# **Smart-X Software Solutions**

# **Core Configurator User guide**

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### Welcome

Welcome to Smart-X.

Thank you for choosing Core Configurator™, one of the top tools developed by Smart-X Software Solutions expert team in an effort to optimize your everyday work. Core Configurator helps you manage your system efficiently, effortlessly and productively.

This chapter describes the features and capabilities of Core Configurator, and lists additional tools in the same field that can help optimize your work environment.

For more tools, click on the link to visit our website at <a href="www.Smart-x.com">www.Smart-x.com</a>.

# **This Chapter Contains:**

- Features and Capabilities.
- More System Management tools.

# **Features and Capabilities**

A number of the Core Configurator advantages are as follows:

#### Graphic interface for Windows Server 2008 Core configuration.

- Product Activation
- Configuration of display resolution
- Clock and time zone configuration
- Remote Desktop configuration
- Management of local user accounts (creation, deletion, group membership, passwords)
- Firewall configuration
- WinRM configuration
- IP configuration
- Computer name and domain/workgroup membership
- Installation of Server Core features/roles

# **More System management tools**

#### <u>DSM</u>

- Instantly get a real view of duplicate SID computers on your network.
- Easily distribute new SIDs to remote computers with a single click.
- Easily repair problems caused by years of incorrect deployment procedures
- Tighten security and fix one of the most common security threats in enterprise networks.

#### **SecReport**

- Easily generates NTFS permissions reports on your network
- SecReport allows you to generate complex NTFS security reports on any given directory. The report will include all users who have access to each sub directory (and optionally files) and the type of access permission.
- Benefits:
- Get a clue who can access which data on your public folders
- Generate reports from the context menu.
- Provide annual security reports to managers to comply with SOX standards.



# **Working with Core Configurator**

This chapter provides explicit instructions on how to use the Core Configurator.

After reading the content carefully and following the prescribed instructions you will find Core Configurator simple to operate.

### **This Chapter Contains:**

I: Requirements.

II: Installation and Licensing.

II: Working with Core Configurator.

# Requirements

Windows Server 2008 Server Family

Windows Server 2008 R2 Server Family

Windows Server 2008 Hyper-V

Windows Server 2008 R2 Hyper-V

# **Licensing and installation**

#### **Evaluation version limitation**

The product you have downloaded is defined as 'Free for non commercial use'.

You can use this product as freeware only for personal use. If you are using the product as part of an organizational network, you should acquire a valid license (as explained in the EULA).

Please read the legal document carefully and follow its instructions.

#### Installation

Core Configurator should be installed locally on Windows 2008 Server, Core Edition.

To install Core Configurator from a downloaded file:

- Copy the Core Configuratorurator.msi file to the Windows 2008 Server.
- Logon to the server's console.
- 3. Use the CMD windows to change directory to the location where you placed the Core Configuratorurator.msi file.
- 4. Enter 'msiexec /i Configuratorurator.msi' at the command prompt
- 5. Follow the online screen instructions to complete the installation procedure.

If a previous version is already installed, you will need to uninstall it first by typing the following command:

MsiExec.exe /X{9C3D23FA-E 8E2-451C-82E0-EA3B70585E47}

# Installing CoreConfig on Windows 7 / 2008 R2 beta versions

Installing the CoreConfigurator on Windows 2008 R2X64 requires an installation of WOW64 according to the following instructions:

 In order to see if WOW64 is installed or not, use the following command:

#### **Oclist**

• Look for the status of **ServerCore-WOW64** component.

In order to install WOW64, use the following command:

- Ocsetup ServerCore-WOW64
- Then reboot (The installation will not prompt you to reboot, but the reboot is required).
- Once the server has rebooted, you should be able to install Core Configurator.

# **Licensing**

Core Configurator is licensed per organization. Each organization should acquire a single license. This license can be used on multiple servers within the organization.

When using an unregistered version, the following screen will appear each time you launch the application.



Once a valid license file is installed, this message will not be displayed.

In order to install the licensed file, purchased from

www.Smart-X.com, apply the following procedure:

- 1. Copy the license file to the target server.
- 2. Run the application
- 3. On the main screen, select Help  $\rightarrow$  About from the main menu
- 4. Click the 'Set License' button
- 5. Browse to choose the received file
- 6. Verify that the registration information is correct. If not, contact support@smart-x.com.
- 7. Click 'About' to close screen.

# **Working with Core Configurator**

After installing Core Configurator (supplied as MSI package), simply type 'Start CoreCFG' at the command prompt to launch the application.

Upon installation, the setup program sets the path to CoreConfigurator on the machine's %path% environment variable. However, since the Command window was already opened when the variable was altered, it will only apply if you close the original Command prompt and open a new one using Task manager.

Subsequent to the program setup update of the application path ('HKLM\Software\Microsoft\Windows\CurrentVersion\App Paths'), the command 'Start CoreCFG' will work immediately.

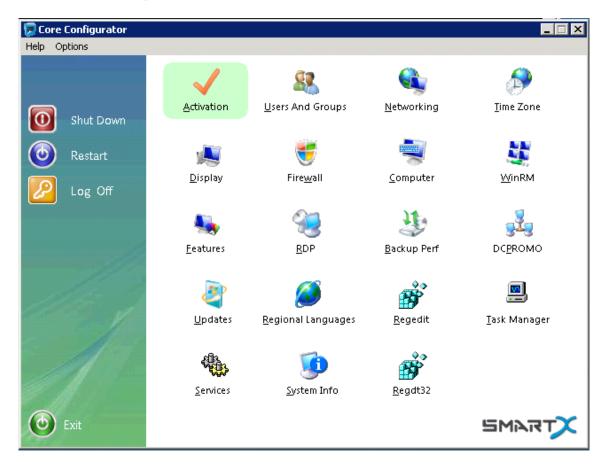
The guide describes each configuration screen.

#### **How it works**

Installing Microsoft .Net on Windows 2008 Core is no picnic. Therefore we decided it is best to use Visual Basic 6. In order to provide the best feel and look, we created several custom controls.

This is the main reason Core Configurator should be installed. (Otherwise, you could simply run it without installation).

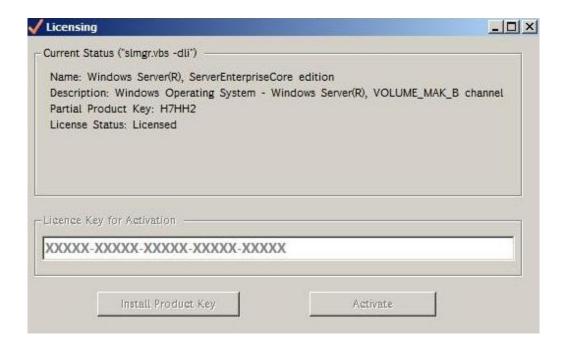
# **Core Configurator Main Screen**



Note: The Regedt32 will only appear when you run CoreConfigurator on a 64 bit edition (using WOW64).

#### **Activation screen**

The current Windows activation status can be viewed in this form. Install the Product Key (in case you did not do that during the OS setup) and activate the server:



First, enter a valid license key and click 'Install Product Key'.

Once the product key is successfully installed, you will receive a proper message.

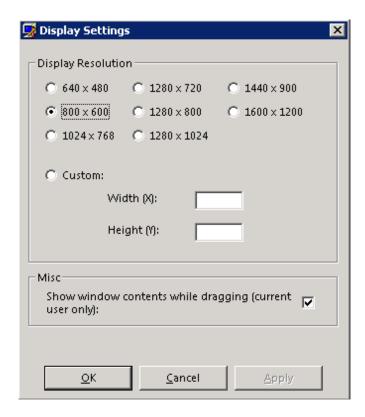
Then, you should use the 'Activate' button to activate the product over the internet.

#### **How it works:**

All the background tasks are achieved by calling *slmgr.vbs* script (part of the OS) with relevant arguments. Product Key installation uses the "-ipk" switch and activation uses "-ato" switch.

# **Display Settings**

The Display Settings screen provides a smart and simple way of configuring the display resolution and "Show window content while dragging" features that can significantly improve the user experience, when the server is virtualized and user is working on its console. Please note that this is a per-user versus per-machine setting.



In order for settings to apply, you will have to log off and back on again. After changing settings and clicking OK, you will be prompted.

#### **How it works**

CoreConfig sets display settings by manipulating registry values under the following registry key:

HKLM\System\CurrentControlSet\Control\Video

Further details can be found in following link:

http://blogs.dirteam.com/blogs/sanderberkouwer/archive/2007/08/14/changing-server-core-s-look-and-feel-part-2.aspx

#### **Time Zone**

Clicking Time Zone button will display the standard timedate.cpl control panel applet:



#### **How it works**

This panel is one of the only graphic controls MS left in Windows 2008 Core. It can be run by typing 'timedate.cpl' in the command prompt.

# **Remote Desktop**

Clicking the RDP button enables/disables Remote Administration connections (relevant rules in the firewall still need to be enabled. The "Remote Administration" rule set in firewall configuration section or manually open the relevant rules using netsh.exe). In addition you can configure here the "Allow connections from previous versions of Windows":



#### **How it works**

CoreConfig sets remote administration settings by manipulating registry values under the following registry key:

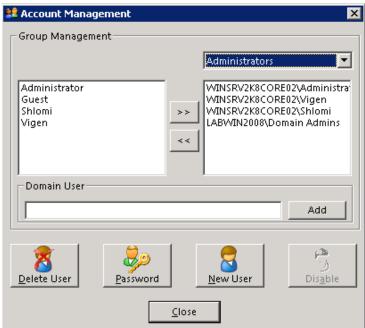
HKLM\System\CurrentControlSet\Control\Terminal Server

Further details can be found in following link: http://www.leedesmond.com/weblog/?p=142

# **Account Management**

This form allows you to manage your local accounts. You can create / delete local user accounts, reset password and enable / disable user accounts. You can also change local and domain users' group membership.





Note that this panel is not available when the server is a Domain Controller

#### **How it works**

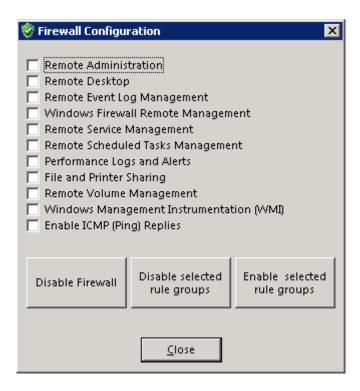
Creating this form using CLI solely was too much work, so we used direct API calls. However, you can practice basic account operations by using the 'net user' and the 'net localgroup' commands.

Further details can be found in the following link: <a href="http://technoicon.blogspot.com/2008-08-01">http://technoicon.blogspot.com/2008-08-01</a> archive.html

#### **Firewall**

Managing firewall with command line is not always a- simple task. The firewall section is here to help you to enable / disable the FW and configure the basic rule groups so that you will be able to at least connect and administer the server from a remote machine.

**Warning:** the tool will not display the current state of the already configured firewall rules. It enables / disables the selected rules group solely.



#### **How it works**

In order to alter FW configuration, CoreConfig you can apply 'netsh firewall' and 'netsh advfirewall' commands.

Further details can be found in following link:

http://www.petri.co.il/configuring-firewall-on-server-core-for-remote-management.htm

#### **WinRM**

This form allows you to enable / disable WinRM.



#### **How it works**

to set WinRM settings, uses the winrm.cmd file which exists in %windir%\system32 directory.

Further details can be found in following link:

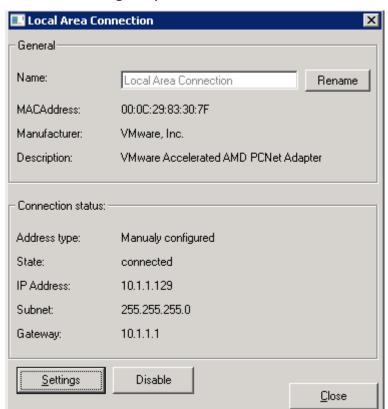
http://technet.microsoft.com/en-us/library/cc781778.aspx

# **Networking**

The main networking form allows you View TCP/IP v4 enabled network adapters' status (Enabled / Disabled / Connected / Disconnected)



Double clicking a specific connection will launch the following screen:

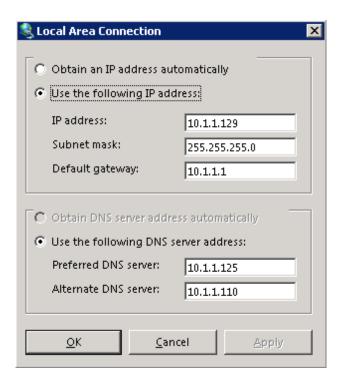


This screen allows you to view the following information:

Mac Address, Manufacturer, Description, Address type (Manual / DHCP), connection status, IP address, subnet and gateway.

It also allows you to disable / enable and rename the adapter.

Clicking on 'Settings' will open the following screen:



This screen allows you to configure basic TCP/IP v4 settings.

#### **How it works**

CoreConfigurator uses the netsh command and some WMI calls for the networking forms.

Further details can be found in following link:

http://www.windowsnetworking.com/articles tutorials/Configure-Networking-New-Windows-Core2008-Server-Using-CLI.html

# **Computer Name**

Use this form to rename the box and join /disjoin it from a domain.



#### **How it works**

CoreConfig uses the netdom command in order to perform this tasks

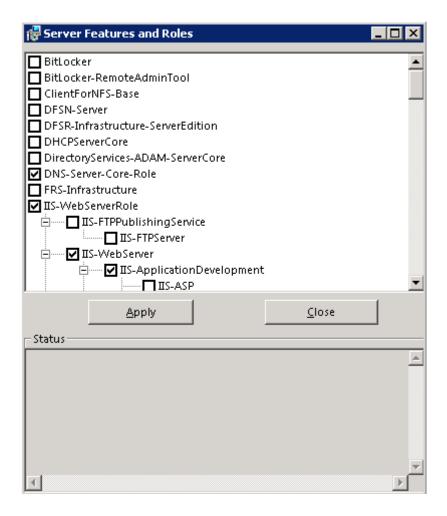
Further details can be found in following link:

http://krva.blogspot.com/2007/10/renaming-and-joining-w2k8-core-to.html

#### **Features**

This form is used to add / remove server roles and features.

**Warning:** The new WMI Win32\_ServerFeature class has limitations. CoreConfig does retrieve the list of roles and features by parsing the output of oclist.exe. The downside is that some IIS features after being installed do not show up as installed in the output. If you want to verify the specific IIS feature has been installed, look at the event logs.



#### **How it works**

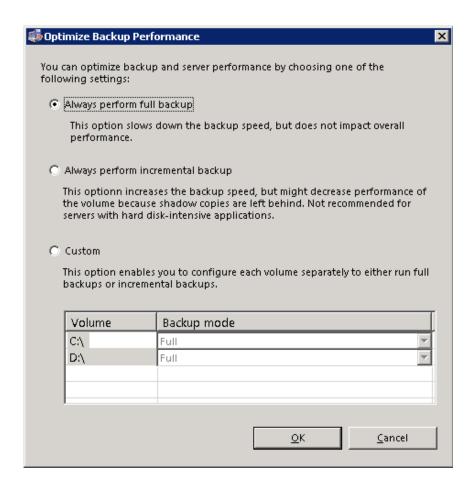
CoreConfig uses the oclist.exe and oclist64.exe commands

Further details can be found in following link:

http://krva.blogspot.com/2007/10/renaming-and-joining-w2k8-core-to.html

# **Backup Performance**

Use this form to set the backup performance.



Note that this tool can be used only if you have at least two volumes, and only if the 'WindowsServerBackup' feature is installed.

#### How it works:

In order to enumerate all hard drives' volumes, CoreConfig uses WMI query. You can simply type the following command at the command prompt:

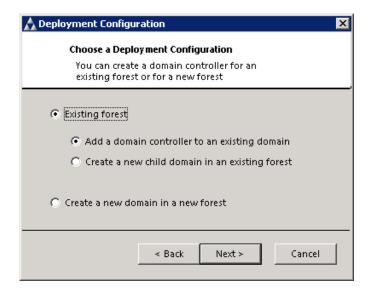
Wmic volume where(drivetype=3) Get name,label

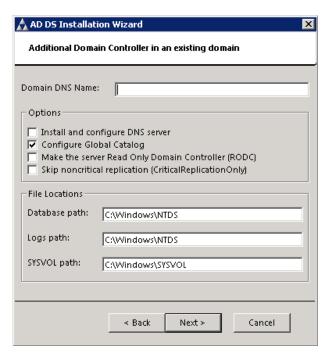
In order to manipulate backup performance settings, you will need to alter the registry at the following key:

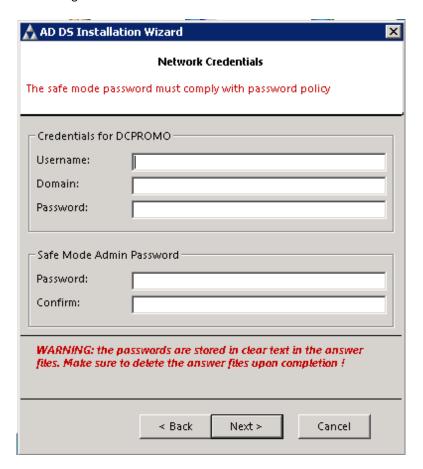
HKLM\ Software\Microsoft\Windows\CurrentVersion\Windows Block Level Backup

#### **DCPromo**

The DCPromo form allows you to configure your server to be a domain controller, similar to the DCPromo in the standard version.







#### **How it works**

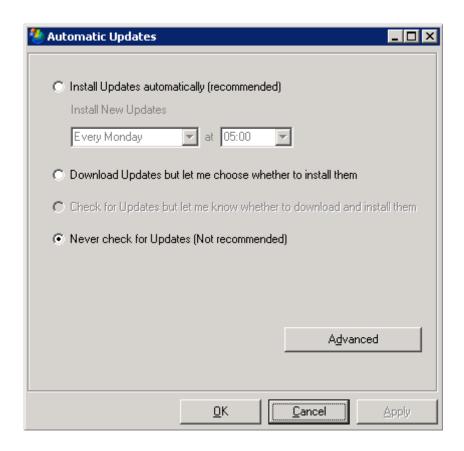
The DCPromo wizard walks you through the configuration steps, builds a temporary answer file and then runs DCPromo using the answer file.

Further details can be found in following link:

http://4sysops.com/archives/how-to-install-active-directory-domain-services-on-server-core-with-dcpromo/

# **Automatic Updates**

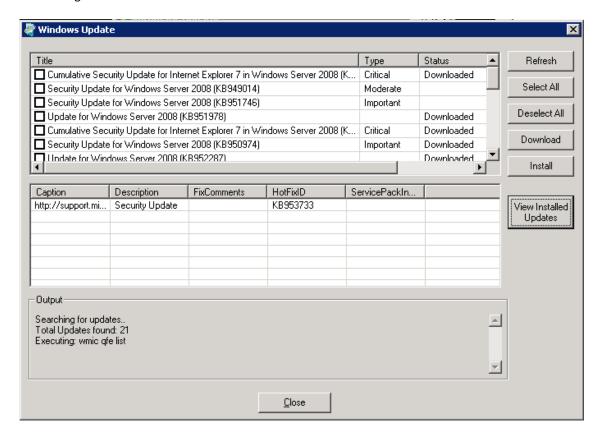
The automatic updates form allows user to configure automatic update settings and review, download and install updates to your core machine.



Out-of-the-box installation of Windows 2008 Core only supports the 'Install Updates Automatically' and the 'Never check for Updates' settings. This is because the other two settings require a GUI to select which updates should be downloaded / installed.

Using CoreConfigurator, you can configure your box to 'Download Updates but let me choose whether to install them' and use the 'Advanced' button in order to choose which updates should be installed.

Clicking on the 'Advanced' button, will display the following screen:



Use the 'Search' button to query Microsoft Update Server over the internet and populate the upper grid with update packages which are not already installed on your server. Once the search is completed, the list of updates will be shown in the upper grid and the 'Search' button will change to 'Refresh'.

Use the 'View Installed Updates' to see which updates are already installed on your server. Once you click this button, the lower grid will be populated with the list of installed packages.

In order to download / install specific update package/s, select the required packages and click 'Download' or 'Install'.

#### **How it works**

The configuration of the Automatic Updates service can be done by using the **SCregEdit.wsf** (located at %windir%\system32 directory).

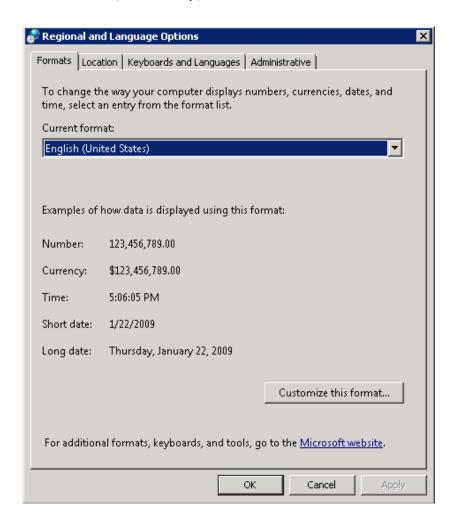
Further details can be found in following

link: <a href="http://blogs.dirteam.com/blogs/sanderberkouwer/archive/2007/0">http://blogs.dirteam.com/blogs/sanderberkouwer/archive/2007/0</a>
<a href="mailto:7/16/automatically-updating-server-core.aspx">7/16/automatically-updating-server-core.aspx</a>

Unfortunately, the 'Advanced' screen is not that obvious in the Core edition of Windows 2008. CoreConfigurator uses some API calls for these abilities.

# **Regional Languages**

Use this form to set your regional languages options such as date and time format, currency, etc.



#### **How it works**

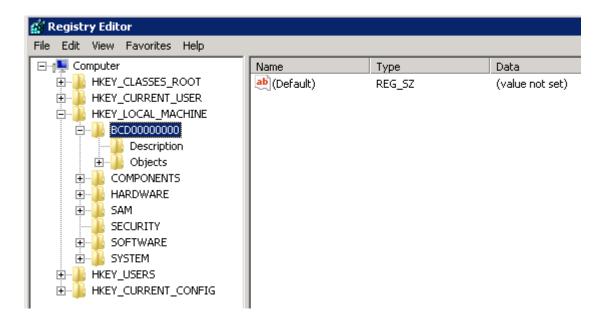
This panel is one of the only panels available at Windows 2008 Core.

In order to display it, run 'intl.cpl' at the command prompt.

# **Registry Editor**

This form is very handy on the core machine... Microsoft enables core users to use the registry editor instead of working with the REG command line tool. When running Core Configurator on a 64 bit edition of Windows server, an additional icon appears named 'Regedt32'. This icon can be used to open the registry editing tool for 32 bit applications. For additional information regarding registry and file system redirection in Windows 2008 64 bit, please visit the following link:

http://support.microsoft.com/kb/305097

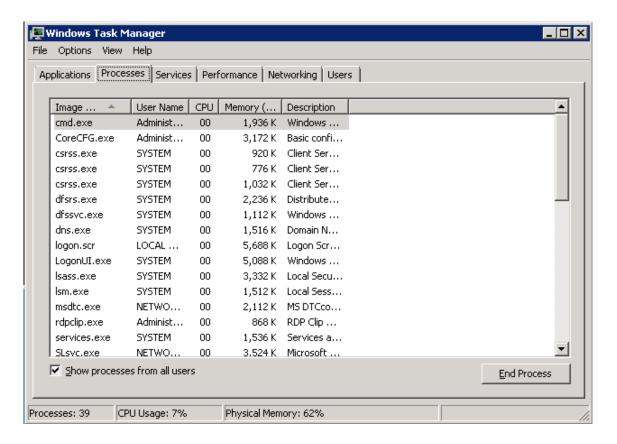


#### **How it works**

Simply type 'Regedit' on the command prompt.

# **Task Manager**

If you use Windows Server 2008 Core edition, you probably don't need us to describe the task manager.



The Task Manager in the core edition is exactly the same as in other versions of Windows 2008. The only difference we found is that the 'Resource Monitor' button on the 'Performance' tab does not work.

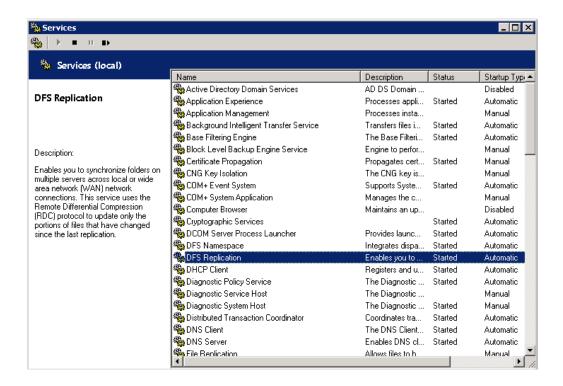
#### **How it works**

Simply type 'taskmgr' at the command prompt or use the shortcut keys: CTRL + SHIFT + ESC

#### Service

Working with services in Windows 2008 Core can be annoying because most of us do not remember the actual names of the services. In order to perform service related tasks, we need to query for the actual name of the server (not the display name) and then do whatever we need to do.

Since we missed the good old Services.MSC snap-in, we tried to recreate it in the core edition as similar as possible to its source.



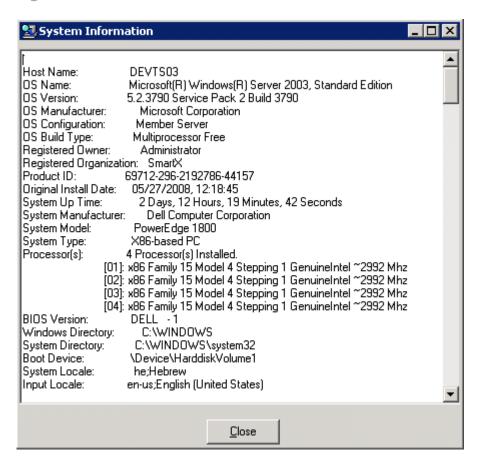
#### **How it works**

The core Configurator uses API calls to manipulate services. However, you can use the most powerful SC command in order to do almost everything related to services.

Further details can be found in following link:

http://windowsitpro.com/article/articleid/94722/unleashing-sc-on-service-configuration.html

# **System Info**

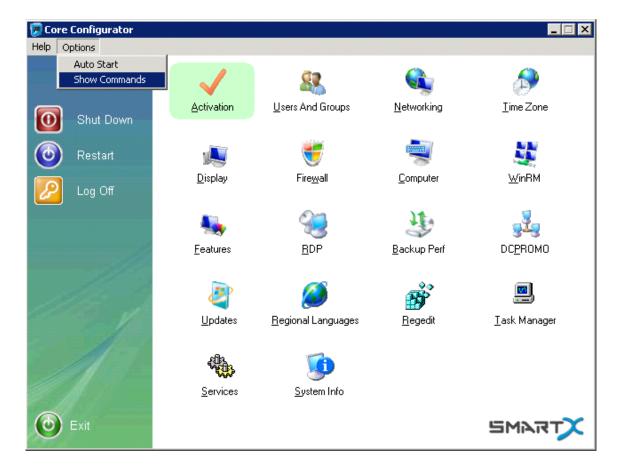


The system information screen displays general information regarding the operating system and the computer's hardware.

#### **How it works**

Core Configurator using the command 'systeminfo' in order to retrieve the information.

### **Show Commands**



When this option is selected, the CLI command which is executed is displayed when launching the relevant tools.

Tools that are using API commands will not show any command.

The following tools are based on CLI commands:

Activation, Networking, Firewall, WinRM, Features, System Info.