so, deploying SharePoint Packages means outage to your Web Applications).

There are a few methods available to minimize the amount of downtime; however it’s just not possible to achieve **a zero downtime** solution for your upgrade. A common way to minimize downtime is via implementation of a parallel upgrade farm.

## Stretched Farms

A great example is the Stretched Farm, even if it is not a perfect solution.



For stretched farm architecture to work as a supported high availability solution the following prerequisites must be met:

- There is a highly consistent intra-farm latency of <1ms (one way), 99.9% of the time over a period of ten minutes. (Intra-farm latency is commonly defined as the latency between the front-end web servers and the database servers.)
- The bandwidth speed must be at least 1 gigabit per second.

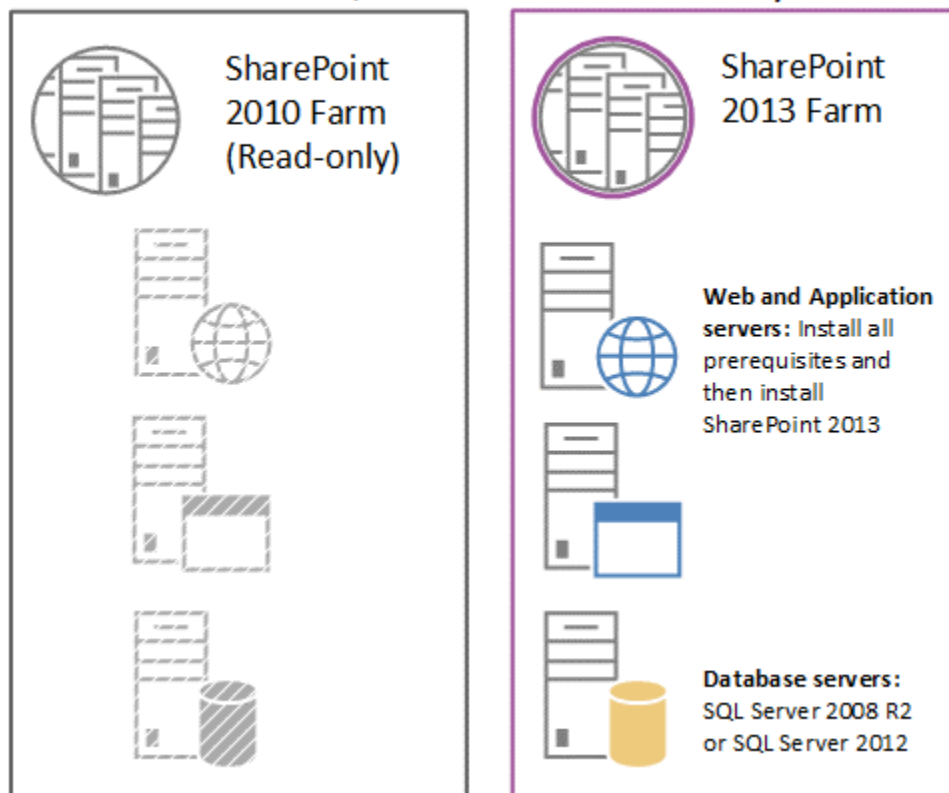
The TechNet Article has more information about the Stretched Farms: [here](#).

### SharePoint Read-Only Farms

The functionality and user experience in a read-only farm depends on which databases are set to read-only. A farm that uses read-only content and service application databases is likely to be part of a disaster recovery environment or a highly available maintenance, update, or upgrade environment.

You may choose a switching mechanism (DNS, load balancing, etc.), that meets your needs. Read more about this configuration, its caveats, & the end user experience it provides: Run a farm that uses read-only databases (SharePoint Server 2010) [http://technet.microsoft.com/en-us/library/dd793608\(v=office.14\).aspx](http://technet.microsoft.com/en-us/library/dd793608(v=office.14).aspx)

### Create 2013 farm, set 2010 to read-only



## Local deployment

In a local deployment, solution files are deployed only to the computer from which the deployment operation was initiated. The solution is not marked as “deployed” in the configuration database until the solution files are deployed to all applicable servers in the server farm. Then solution features are installed, and schema and definition files are committed to the configuration store.

There are some situations where this way of deployment just does not work, especially when the solution updates the content and code at the same time. The content is in the DB and shared by all the WFEs. So, you should first consider what type of customizations you do and which allow for zero downtime and which not. Note Web services can be deployed and only recycle the used app pool.

Another example, assuming you’re only updating a .dll:

- Disable the timer job on all front-ends
- On the CA server (not load balanced), Update-SPSolution
- For each of the front-ends
  - Take the front-end out of rotation
  - Launch stsadm -o execadmsvcjobs. This will cause the upgrade to execute on that particular front-end only.
  - Bring the front-end back into rotation
  - Enable the timer job

## Release Distribution checklist

Although this approach will for most cases work there are a few gotchas that you need to watch out for. In some of these occasions all SharePoint WFEs will have their application pools restarted.

### 1) Try to avoid -Force

Use the Force switch only for fixing broken deployments of SharePoint Packages. Not only it makes SharePoint stop affected Application Pools but also it prevents you from seeing errors should there be any.

### 2) Retracting packages

There is a recycle on the Application Pool, Why don't you do this at 04:00AM. On Each front-end Web server, the following occurs:

- Microsoft Internet Information Services (IIS) is disabled.
- Files are removed from the system.
- IIS is re-enabled and Windows SharePoint Services is reloaded when a user browses to a page.

### 3) Scope your solution

When a solution is deployed globally, all SharePoint application pools, including Central Administration's, are recycled automatically. This can be good and bad. This is good because any GAC installed DLL that has been upgraded needs to be reloaded. This can be bad though with regards to the availability of your entire SharePoint Farm.

### 4) Recycle

Set the **ResetWebServerModeOnUpgrade** attribute to **Recycle**. You have to do this explicitly in the SharePoint Package configuration. Without it, the setting will default to the StartStop.

### 5) Good resource

Who wrote my solution? Anybody who I can fully trust? Does he write great code? Does he an IISReset in his code?



## **6) Reduce the amount**

Do not create a WSP for layout Pages, CSS. Try to minimize the amount of solutions. 'Aspx' files, DLL and controls are going to the application domain and these files have to be compiled. Layouts, CSS, resources not!

## **7) Time limit**

Schedule retracting of SharePoint Packages when there is the least traffic on your Web Applications as it always stops affected Application Pools.

## **8) Hardware and software boundary limits**

On many TechNet articles you can see that per Application Pool you need 2GB of RAM. A simple calculus could be for 40 Application Pools => 80GB or RAM. This is not true! Try to respect the 12 Application Pools per server and be generous with the RAM (depending your hardware).

## **9) Separated Application Pools**

Many websites can be hosted on one Application Pool, but Many Application Pools cannot be used by a Web Application. So the question can be how can I manage my Web Applications while keeping in mind the 12 Web Application Pools Limit? Well, all the Application Pools should be together by usage or anything else and divided by authentication model (claims, anonymous ...)

## **10) Avoid creating a lot of global SharePoint Packages**

Avoid creating a lot of global SharePoint Packages and try instead to provision as much as you can to specific Web Applications. Every time you touch a global SharePoint Package all Applications Pools will be stopped/recycled.

## According to Microsoft

After several days of discussion with @MicrosoftBe and several **tests on our Dev machines**, here are the results of our tests on the behavior of pools Application. A special thanks for my colleague and Solution Architect [@Tomvanroussel](#) for that!

Assembly Deployment Target	IncludeAssemblyPackage	Deployed to	Action	Server Type	Reset web server	Reset web server on upgrade	Package Content	Conclusion
GlobalAssemblyCache	True	1 Webapp	Upgrade	Web Front End	False	StartStop	Webpart + site feature	All application pools stop/start, service unavailable, slow startup
GlobalAssemblyCache	True	1 Webapp	Add	Web Front End	False	Recycle	Webpart + site feature	No impact
GlobalAssemblyCache	True	1 Webapp	Install	Web Front End	False	Recycle	Webpart + site feature	1 application pool recycle, slow startup
GlobalAssemblyCache	True	1 Webapp	Uninstall	Web Front End	False	Recycle	Webpart + site feature	1 application pool recycle, slow startup
GlobalAssemblyCache	True	1 Webapp	Upgrade	Web Front End	False	Recycle	Webpart + site feature	All application pools recycle, slow startup
WebApplication	False	1 Webapp	Add	Web Front End	False	Recycle	Masterpage + feature + safecontrol	No impact
WebApplication	False	1 Webapp	Install	Web Front End	False	Recycle	Masterpage + feature + safecontrol	1 application pool recycle, slow startup
WebApplication	False	1 Webapp	Uninstall	Web Front End	False	Recycle	Masterpage + feature + safecontrol	1 application pool recycle, slow startup
WebApplication	False	1 Webapp	Upgrade	Web Front End	False	Recycle	Masterpage + feature + safecontrol	All application pools recycle, slow startup
WebApplication	False	1 Webapp	Add	Web Front End	False	Recycle	Masterpage + feature + safecontrol	No impact
WebApplication	False	1 Webapp	Install	Web Front End	False	Recycle	Masterpage + feature + safecontrol	1 application pool recycle, slow startup
WebApplication	False	1 Webapp	Uninstall	Web Front End	False	Recycle	Masterpage + feature + safecontrol	1 application pool recycle, slow startup
WebApplication	False	1 Webapp	Upgrade	Web Front End	False	Recycle	Masterpage + feature + safecontrol	All application pools recycle, slow startup
GlobalAssemblyCache	True	1 Webapp	Add	Web Front End	False	StartStop		No impact
GlobalAssemblyCache	True	1 Webapp	Install	Web Front End	False	StartStop		1 application pool stop/start, slow startup
GlobalAssemblyCache	True	1 Webapp	Uninstall	Web Front End	False	StartStop		1 application pool stop/start, slow startup
GlobalAssemblyCache	True	1 Webapp	Upgrade	Web Front End	False	StartStop		All application pools stop/start, service unavailable, slow startup
GlobalAssemblyCache	True	1 Webapp	Remove	Web Front End	False	StartStop	Upports file, no feature	No impact
GlobalAssemblyCache	True	1 Webapp	Add	Web Front End	False	Recycle		No impact
GlobalAssemblyCache	True	1 Webapp	Install	Web Front End	False	Recycle		1 application pool stop/start, slow startup
GlobalAssemblyCache	True	1 Webapp	Uninstall	Web Front End	False	Recycle		1 application pool stop/start, slow startup
GlobalAssemblyCache	True	1 Webapp	Upgrade	Web Front End	False	Recycle		All application pools recycle, slow startup
GlobalAssemblyCache	True	1 Webapp	Remove	Web Front End	False	Recycle		No impact
GlobalAssemblyCache	True	1 Webapp	Uninstall safe package	Web Front End	False	Recycle	Everything	All application pools stop/start, service unavailable, slow startup
WebApplication	True	1 Webapp	Add	Application Server	False	Recycle	Webpart + site feature	<b>This solution must be deployed to application servers, not front-end Web servers.</b>
WebApplication	True	1 Webapp	Add	Application Server	False	Recycle	Webpart + site feature	No impact
WebApplication	True	1 Webapp	Install -force	Application Server	False	Recycle	Webpart + site feature	1 application pool stop/start, slow startup
WebApplication	True	1 Webapp	Uninstall	Application Server	False	Recycle	Webpart + site feature	1 application pool stop/start, slow startup
WebApplication	True	1 Webapp	Upgrade	Application Server	False	Recycle	Webpart + site feature	All application pools recycle, slow startup

[Please hit ME or the image to download the Excel Sheet!](#)

## The deployment process is a black box

According to @Microsoftbe: (Note these remarks are valid for globally deployed solutions as deployments targeted towards particular applications should not have any impact on other web applications: [http://msdn.microsoft.com/en-us/library/ms412929\(v=office.14\).aspx](http://msdn.microsoft.com/en-us/library/ms412929(v=office.14).aspx) )

1. If you retract/deploy the solution which marked as "DeploymentServerType = ApplicationServer" then the **application will never stopped or recycle.**
  2. If you retract the solution which marked as "DeploymentServerType = WebFrontEnd" from SharePoint then SharePoint will first stop all the **application pools and then start then one by one**
  3. If we upgrade the solution which marked as "DeploymentServerType = WebFrontEnd" from SharePoint then **SharePoint will first stop all the application pool and then start then one by one**
  4. If we deploy the solution to SharePoint with -force then SharePoint then **SharePoint will first stop all the application pool and then start then one by one**
  5. If we deploy the solution to SharePoint without -force (or in the central admin) then **SharePoint will recycle the application at the end of the progress**
  6. If we deploy the solution to SharePoint without -force (or in the central admin) and "ResetWebServer = false" then **SharePoint will not recycle the application pool any more.**
- But to make your new solution works you need to recycle the application pool manually.

Then in your scenario if you want to reduce the downtime please do the following:

1. Make sure you are using the right “DeploymentServerType” value to **avoid the unnecessary restart on the application server**
2. Avoid to retract/upgrade the solution with “DeploymentServerType = WebFrontEnd” in the business time. As this scenario which **stops all the application pool and start them again**
3. Deploy the solution without –force (or in the central admin) SharePoint **will recycle them rather than stop and start them again**
4. Deploy the solution without –force and “ResetWebServer = false” in the solution manifest file will make the **application pool with no recycle**. But you need to recycle the application by yourself accordingly. Be sure that this has to be done manually, because Visual Studio creates for you the Manifest file.

## Conclusion

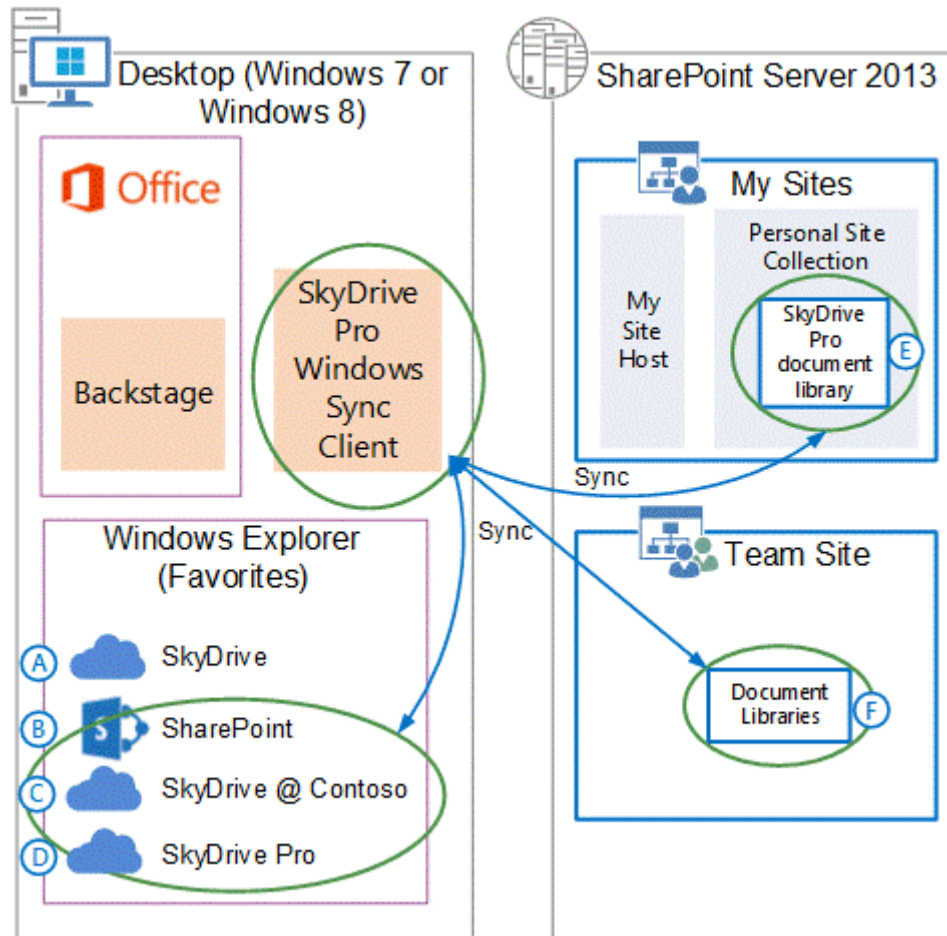
The deployment process on each front-end Web server involves copying files into system directories, installing features, and adding assembly DLLs to the GAC. Furthermore, SharePoint always runs a command to restart all the IIS worker processes that might be affected by the new components that have just been installed. For this reason, in production environments you should deploy solution packages during off hours with the provided gotchas when the fewest number of users are using the system.

## References and Additional Info

- [Optimizing the process of deploying SharePoint Packages to minimize the impact on farm's availability](#)
- [The Zero Downtime SharePoint Patching Myth](#)
- [How we deployed SharePoint WSP Solutions without downtime](#)

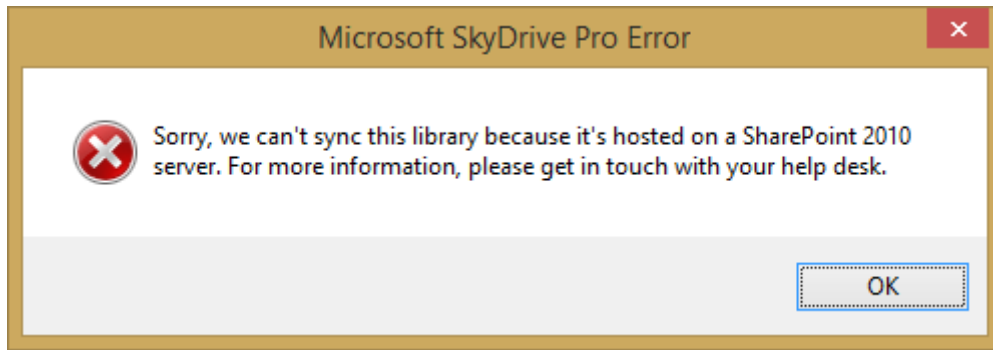
## SkyDrive Pro is not supported with SharePoint 2010

A new amazing feature on SharePoint 2013 is SkyDrive Pro. **SkyDrive Pro** is a personal file storage and synchronization service for business use. Users store, access, and synchronize their files in SharePoint Online or SharePoint Server 2013 with their client workstation.



When you work like me at a corporate who still uses a SharePoint 2010 platform and try to use SharePoint Pro you will notice that a recent update to SkyDrive Pro breaks compatibility with SharePoint 2010 and you get really mad.

We already rolled-out the Office 2013 with SkyDrive 2013, but however the Platform is still SharePoint 2010. This is the error that you will receive when trying to sync a document library to SkyDrive Pro.



Sorry, we can't sync this library because it's hosted on a SharePoint 2010 server. For more information, please get in touch with your helpdesk.

You can uninstall the Knowledge Base (KB2825633) but this will not help. Please refer to this link to see all kind of information: <http://support.microsoft.com/kb/2825633>

Actually, **SkyDrive Pro is not supported with SharePoint 2010**. Users complaining about the incapability errors should ask to the Administrator to install SharePoint Workspace if they're looking for offline sync capabilities with SharePoint 2010.

For more information you can always check here:

- <http://office.microsoft.com/en-us/sharepoint-workspace/sync-with-skydrive-pro-or-sharepoint-workspace-HA104048828.aspx>

[UPDATE 1]

Some community member's feedback that they resolved this issue by uninstalling all instances of KB2825633, KB2817622 (and possibly KB2817469).

But this is not the long-term solution.

[/UPDATE 1]

[UPDATE 2]

However, an alternative workaround to connect SkyDrive Pro client to SharePoint 2010 library.

- Workaround 1: Install the previous version of SkyDrive Pro (Stand-alone version), the version number is: 15.0.4505.1007.
- Workaround 2: Uninstall the KB2825633, KB2817622 (and possibly KB2817469).

The latest version of SkyDrive Pro client will check if the library is the SharePoint 2013 library. If not, it will pop up the error message about the sever version is incorrect and stop processing the next step. If we can pass-by the version checking, it can continue syncing the SharePoint 2010 library. (We cannot ensure the alternative workarounds can work on all scenarios)

[/UPDATE 2]

## Benefits of using SkyDrive Pro

If your still not convinced about SkyDrive Pro, here are some benefits of using SkyDrive Pro:

- Users can take their documents offline with them and have them synchronize when they are online again.
- Users' documents can be synchronized across all client devices and servers where the files are stored and synchronized.
- Multiple users (online or offline) can work on documents at the same time, and the SkyDrive Pro Windows Sync client will synchronize the changes between the users. If there are conflicts, users are prompted to resolve the conflicts.
- Users can share and collaborate on documents.
- Users can work from many locations, either online or offline, and work from many devices.

## SharePoint Foundation 2013

SkyDrive Pro is not available in the foundation edition of SharePoint 2013. There is no replacement for SharePoint Workspace if you are on the foundation edition of SharePoint 2013.

## SkyDrive Pro Online

Essentially, all Office 365, and stand-alone SharePoint Online plans provide SkyDrive Pro with two exceptions: Kiosk Plans which provide users with access to site document libraries only (but no personal SkyDrive Pro site), and external users (who cannot use SkyDrive Pro). Below are tables from the SharePoint Online Service Description, which note the Office 365 and SharePoint Online plans that include SkyDrive Pro.

	SharePoint Online Plan 1	SharePoint Online Plan 2	SharePoint Online + Yammer Plan 1	SharePoint Online + Yammer Plan 2
SkyDrive Pro	Yes	Yes	Yes	Yes

SkyDrive Pro standalone client has been released. You can download it from [here](#).

## How is SkyDrive Pro different from SkyDrive?

Microsoft offers another storage service called [SkyDrive](#). You may already be using SkyDrive to store documents and other content in the cloud. This service is different from [SkyDrive Pro](#):

- SkyDrive is free online personal storage that you get with either a Microsoft account or Outlook.com. [Use SkyDrive](#) to save documents, photos, and other files in the cloud, share them with friends, and even collaborate on content. You're free to decide how you want to use it.
- SkyDrive Pro is online storage intended for business purposes. Your [SkyDrive Pro library](#) is managed by your organization and lets you share and collaborate on work documents with co-workers. Site collection administrators in your organization control what you can do in the library.

## References

- <http://www.toddklindt.com/blog/Lists/Posts/Post.aspx?ID=388>
- <http://technet.microsoft.com/en-us/library/dn167720.aspx>
- <http://office.microsoft.com/en-us/sharepoint-workspace/sync-with-skydrive-pro-or-sharepoint-workspace-HA104048828.aspx>
- <http://blogs.technet.com/b/volume-licensing/archive/2013/09/05/licensing-how-to-skydrive-pro-licensing.aspx>
- <http://office.microsoft.com/en-us/sharepoint-server-help/what-is-skydrive-pro-HA102822076.aspx>
- <http://community.office365.com/en-us/forums/685/p/194312/605064.aspx>

## Project Server 2013 - Presentation of the new platform features

The cloud concept came as a strong trend in the new Project Server 2013, and becomes more and more present in our day life. However, most professionals who work directly with planning and projects management still have sometimes difficulties to understand the real needs of their organizations.

With Project Server 2013 web version, it is possible to do all the work with all security and convenience; it allows you to work on project management, portfolio management, and to control and manage tasks quickly and easily. However, the tool is a new form of communication, which will help your organization to interact with their users, share tasks, better understand the risks and challenges, define a methodology to better organize documents and improve your productivity.

This new platform allow you to work easier on project management and portfolio, as it is full web-based and gives you the opportunity to work locally with Project Professional 2013. So you can monitor projects at the organizational level, anywhere you are.

Microsoft Reference:

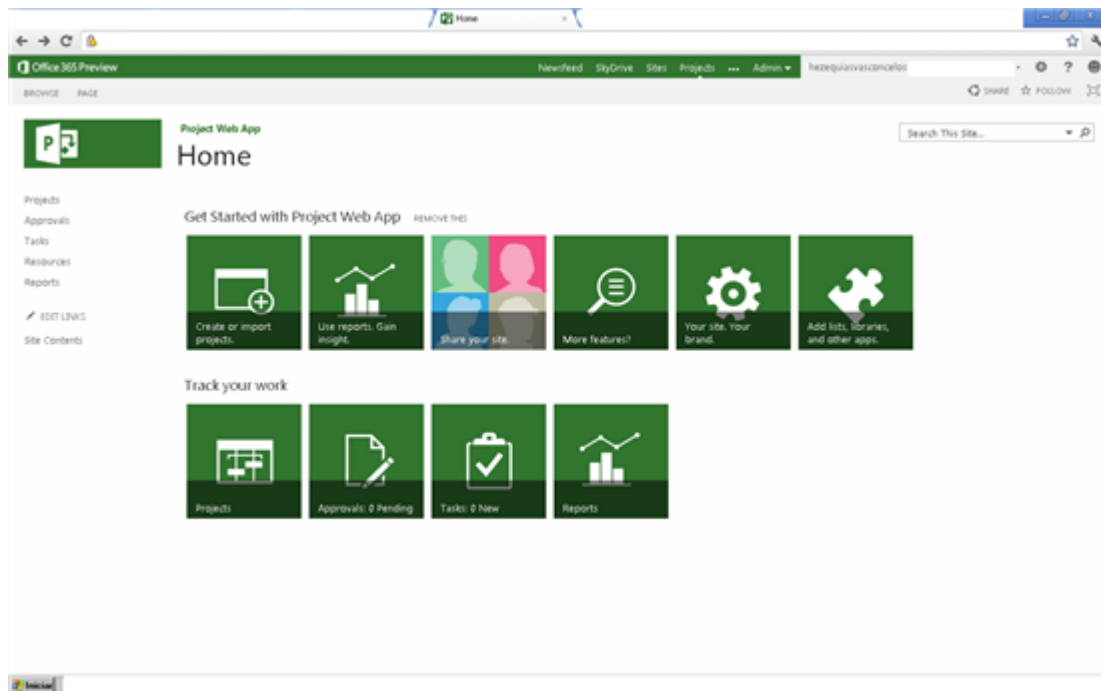
<http://technet.microsoft.com/en-en/library/cc303399.aspx>

### Project Web App 2013

Project Web App 2013 is the Web version of Project 2013.

When you first access a project, you access the home page of PWA - "Project Web Access".



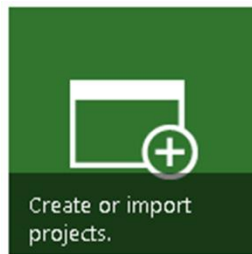


You will find the following groups:

- Create or import projects
- Use reports
- Share your site
- Use more features
- Your site. Your brand.
- Add lists, libraries, and other apps
- Projects
- Approvals
- Tasks
- Reports

### [Create a new project or import an existing project](#)

this group is dedicated to the creation of projects. It is possible, starting from a SharePoint 2013 tasks list, to develop a new structure. However, all information will be available for viewing and editing directly in Project Web App (Project Web Access). One of the new feature is the ability to import a SharePoint site, a list of project activities.



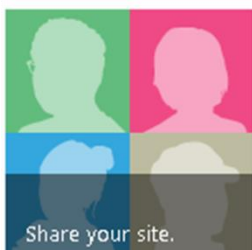
## Use reports

This group is designed to generate graphical reports with project contents, which includes the entire structure of the site business intelligence and its libraries, data analysis, reports and interactive dashboards creation.



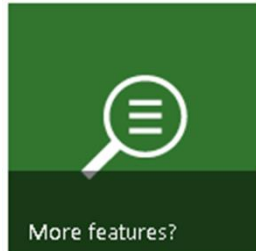
## Share your site

This group is designed to share the site, by defining what users' needs and optional access to this site, removing users which should not have access to the project site and adding permissions (Read, Full Control, etc.) ..



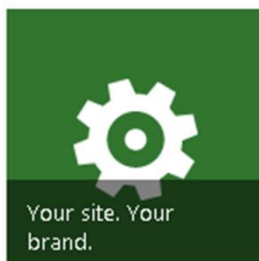
## Use more features

This group is designed to share the resources of the project web application. Among them, we can highlight available reports, business intelligence, resource management, task progress, and timesheets.



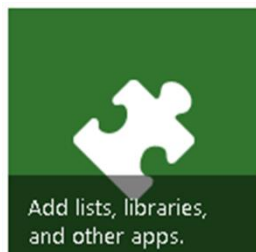
## Your site. Your brand.

This group is designed to configure basic PWA site information such as the title, description and icon, so you can give to your business a fully customized site. Other available parameters are the site address (URL) and a description to describe the object or purpose of the site.



## Add lists, libraries, and other apps

This group is designed to create lists and libraries that can be created or customized to organize your files, access permissions and other resources.



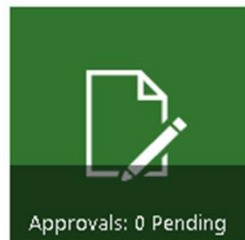
## Projects

This group provides access to a better understanding of project management offices (PMO) by providing the “famous” Project 2013 central project. The main objective is to enable the visualization of projects such as the duration, schedule, priority, resource owners (also known as project managers), graphical indicators and project details.



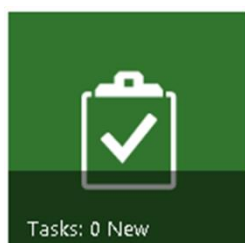
## Approvals

This group provides access to the approval of tasks assigned to resources (people) who carry out project activities. You can easily view the completion of the activity and maintain the history of information's shared between the project manager and team member.



## Tasks

This group is designed to allow resources (people) participating in a project to access their tasks. It is possible for users to display the entire project activities assigned by your project manager. Please note that it may notify the execution percentage whether the task was approved or not, informs the daily working hours in case of need, can also inform of tasks performed overtime and displays all tasks assigned to the user regardless of the project.



## Reports

This group is one of the most important because it focuses on graphical project reports, which includes data analysis, reporting or interactive panels.



Microsoft Reference:

<http://office.microsoft.com/en-us/microsoft-project-project-and-portfolio-management-FX103472268.aspx>

# Project Server 2013 - How to install on SharePoint 2013

## Overview

Project Server 2013 is a project management solution. SharePoint 2013 provides support for a Project Server 2013 implementation, with its farm structure and architecture. Project Server 2013 objectives is portfolio management, project management, resource management and administrative tasks. The software can be integrated with several programs such as Microsoft Office, SharePoint itself and also Lync. Thus, this integration allows the use of different resources within the platform.

This article will show you how to install and configure Project Server 2013 for SharePoint 2013, step by step. In this scenario, SharePoint Server 2013 is already installed and configured

The installation is divided into the following steps:

- Install Project Server 2013,
- Configure Project Server 2013 for SharePoint 2013.

For more information on installing and deploying Project Server 2013:

<http://office.microsoft.com/en-us/microsoft-project-project-and-portfolio-management-FX103472268.aspx>

## Highlights

Project Server 2013 requires SharePoint Server 2013 to be installed.

The installation should have been done in full mode and the prerequisites should have been correctly installed.

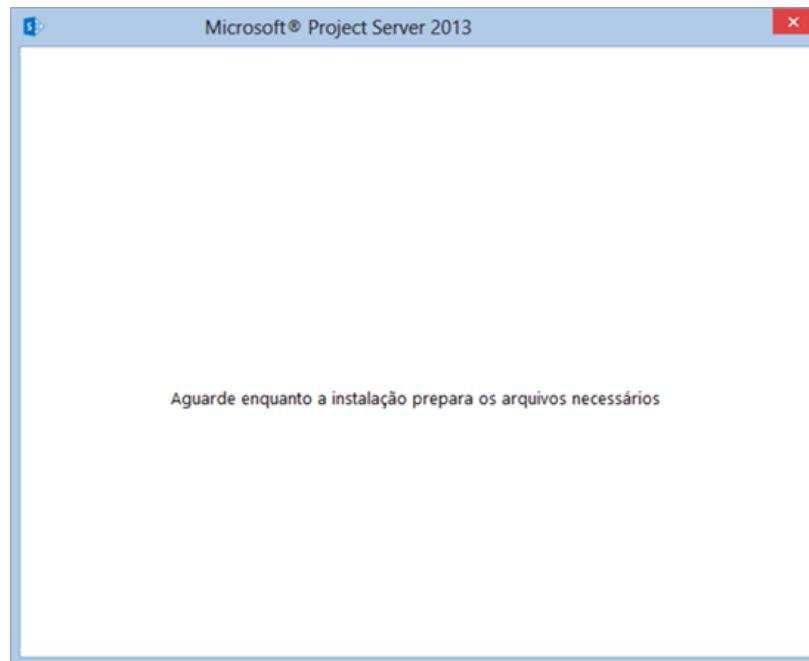
The user must have administrator rights on the application server and on the SharePoint farm.

## Install Project Server 2013

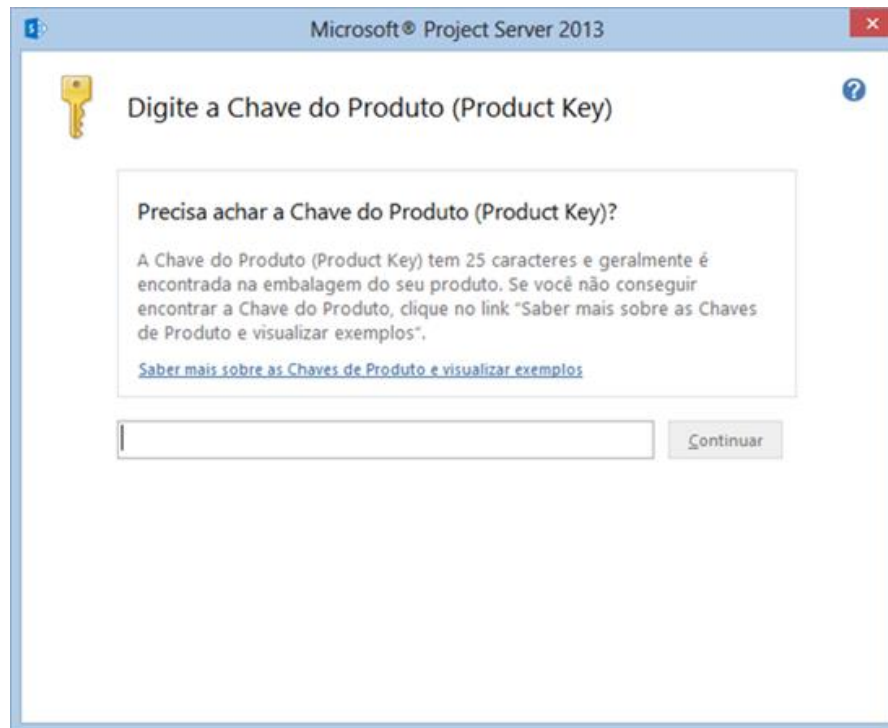
Run Project Server 2013 setup file

readme	20/05/2012 00:02	Arquivo HTM	1 KB
setup	13/12/2011 19:05	Script de Comand...	1 KB
setup.dll	01/10/2012 21:23	Extensão de aplica...	1.036 KB
setup	01/10/2012 21:25	Aplicativo	210 KB
splash	29/09/2012 14:01	Arquivo HTA	3 KB
svrsetup.dll	01/10/2012 21:22	Extensão de aplica...	9.687 KB

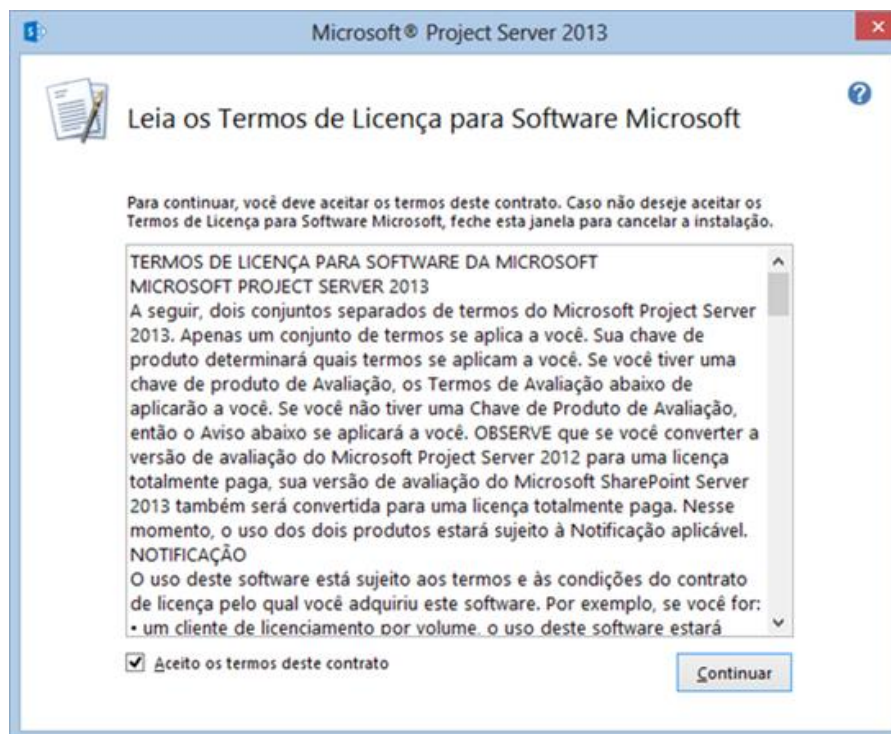
Wait until the program performs checks



Enter the product key, wait until it is approved and click on **“Continue”**

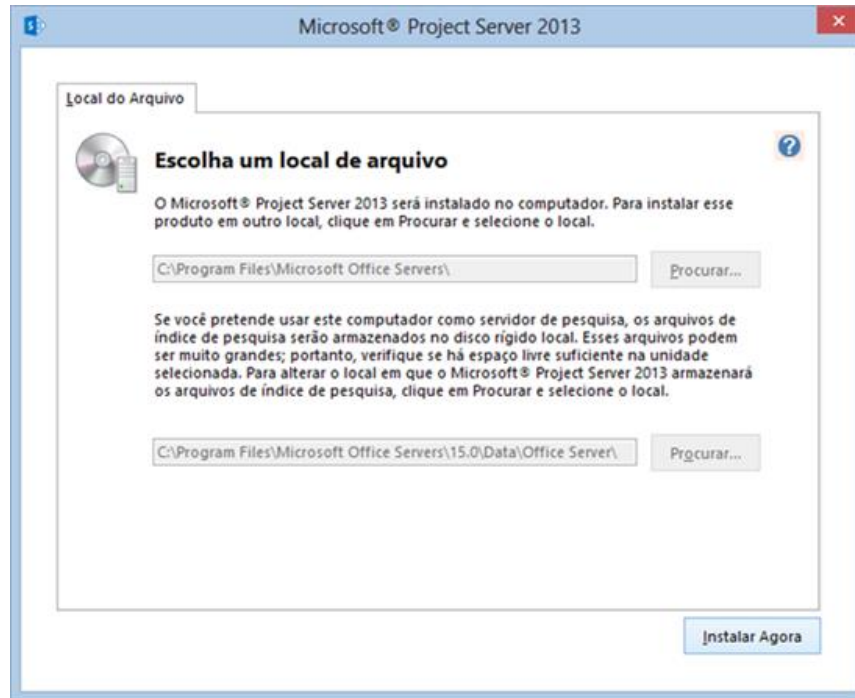


Click on **"I accept the terms of this agreement"** checkbox; click on **"Next"**

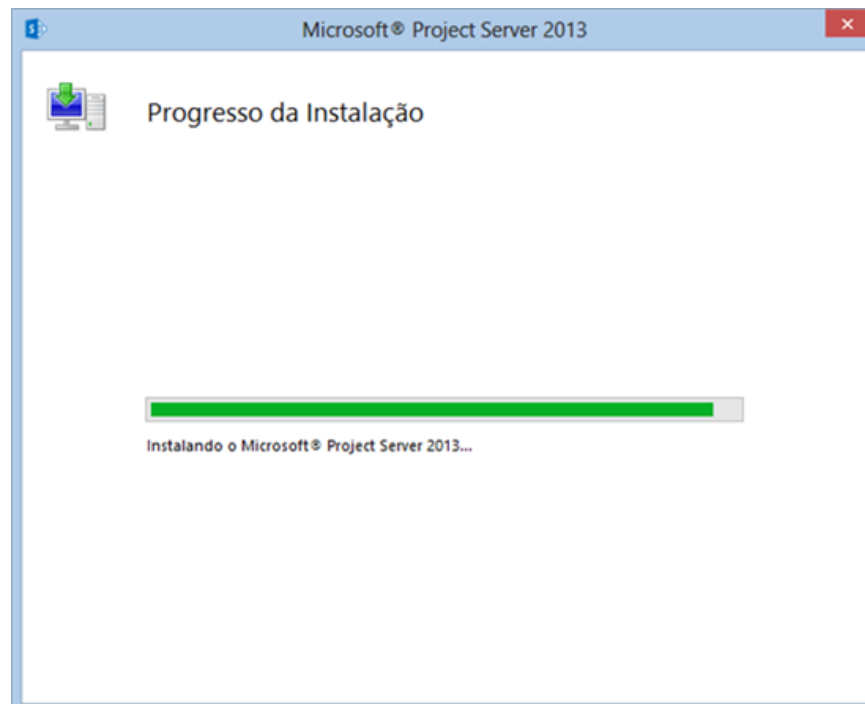


The directory where Project Server 2013 will be installed is displayed; click on **"Install Now"**



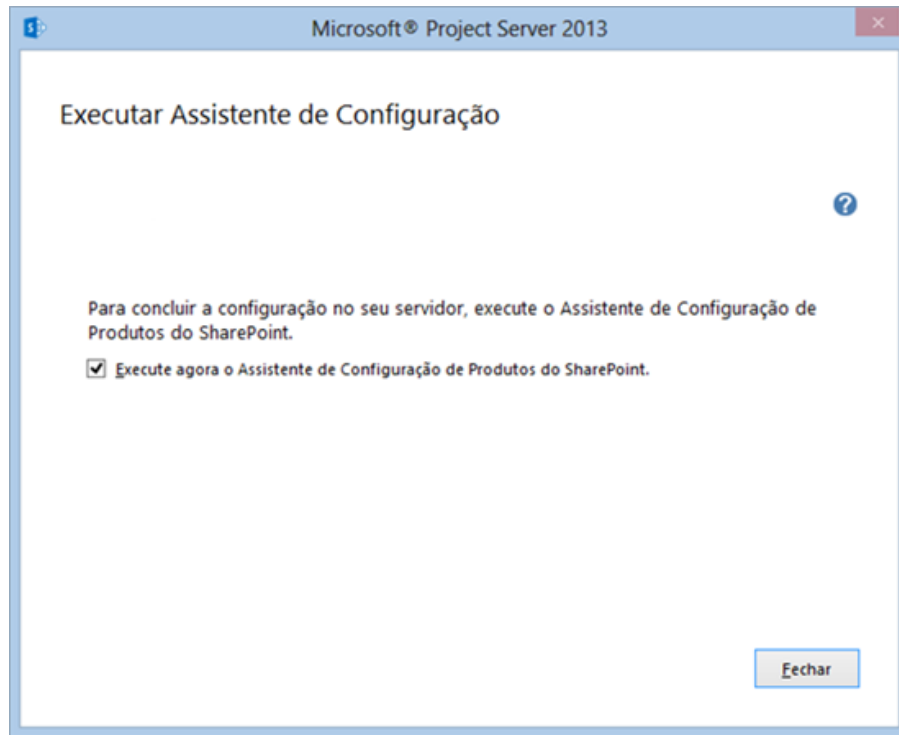


Wait until the installation is complete

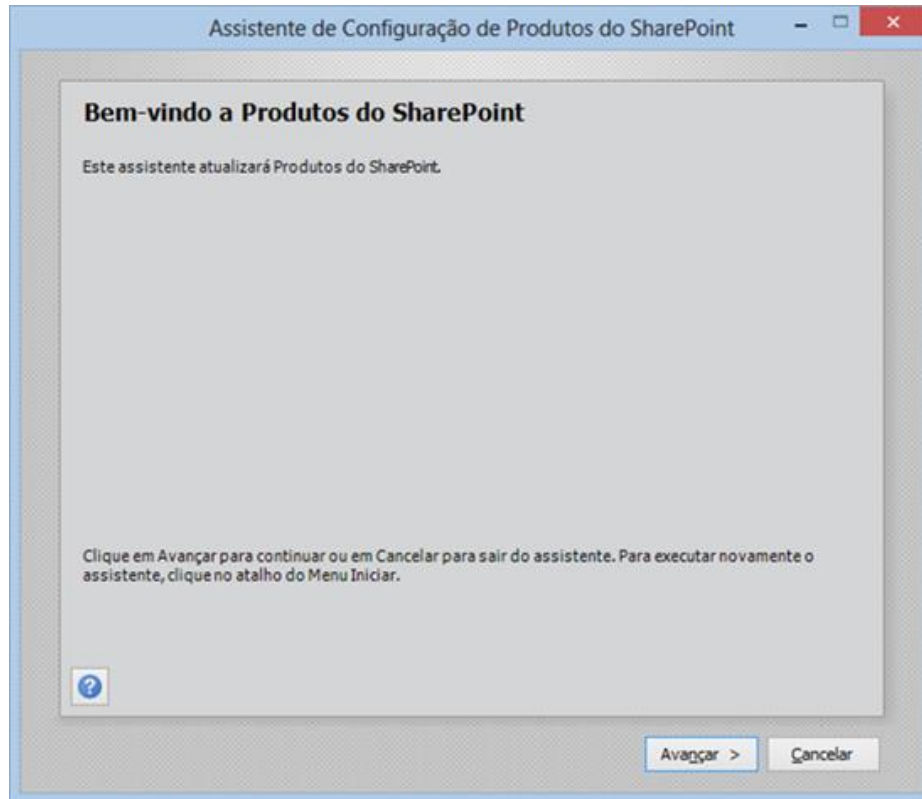


## Configure Project Server 2013

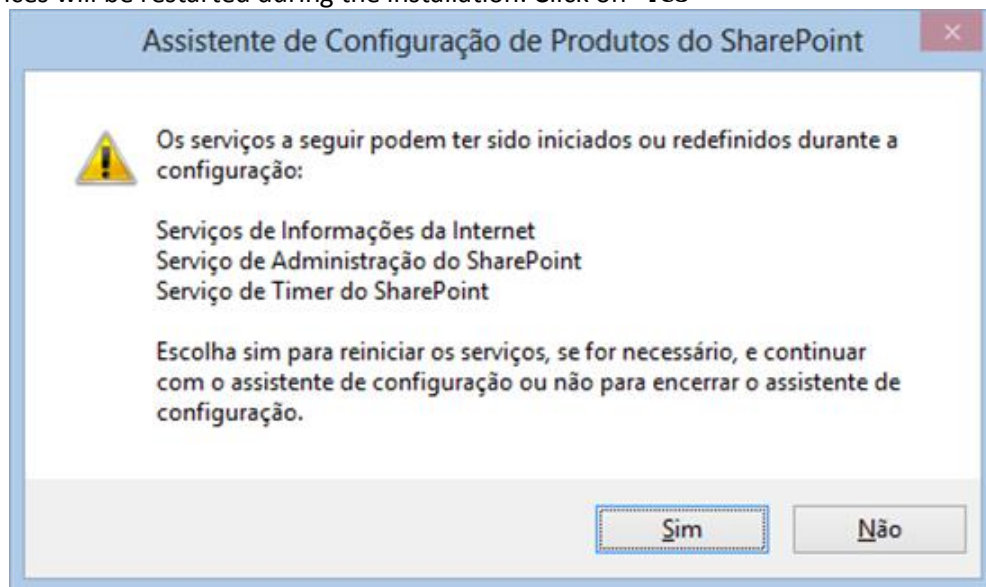
Select **“Run Now the SharePoint Products Configuration Wizard”**; click on **“Close”**



Click on **“Next”**



Some services will be restarted during the installation. Click on **“Yes”**



SharePoint 2013 configuration database will be updated during this configuration. The SQL Server name and SharePoint configuration database name are displayed.

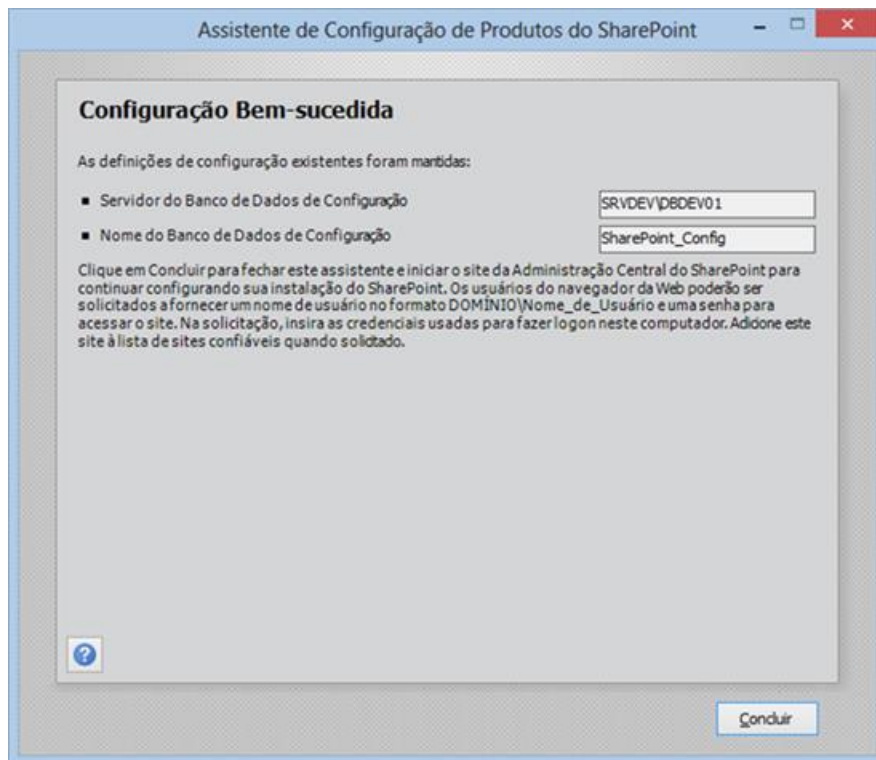
Click on “Next”

The screenshot shows the 'Assistente de Configuração de Produtos do SharePoint' (SharePoint Product Configuration Wizard) window. The title bar reads 'Assistente de Configuração de Produtos do SharePoint'. The main content area is titled 'Concluindo o Assistente de Configuração de Produtos do SharePoint' (Completing the SharePoint Product Configuration Wizard). Below the title, it states 'As definições de configuração a seguir serão aplicadas:' (The following configuration definitions will be applied:). There are two configuration items listed: 'Servidor do Banco de Dados de Configuração' (Configuration Database Server) with the value 'SRVDEV\BDEV01' and 'Nome do Banco de Dados de Configuração' (Configuration Database Name) with the value 'SharePoint\_Config'. Below these, it says 'Clique em Avançar para aplicar as definições de configuração.' (Click Next to apply the configuration definitions.). There is a button labeled 'Definições Avançadas' (Advanced Definitions). At the bottom, there are three buttons: '< Voltar' (Back), 'Avançar >' (Next), and 'Cancelar' (Cancel). A help icon (?) is located in the bottom left corner.

The configuration is performed by the wizard.

The screenshot shows the 'Assistente de Configuração de Produtos do SharePoint' (SharePoint Product Configuration Wizard) window. The title bar reads 'Assistente de Configuração de Produtos do SharePoint'. The main content area is titled 'Configurando Produtos do SharePoint' (Configuring SharePoint Products). Below the title, it states 'Aguarde enquanto os Produtos do SharePoint são configurados.' (Wait while the SharePoint Products are configured.). It then says 'Executando tarefa 2 de 10 da configuração' (Executing task 2 of 10 of the configuration). Below this, there is a progress bar that is partially filled with green. Under the progress bar, it says 'Iniciando a sequência de atualização...' (Starting the update sequence...). At the bottom right, there is a 'Cancelar' (Cancel) button. A help icon (?) is located in the bottom left corner.

If no errors occurred, a “**Configuration successful**” message is displayed. Click on “**Finish**”.



# Project Server 2013 - How to use Project Web Access with SharePoint 2013

## Overview

Project Server 2013 works with SharePoint 2013 to offer collaboration features and more effective project management. In addition, they provide a portal for managing web projects which will use all SharePoint 2013 features. This web site is called “Project Web Access”.

Microsoft Reference:

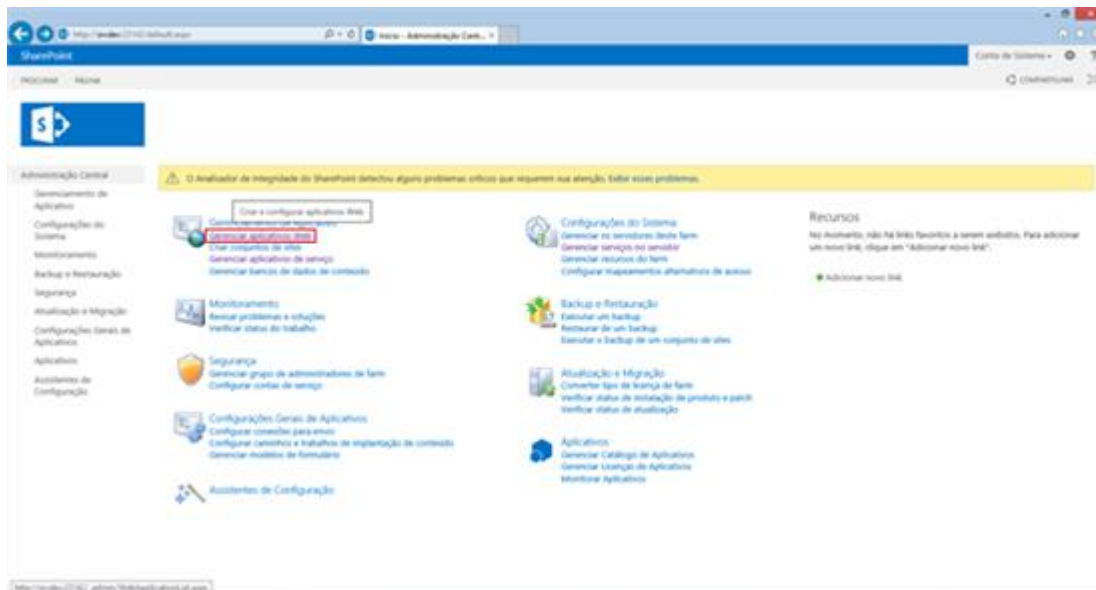
<http://technet.microsoft.com/en-us/library/ee662106.aspx>

## Highlights

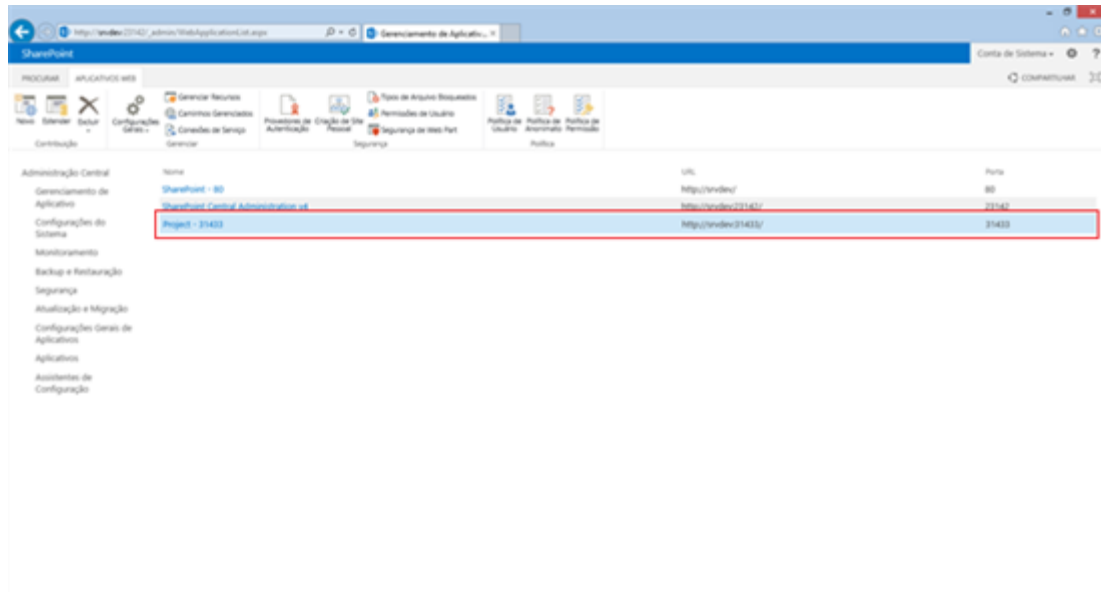
- The web application must be created in SharePoint 2013,
- The service related to Project Server must be enabled in SharePoint 2013 services,
- The user must have administrator rights in the central administration and on the SharePoint server,
- The user must have “Database\_Write Database\_Reader” permissions.

## Web application

To create the “Project Web Access” web application, launch SharePoint 2013 central administration and click on **“Central Administration - Application Management - Web applications”**.

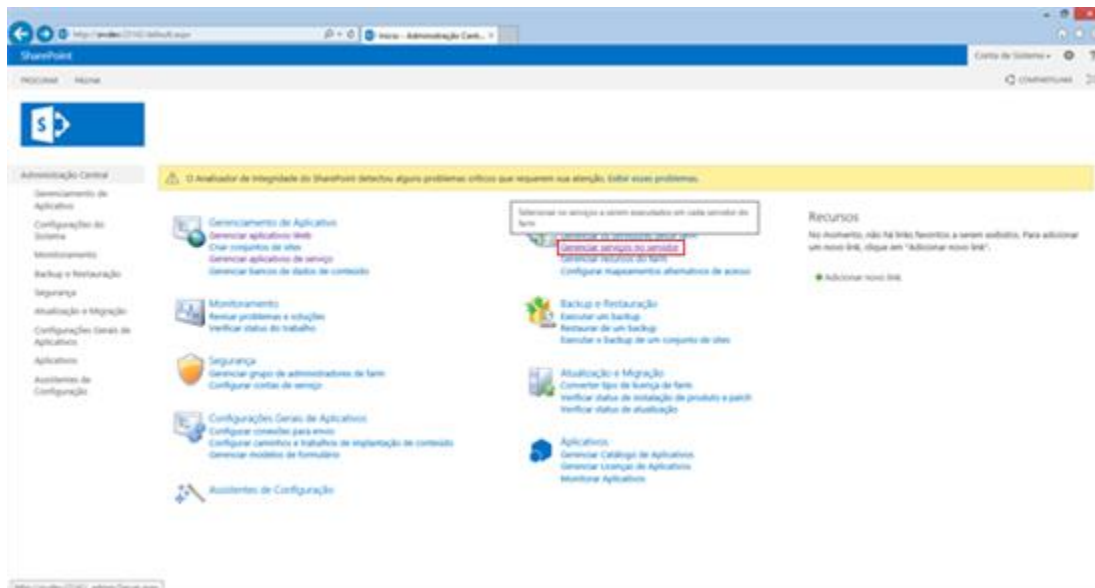


A best practice is to standardize the application name. In this example, we used the project name.

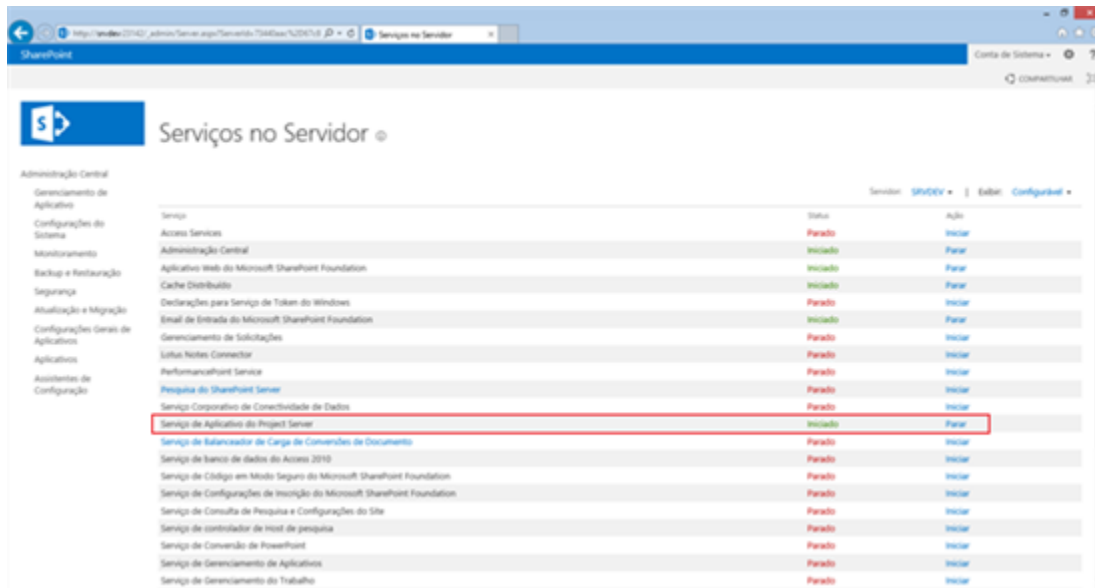


Enable the Project Application Server service

To enable this service, click on **“Central Administration - Manage services on the server”**

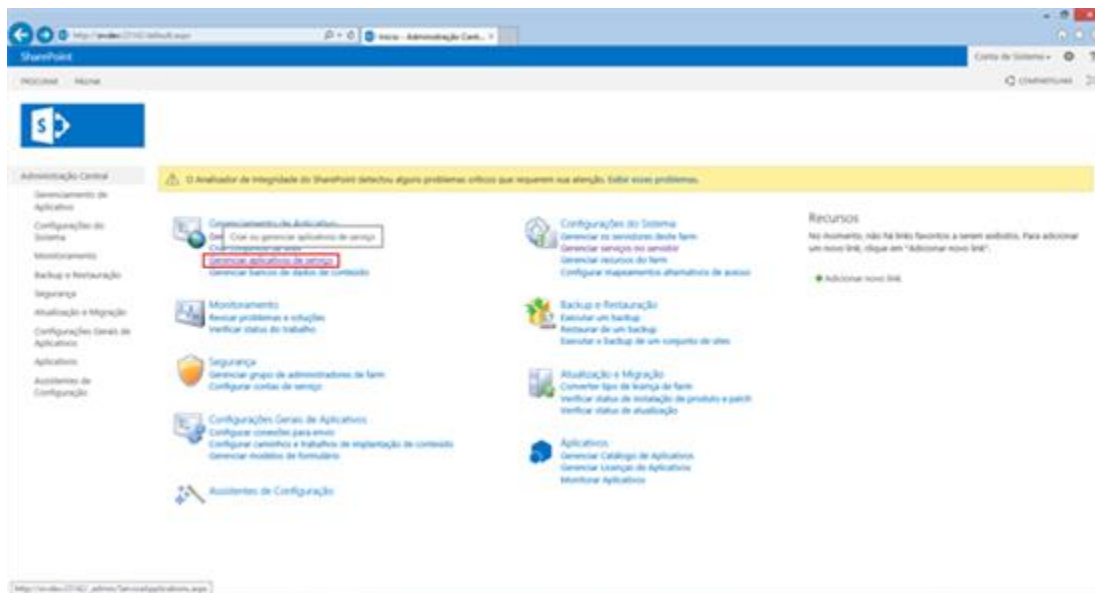


Click on **“Enable”** in front of the service named **“Project Application Server”**



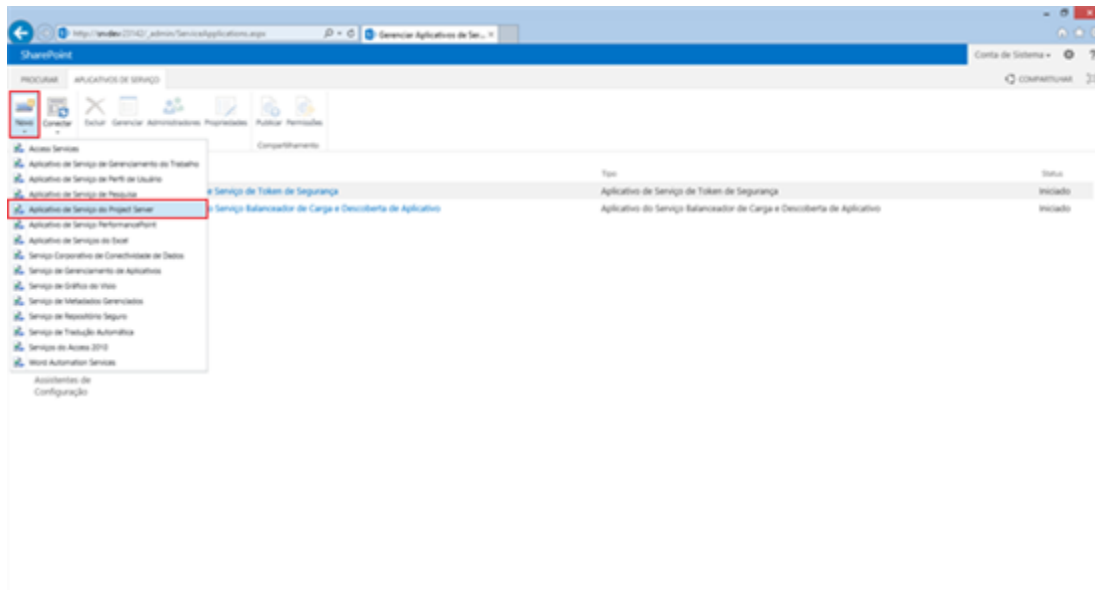
## Provisioning Project Web Access

In SharePoint Central Administration click on **“Manage Service Application”** in the **“Application Management”** section



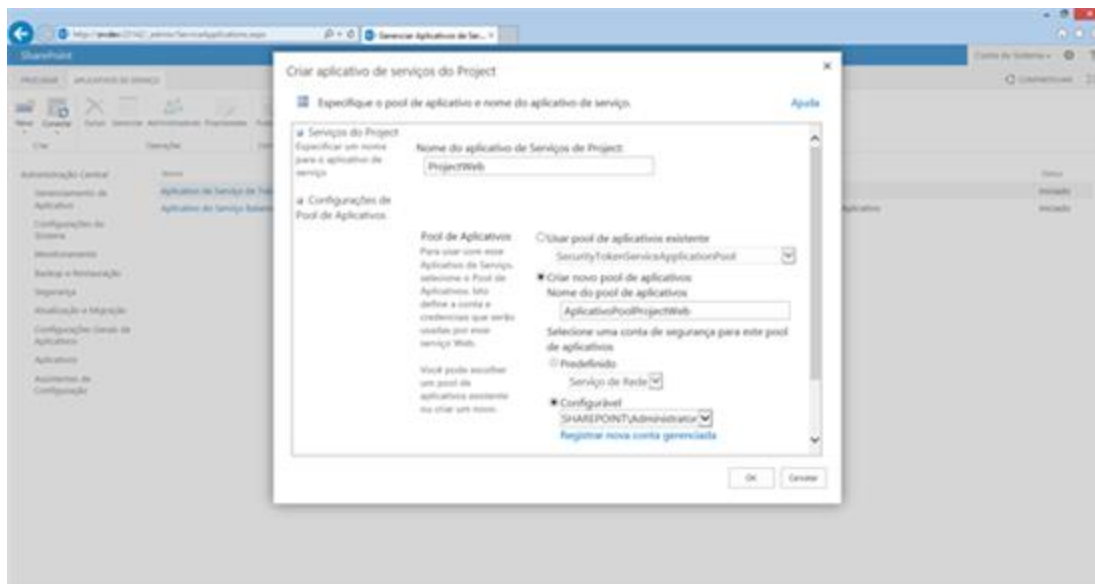
Click on **“New - Project Server Service Application”**





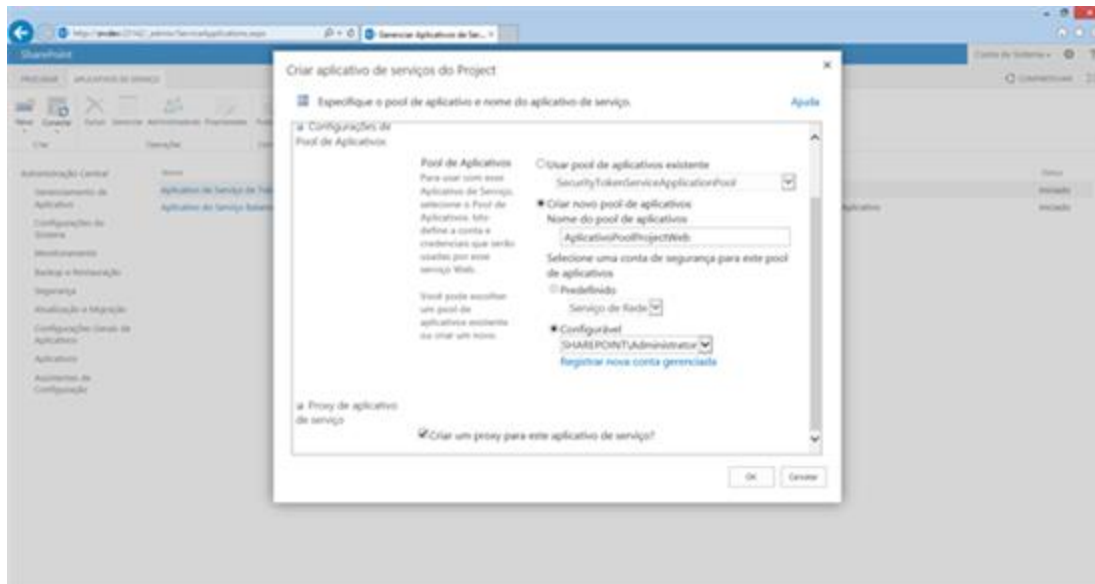
The required parameters are the following:

- Project's name: in this example "projectweb",
- Pool account's name: in this example AplicativoPoolProjectWeb,
- Service user's name.



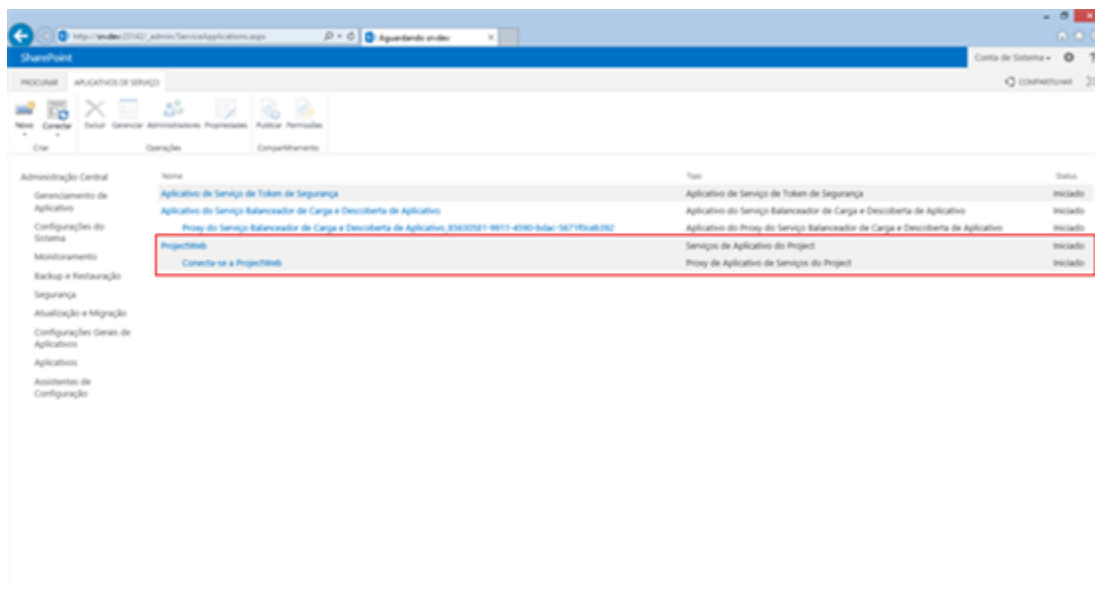
In the bottom of the page you can create a proxy for this service application, by clicking on the corresponding checkbox.

Then click on "OK" to launch the creation.



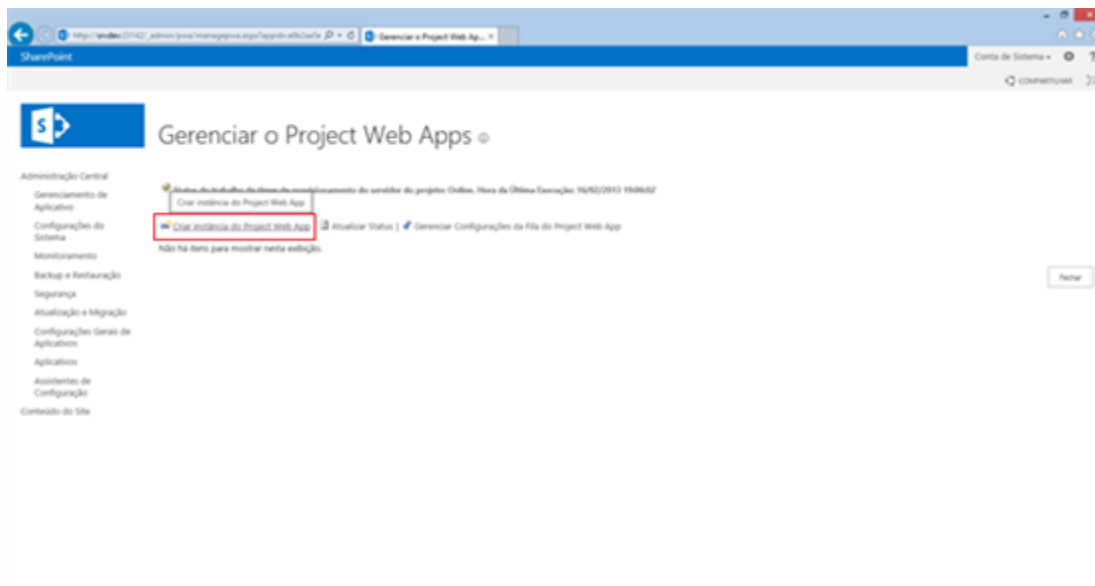
Once the creation process is done, check in the service applications list if the service application and its proxy have been created.

In the screenshot below, the service application named **“projectweb”** and its proxy are correctly displayed.



Click on the service application’s name to access Project Server 2013 settings.

Firstly, click on **“Create an instance of Project Web App”**.

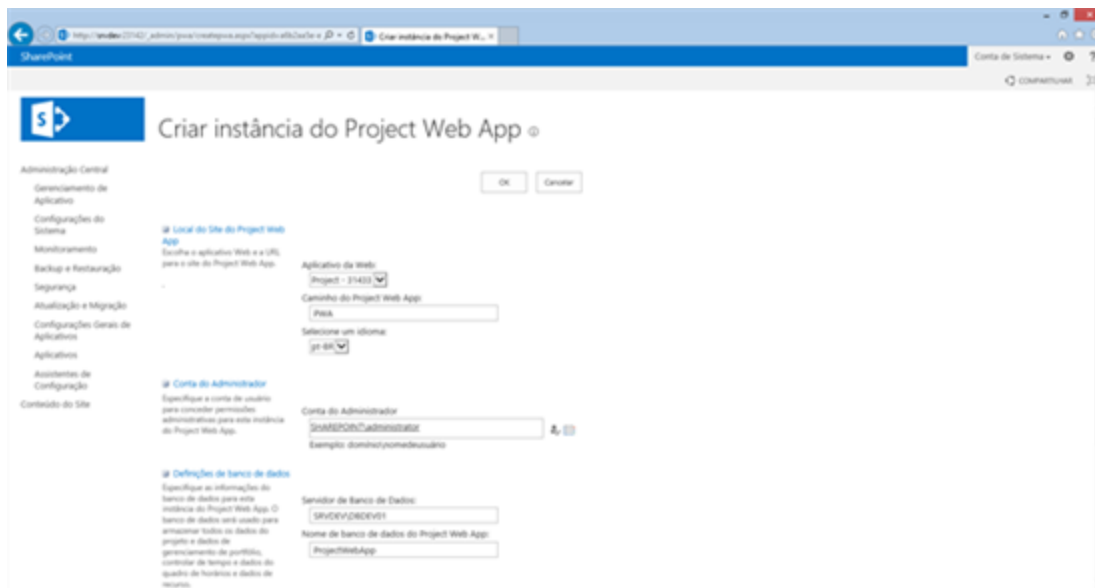


Create the Project Web App site under the selected web application to support the web Project Web Access. The path use the default PWA.

If you are using the Portuguese version choose “PT-BR” as language.

Enter the administrator account name.

The database server and the database name which the web app will be created are displayed; in this example the database name is “ProjectWebApp”.



Using the “**quota**” parameter, you can set the maximum file size to be downloaded in this site.

SharePoint

Conta de Sistema

Atualização e Migração

Configurações Gerais de Aplicativos

Assistentes de Configuração

Conteúdo do Site

Caminho do Project Web App

PAWA

Selecione um idioma

pt-br

**Conta do Administrador**

Especifique a conta de usuário para conceder permissões administrativas para esta instância do Project Web App.

Conta do Administrador

SPMSFONCAdministrator

Exemplo: domini@nomedousuario

**Definições de banco de dados**

Especifique as informações do banco de dados para esta instância do Project Web App. O banco de dados será usado para armazenar todos os dados do projeto e dados de gerenciamento de portfólio, controle de tempo e dados do quadro de horários e dados de recursos.

Servidor de Banco de Dados

SPMSFONCDEV01

Nome de banco de dados do Project Web App

ProjectWebApp

**Cota do Site**

Insira a cota de uso de disco para este site

Cota para o conteúdo do SharePoint neste site

1GB

Auto de Cota para o conteúdo do SharePoint neste site

1GB

OK Cancelar

In this first step, the status column displays **“waiting for resources”**.

SharePoint

Conta de Sistema

Gerenciar o Project Web Apps

Administração Central

Gerenciamento de Aplicativos

Configurações do Sistema

Monitoramento

Backup e Restauração

Segurança

Atualização e Migração

Configurações Gerais de Aplicativos

Assistentes de Configuração

Conteúdo do Site

Status do trabalho de fila de provisionamento do servidor de projetos Online. Hora da Última Execução: 16/02/2013 15:06:02

**Criar instância do Project Web App** | Atualizar Status | Gerenciar Configurações da Fila do Project Web App

URL

**Project - 31433** | <http://mdev31433/>

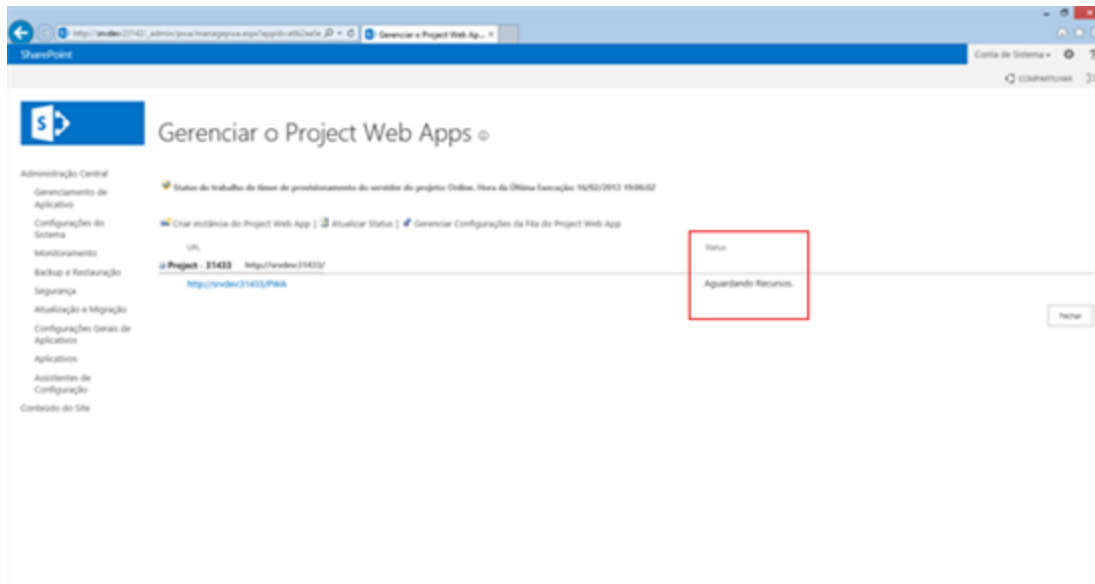
<http://mdev31433/PAWA>

Status

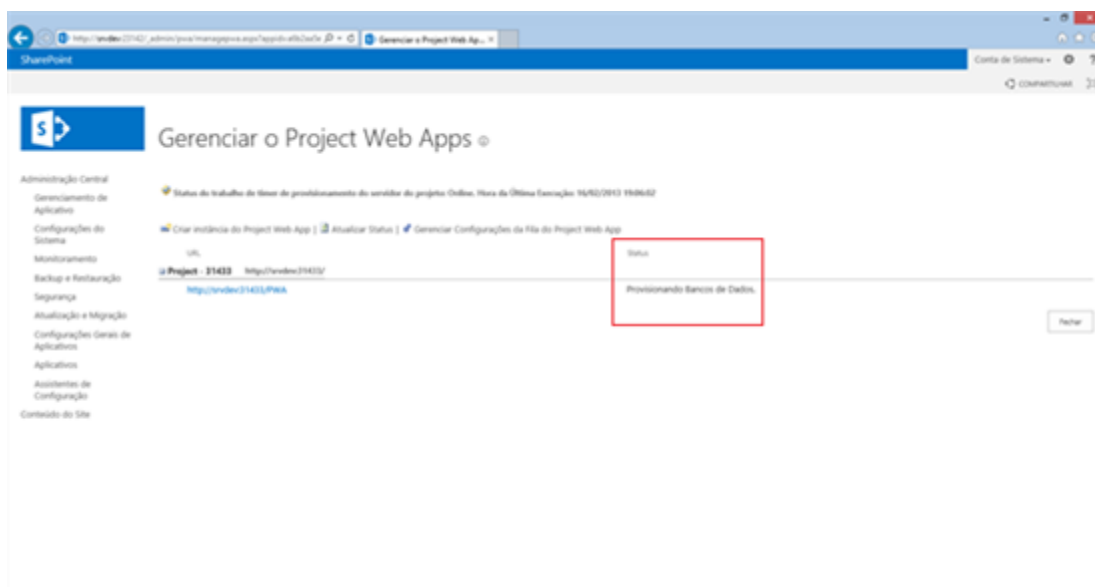
Aguardando Recursos

Gerenciar

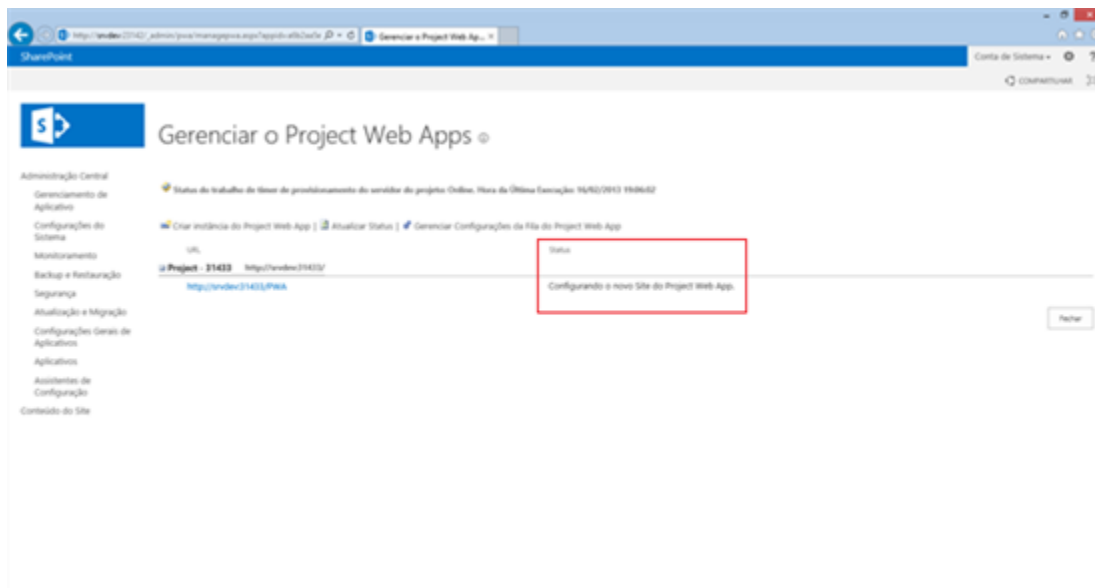
In the next step, the status switches to ‘Creating Project Web Access site’.



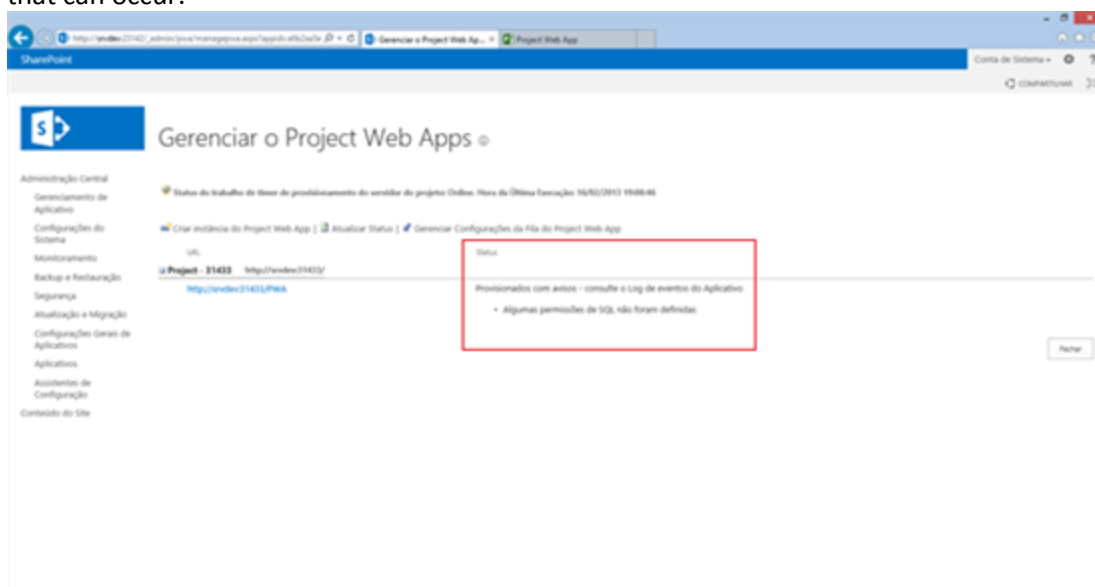
Then, the status switches to '**Provisioning databases**'.



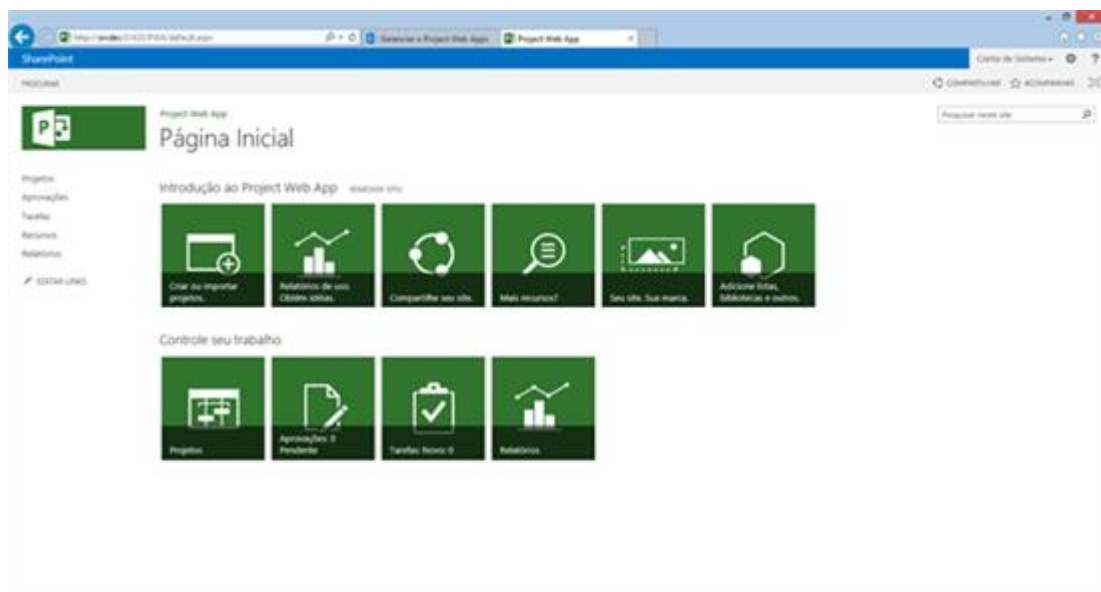
The next step focuses on the PWA site configuration, the status switches to “**Configuration of the new Project Web App**”



The main advantage of the “**status**” column is to monitor the process and also to check the problems that can occur.



At the end, open a new tab in the browser and enter the address used (here <http://servidor:1223/pwa>). You will access Project Web Access in its 2013 version.



## Project Server 2013 - Good practice for information retrieval and troubleshooting

As any tool or system, using Project Server 2013 can be the source of technical problems. However, you can solve these problems quickly and easily. Although many believe that problems can only occur on servers and databases, other causes may also have a direct impact on the tool, such as a corrupt field, a view that cannot load projects, integration with other solutions that is not functional and other scenarios.

Maintenance patches and bugs in Project Server 2013 are divided into two groups:

- Operational,
- Infrastructure (database and application servers).

### Operational

As part of the corrective maintenance and operating, Microsoft offers a unique knowledge base treating serious errors that may occur when running Project Server 2013. These data are stored in the Microsoft reference material:

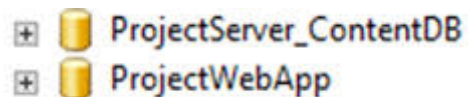
<http://office.microsoft.com/en-us/help/project-server-2013-known-issues-HA102919020.aspx>

This can be used to solve many problems, as additional workflow not working, lookup tables based on custom fields that cannot be used by the workflows, sync tasks with Outlook Exchange 2010 not correctly applied, among others. Remember that this reference provides solutions therefore just apply a patch.

### Infrastructure

Maintenance of servers that support Project Server 2013 and its structure is an essential task to maintain the solution functional. Some of these problems will require to use a Project Server 2013 backup.

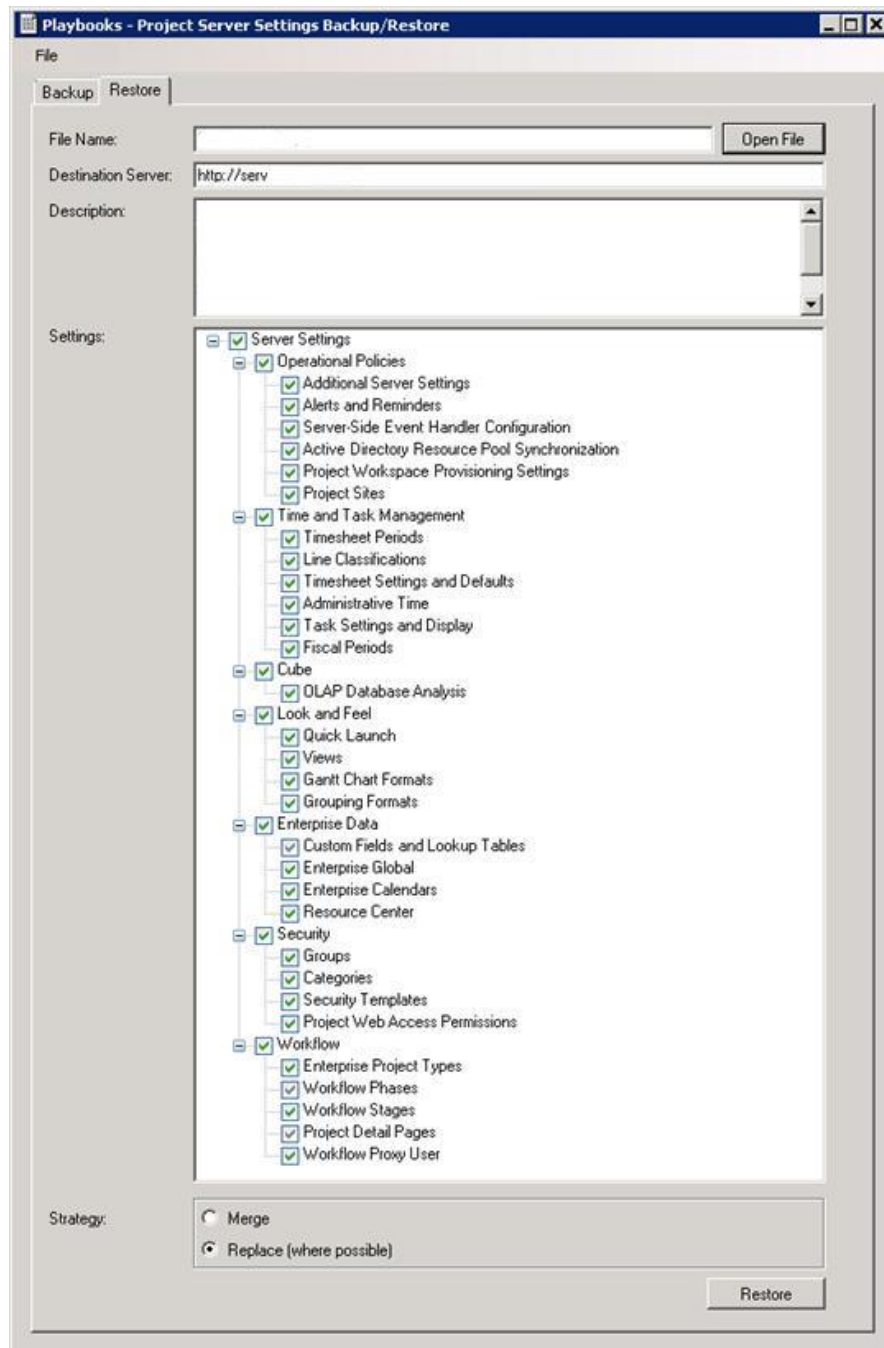
The Project Server 2013 database structure is the following:



In the SharePoint Central Administration go to the Backup and Restore section.







Microsoft Reference:

<http://www.microsoft.com/en-us/download/details.aspx?id=30435>

<http://technet.microsoft.com/en-us/library/jj993260.aspx>

# Project Server 2013 - Overview of server settings

## Overview

In addition to the layout, which has been updated to improve access to Project Server 2013 parameters, server settings related to the structure and groups of commands/options are more convenient and easy to use.

The main objective is to have a space dedicated for Microsoft Project Server management, both within the company infrastructure or even in the cloud, as this place is completely separated from SharePoint 2013.

The objective is to help administrators to better manage resources, find administrative options, improve security and access to correct problems more efficiently and especially to manage all basic operations and security policies.

Some options are:

- Control licenses used by Project Professional and Project Server 2013,
- Company parameters, for example: registration of users calendars,
- Manage capacity and resource planning,
- More information on the Exchange Server services,
- Define the type of tasks to be used by the organization.

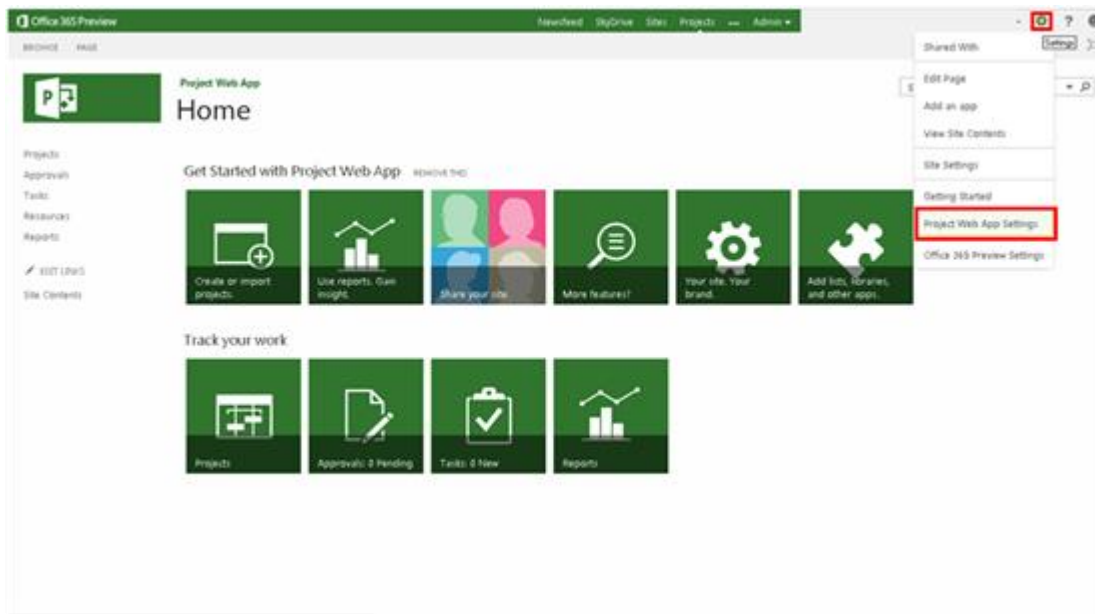
Project Server 2013 Settings allows the user to customize and configure all projects, by modifying:

- Title,
- Views,
- Filters,
- Security,
- Workflow,
- Site Template.

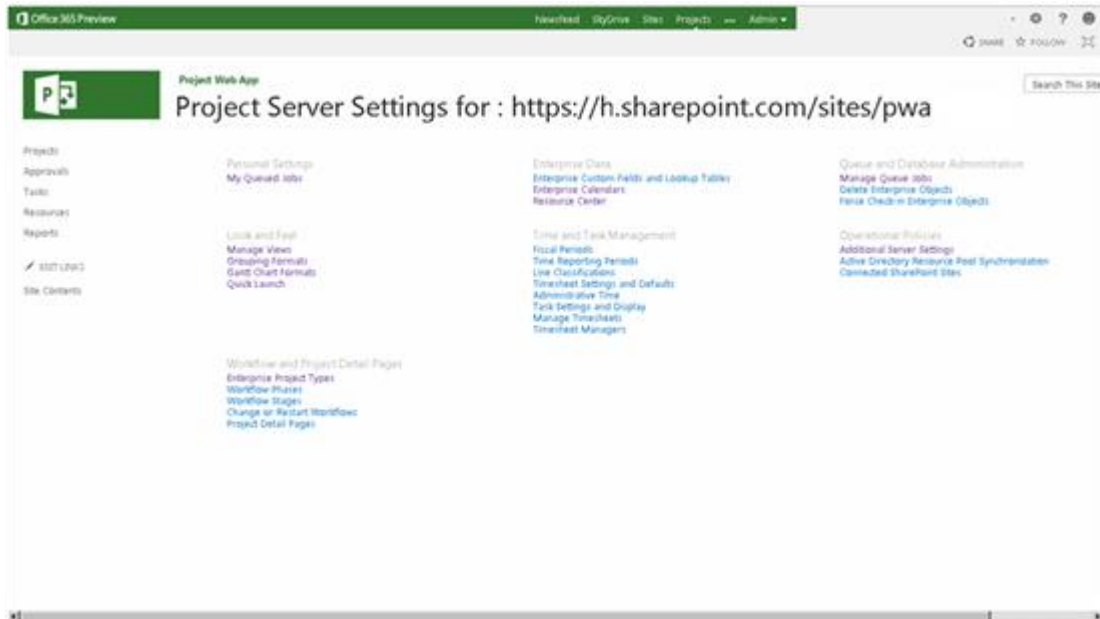
Microsoft Reference: <http://technet.microsoft.com/en-us/library/gg982980.aspx>

## Project Server settings

1 - To access the settings, click on “**Settings - Project Web App**”

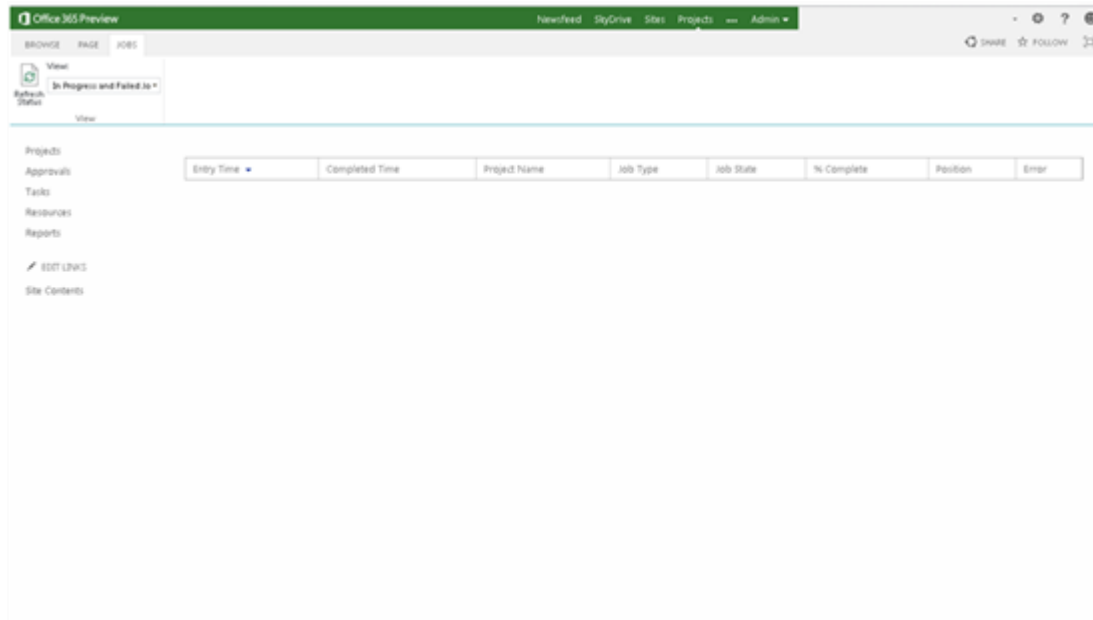


2 - The settings page displays the available structure



## Personal Settings

**My Queued jobs:** This option allows you to view tasks in the queue. When project information and timesheets are published in Microsoft Office Project Server 2013, they are executed by the Project Server queue. You can change the way the events are expected to be queued, see the jobs in the queue and restart the specific jobs in the queue.



## Enterprise Data

**Enterprise Custom Fields and Lookup Tables:** This option is used to create, edit, view and delete custom fields in Project Server 2013. Depending on the structure that was created, fields can be displayed both in the web and in the Project Professional environment. You can work with fields of design, tasks and resources type, the choice should be made depending of business needs.

**Enterprise Calendars:** These calendars display holidays, events, and schedule. You can work with multiple calendars but remember that your goal is to provide flexibility for the project and resource management.

**Resource Center:** Centralizes all company resources, as people, material and costs. Another interesting point is the ability to easily view the availability, work hours, as well as resources that were synchronized with Active Directory.

## Queue and Database Administration

**Manage Queue Jobs:** Imagine that several processes can be centralized and managed in a very simple way. This option provides a range of options for managing all activities that occur on the Project Server 2013 server, as publications, errors, activities status and other operations that ease solution management.

**Delete Enterprise Objects:** This option allows you to remove an object from the server, as timing, resources, calendar templates and more. When an object is deleted, the associated database is removed, so if you want to cancel this operation, you should do that using a backup.

**Force Check-in Enterprise Objects:** Why should you use the checking and checkout functionality? If a problem occurs the object may be stuck in the queue, and with this option you can solve these problems. Select the program that causes the problem and perform the check-in.

## Look and Feel

**Manage Views:** Views are one of the most important part of Project Server, they are available in portfolio analysis, individual analysis, analysis, resource management, task management, department divisions, and of course in company's PMO life.

**Grouping Formats:** Clusters unify the available information, for example if IT and new users are registered in a book they can organize the data in a simple way.

**Gantt chart Formats:** Formats are resources that can be used to customize the Gantt Project Web Access, as you can show or hide baselines, define color models and more. Remember that this feature has its limitations (due to Project Professional 2013) and some features may not work in the Web environment, but only in the desktop version.

**Quick Launch:** You can modify here links in the PWA. This is the main portal that links risk, portfolio, and project and resource center. Remember that it is only possible to set native Project Server links, in case of files and documents you should use SharePoint parameters.

## Time and Task Management

**Fiscal Periods:** Exercises are an important requirement when you have to set exercises in an organization, where you can define fiscal periods. Operations such as creating, modifying, editing and deleting can also be performed using this option. Once the period is changed, end dates of each fiscal period are automatically modified.

**Time Reporting Period:** You can set here start and end dates to reports via tasks status and time sheets. You can create different reporting, add or delete periods among other actions.

**Line Classifications:** The line classifications method aims to enable duplication of timesheet lines.

**Timesheet Settings and Defaults:** You can define here timesheets parameters and their default values that are commonly used in the PWA timesheet. You can create and define the timesheets to be used in the control units (days and weeks) definition and set report time limits that includes the maximum and

minimum time that must be followed. Timesheet policies are also an interesting way to help your company will faithfully regulatory or accounting requirements.

**Administration Time:** This option should be used when there is a need for a company to control time exceptions. Other important information are available, such as the status (open or closed), the type of work (useful or off), the approval method, it also shows some ways for the manager to approve working time for resources which were sent.

**Task Settings and Display:** You can specify the progress method (percentage of work completed, the work actually performed and the remaining duration), tasks progress (percentage of work completed, actual work completed and remaining duration). In addition, the report view shows how resources will report their work hours (daily or weekly).

**Manage timesheets:** This option is a way to determine how managers will control the amount of time that your project team will include in the tasks.

**Timesheets Managers:** One new feature in timesheets management is the support of uncontrolled hours and a better control of the users present in the PWA structure. These improvements directly affect administrators and developers because it provides the ability to support work hours that are not related to a specific project, but tasks that must be stored and managed.

## Operational policies

**Additional Server Settings:** You can set company options as master projects that may or may not be registered on the server, if it is allowed to use the local calendar or company schedule, define the default currency (BRL in Brazil), if projects can be published using other formats or if they require the one defined on the server, weekdays resources, task synchronization with Exchange Server and work mode that will be automatic or manual.

**Active Directory Resource Pool Synchronization:** It is possible to put the corporate address book and structure in Project Server 2013. By default, this catalog is linked to a group that usually contains people names and the department in which they work. A tip when working with these names is to call them information resources.

**Connected SharePoint Sites:** You can see here SharePoint sites that are integrated into the PWA structure, as sites.

## Workflow and Project Details Pages

**Enterprise Project Types:** A good way to separate different types of projects in an organization is to use a workflow with phases and steps. With this option you can create forms for proposals that will be available on the New Project Center button.

**Workflow Phases:** The workflow phases are required to inform that a step has been completed, it gathers information through the ability to create projects that have been selected or present a plan for how they will perform tasks.

**Workflow Stages:** With workflow stages, you can have more details of each workflow step (full, Build, Manage, plan and Select). It is also possible to organize information in phases by adding or removing items that are not used in the structure or workflow. Remember that in every detail you can get various data such as description, design details, page views, fields that have been developed and which may or may not be required, authorization level (Read Only, reading and writing, binding, etc).

**Change or Restart Workflows:** Using this option you can select a particular stage to which you want to restart your workflow. You can also select multiple projects and some other options.

**Project Detail Pages:** You can set here project's data which can be viewed or modified in PWA (Project Web App). Options are related to design details, analysis, proposal start and end dates, proposal status, proposal summary, timing and strategic impacts.



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