

# ConfigMgr Status Indicator (CSI)

## Admin Guide

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Version 1.0

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## 1. Welcome

This administrator's guide is provided to help you in the deployment and use of ConfigMgr Status Indicator (CSI). This document has the following structure:

- Introduction of CSI is described in chapter 2 "Introduction"
- The requirements of CSI are described in chapter 3 "Requirements"
- The architecture of CSI is described in chapter 5 "Components and architecture of CSI"
- Features and components are described in chapter 6 "Features"
- The basic indications of CSI are described in chapter 7 "Indications"
- Planning your deployment is described in chapter 8 "Installing and configuring CSI components"
- Management of CSI settings with GPO's is described in chapter 9 "Group Policy configuration"
- Information about Login Consultants can be found in chapter 10 "About Login Consultants"
- Contact information can be found in chapter 11 "Contact Information"

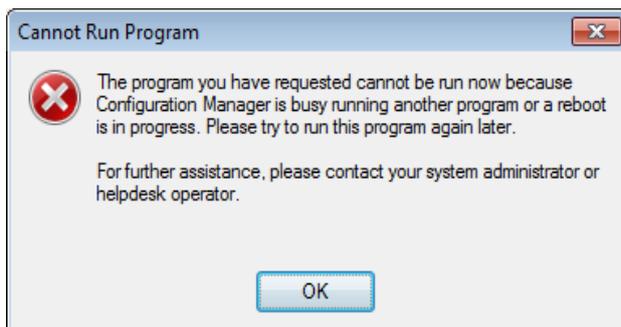
## 2. Introduction

Many organizations are using Microsoft System Center Configuration Manager (ConfigMgr) to manage the machines in their organization. Microsoft System Center Configuration Manager allows administrators to distribute and manage application software and updates to both users and machines, both physical and virtual.

The Microsoft Configuration Manager Client, which needs to be located on every machine, periodically checks with central Management Points if any software (or updates) is assigned to the local machine or the logged on user. When software is applicable it will determine whether it needs to be installed mandatory or be “presented” to the user who is logged on. Mandatory software (like corporate applications or software updates) will usually be installed on the background without any intervention from the end user.

### 2.1 The challenge

When Microsoft System Center Configuration Manager is installing software in the background it prevents the Microsoft Configuration Manager Client from installing other software. For mandatory (background) installation this is handled through a queue. Application installations that the end user initiates are not queued and the user is presented with a (not so user friendly) error:



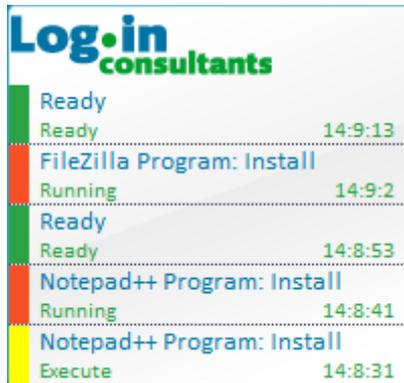
During one of our recent migrations this error was the one issue users complained about. In this particular migration laptops were deployed in advance, put on stock and swapped on the day of migration. Because of this approach users were sometimes presented with laptop configurations that were one or two months old. When these machines were reconnected to the network the Microsoft Configuration Manager Client immediately started updating the machine to the latest software and patch level.

However the users that were freshly migrated also needed to install their personal software and were presented with the error above when the system underneath was still updating.

Although the users accepted the fact that their system was updating they all had a single question: “when should we retry?”. Unfortunately there was no single answer to that question. Until now...

## 2.2 The solution

For this situation the ConfigMgr Status Indicator (CSI) was developed. CSI provides users with information about the activities of the underlying Microsoft Configuration Manager Client through a taskbar icon or through user installed Windows Gadgets.



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Ready	Ready	14:9:13
FileZilla Program: Install	Running	14:9:2
Ready	Ready	14:8:53
Notepad++ Program: Install	Running	14:8:41
Notepad++ Program: Install	Execute	14:8:31

CSI covers information about application installation or uninstallation but also informs the users about required reboots or logoff. Most importantly it informs the user when the Microsoft Configuration Manager Client is free of activities and user initiated installs can take place.

This document will describe all the components of CSI.

## 3. Requirements

In the following chapter the requirements of CSI are described. This chapter also includes the supported operating systems. By not following the requirements and supported operating systems there is a chance CSI will not work properly.

### 3.1 Software requirements

- Microsoft .NET Framework 2.0 or higher
- Microsoft System Center Configuration Manager Client 2007

### 3.2 Supported Operating Systems

- Windows XP Professional, Windows Vista and Windows 7
- Windows Server 2003, 2003 R2, 2008 and 2008 R2  
(CSI supports x86 and x64 bits operating systems.)

### 3.3 Supported Operating Systems for the CSI Gadgets

- Windows Vista and Windows 7

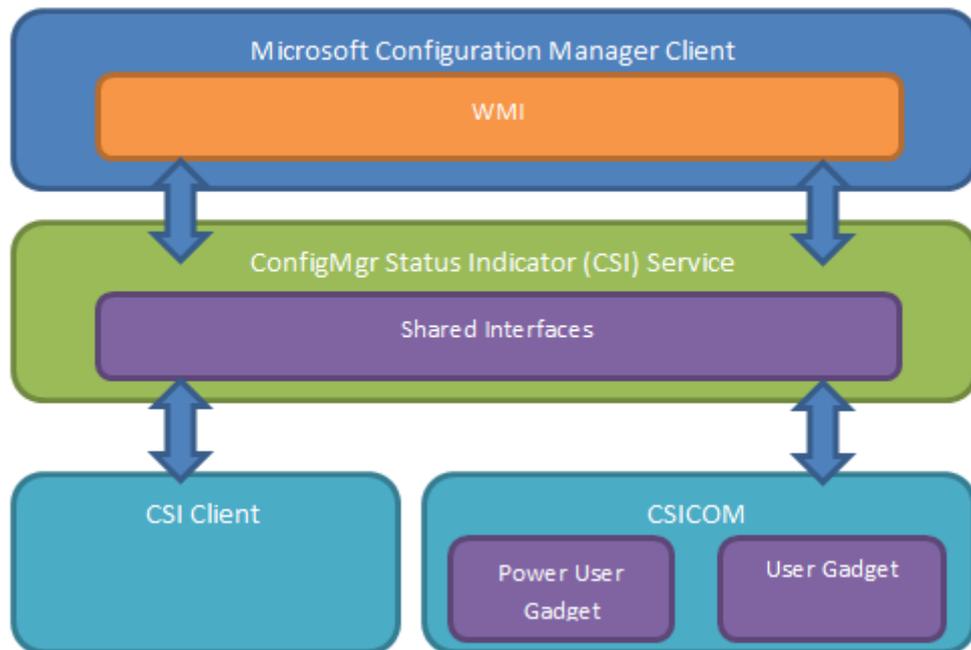
## 4. Version History

### Version 1.0

Original release

## 5. Components and architecture of CSI

By default a standard user does not have access to all the information in the Microsoft Configuration Manager Client. Therefore CSI uses a service to collect the WMI data from Microsoft Configuration Manager Client for the CSI client. The information from the CSI service is shared through the sharedinterfaces.dll with the CSI Client. CSICOM.dll exposes a COM object for the HTML based gadgets.



## 6. Features

The ConfigMgr Status Indicator (CSI) tool is divided into two user components with two sub component.

CSI Client	CSI Gadgets
Status Log	CSI User Gadget
Debug Log	CSI Power User Gadget

Depending on your preference and operating system support you can choose to use the CSI Gadgets or use the CSI Client. It's also possible to use the gadgets and client combined.

### 6.1 Gadgets

CSI contains two gadgets that are supported on Microsoft Windows Vista and Microsoft Windows 7.

**IMPORTANT:** The gadgets are not supported for Microsoft Windows XP and Microsoft Server 2003/2008.

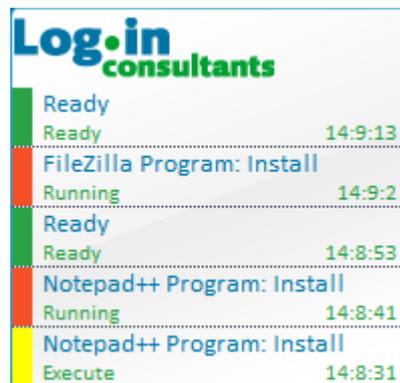
#### 6.1.1 CSI User Gadget

The **CSI User gadget** is a simple gadget that shows the status of the Microsoft Configuration Manager Client with a colour. By hovering over the gadget a message is displayed with more status information. This gadget doesn't have a history like the CSI Power User gadget.



#### 6.1.2 CSI Power User gadget

The **CSI Power User gadget** is a gadget with advanced information. This way the user can see the information about the installing application with a time stamp. The CSI Power User gadget is limited to 5 log entries.



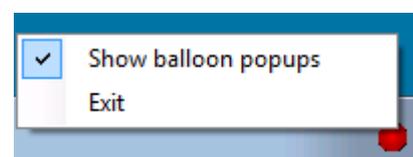
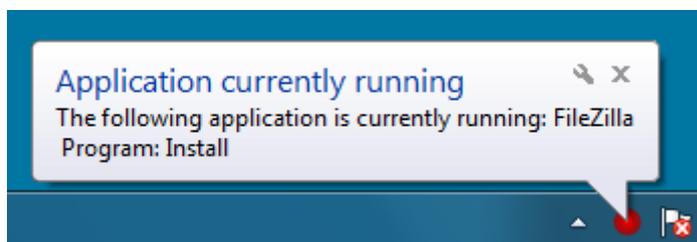
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Ready	Ready	14:9:13
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Notepad++ Program: Install	Running	14:8:41
Notepad++ Program: Install	Execute	14:8:31

When the CSI gadgets are installed, they can be found in the default Gadgets window by a right-click on the desktop and choosing Gadgets or the gadgets can be found in the control panel.



## 6.2 CSI Client

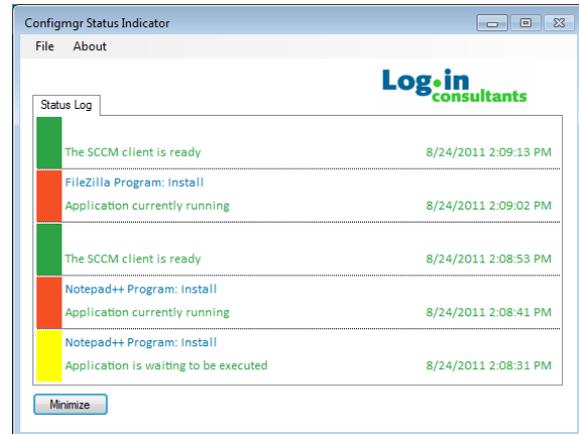
The core of the CSI client is the tray icon that changes the colour depending on the activities of the Microsoft Configuration Manager Client. By default the CSI client displays balloon pop-ups with the current status information. This can be disabled by a right click on the CSI tray-icon. This can also be managed with Group Policy Management (see chapter 9 "Group Policy configuration").



By double clicking on the CSI tray-icon, CSI will open.

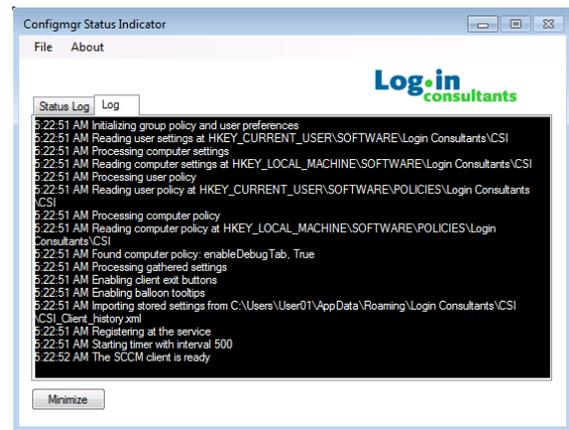
## 6.2.1 CSI Status Log

The Status Log tab shows the events of the Microsoft Configuration Manager Client. This tab is based on the CSI Power User Gadget, an overview with clear colours and information about the activities. The clients log capacity is limited to 5 log entries.



## 6.2.2 CSI Client Log

The Log tab is for advanced users. The log shows the events of the CSI Client in an advanced way.



## 7. Indications

The tool contains four basic colour indications:

Colour	Description
	The Microsoft Configuration Manager Client is ready to install applications.
	An installation is waiting to be executed or a reboot/log off is required.
	The Microsoft Configuration Manager Client is busy with an installation.
	The CSI service encountered an error retrieving the information from the Microsoft Configuration Manager Client.

## 8. Installing and configuring CSI components

The CSI Setup MSI consists of multiple features, which are not necessary on each Windows machine.

Installation feature	Description
<b>CSI Core</b>	Client component service, necessary on each machine on which you use want to use CSI. CSI Core contains the CSI Service and the SharedInterfaces.dll.
<b>CSI Client</b>	The Client interface, optional if you want to use the interface. The CSI Client is by default launched at a successful logon.
<b>CSI Gadgets</b>	Gadgets can replace the Client interface. This is only supported on Windows Vista and Windows 7.

For CSI to run correctly the following core components are required. Whiteout the SharedInterfaces.dll CSI will not work. The SharedInterfaces.dll file is located in the installation directory specified by you. The default is “C:\Program Files\Login Consultants\CSI\”. This includes the CSICOM.dll when the CSI Gadgets are installed.

**NOTE:** The CSI client and CSI Gadgets can be combined on one machine. The gadgets are only supported on Windows Vista and Windows 7.

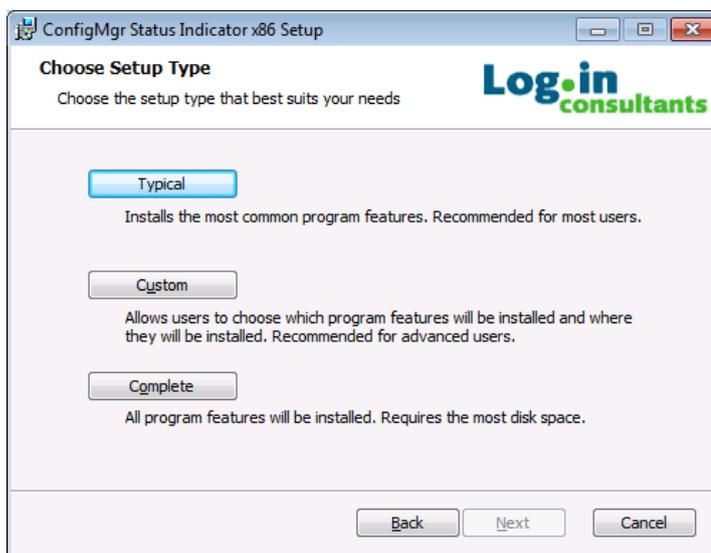
## 8.1 Manual Installation

Install CSI by executing *CSI Setup x86/x64.msi*. The *CSI Setup Wizard* will guide you through the steps required to install CSI on your computer. During the installation of CSI a reboot is required to start the CSI Client. It is possible to start the CSI Client manually without a reboot. After the installation no addition configuration is needed to run CSI.

**NOTE:** The CSI download package contains two MSI files, *CSI Setup x86.msi* and *CSI Setup x64.msi*.

The steps to install CSI are as follows:

1. Run *CSI Setup x86 or x64.msi* after uncompressing the CSI download package.
2. The *CSI Setup Wizard* starts and displays the *Welcome* page.  
Click *Next*.
3. The *License Agreement* page is displayed. You must accept the license agreement before you can click *Next*.
4. In the *Choose Setup Type* page, select *Typical* if you want to install CSI service and CSI client. If you want to manually select CSI components, select *Custom*. If you simply want to install all CSI components, select *Complete*.



5. If you selected *Custom* in the previous page you can manually select which component to install - clicking *Next* takes you to the *Ready to install* page. Proceed by clicking *Install*.
6. The Installation starts.
7. When the installation is finished, a final page shows the success. Click *Finish* to exit the installation

**IMPORTANT:** CSI can only installed by an account with administrative privileges.

## 8.2 Unattended installation

The CSI Setup MSI supports unattended installation by using the default MSI parameters.

An example of a default unattended installation command.

```
msiexec.exe /i "CSI Setup x86 or x64.msi" /qb
```

It is also possible to install CSI with a MST file.

## 9. Group Policy configuration

The configuration of the CSI client can be done by creating a Group Policy Object in Active Directory Group Policy with the CSI Administrative Template, which is provided in the CSI download package. The other components do not have Group Policy configuration. The CSI package contains an ADM and ADMX templates.

### 9.1 Creating the CSI Group Policy Object with ADM

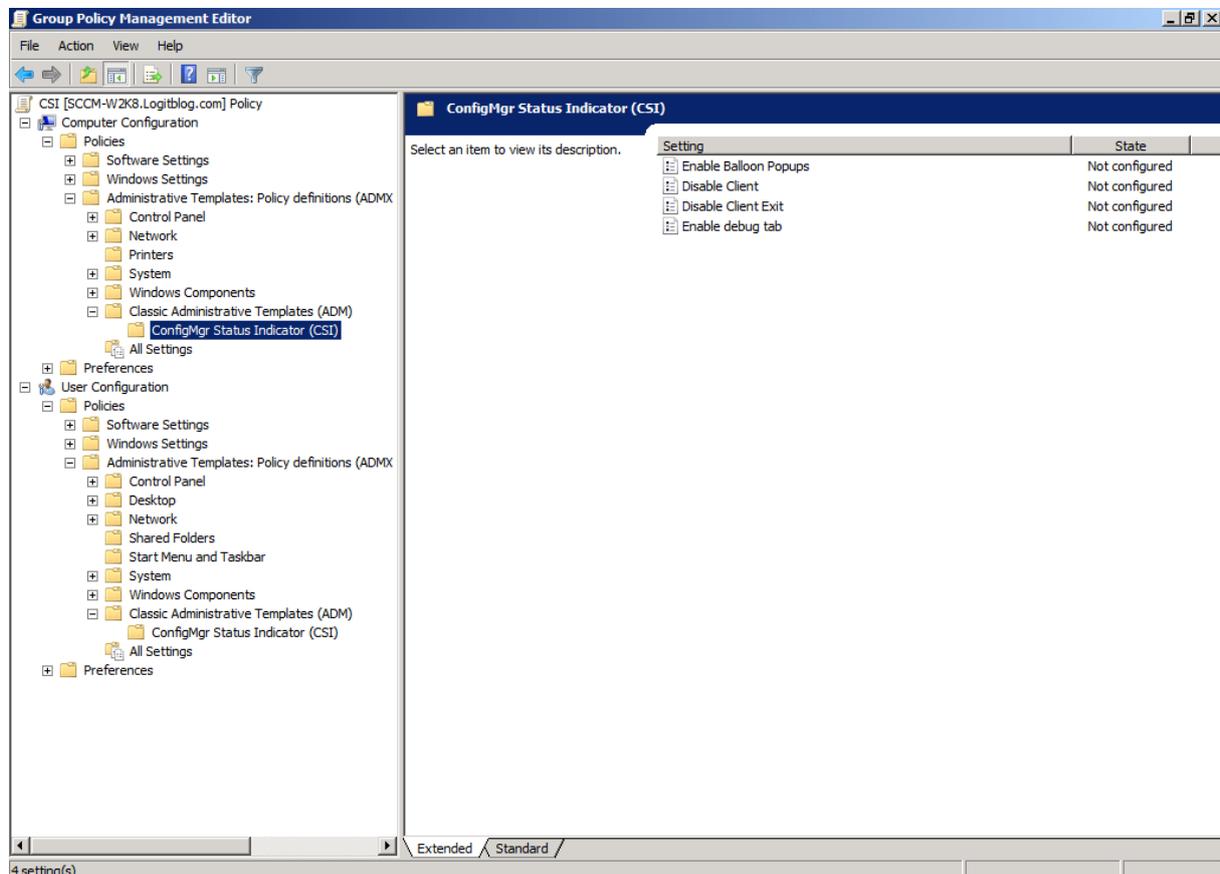
The ConfigMgr Status Indicator (CSI).adm supports Machine and User Configuration.

Creating CSI GPO with ADM requires the following steps.

1. Open *Group Policy Management Console*. Create a new Group Policy Object (GPO) or select an existing GPO that is applied to the machines or users for which you want to configure the CSI client.
2. Import the *ConfigMgr Status Indicator (CSI).adm* into the selected GPO by a right-click on *Computer or User Configuration\Administrative Templates* and *Add/Remove Templates...*
3. Now the *ConfigMgr Status Indicator (CSI).adm* is available under *Machine and User Configuration\Administrative Templates\ConfigMgr Status Indicator (CSI)* (on Windows XP and Windows Server 2003) or *Machine or User configuration\Administrative Templates\Classic Administrative Templates\ConfigMgr Status Indicator (CSI)* (on Windows 7, Windows Vista and Windows Server 2008)
4. Configure the appropriate CSI Group Policy Settings. For details see section *Group Policy Object Reference*.
5. As a final step, apply the Policy and reboot the machines or log off the users that the Group Policy Object is applied on. The policy can also be applied by running *GpUpdate /Force* on the Client machine.

## 9.2 Group Policy Object Reference with ADM

After importing the ConfigMgr Status Indicator (CSI).adm, all CSI settings can be configured through the Group Policy Object in Active Directory, using Group Policy Management Editor.



## 9.3 Creating the CSI Group Policy Object with ADMX

The CSI ADMX supports Machine and User Configuration. More information about ADMX can be found at <http://technet.microsoft.com/en-us/library/cc709647%28WS.10%29.aspx>.

Creating CSI GPO with AMDX requires the following steps.

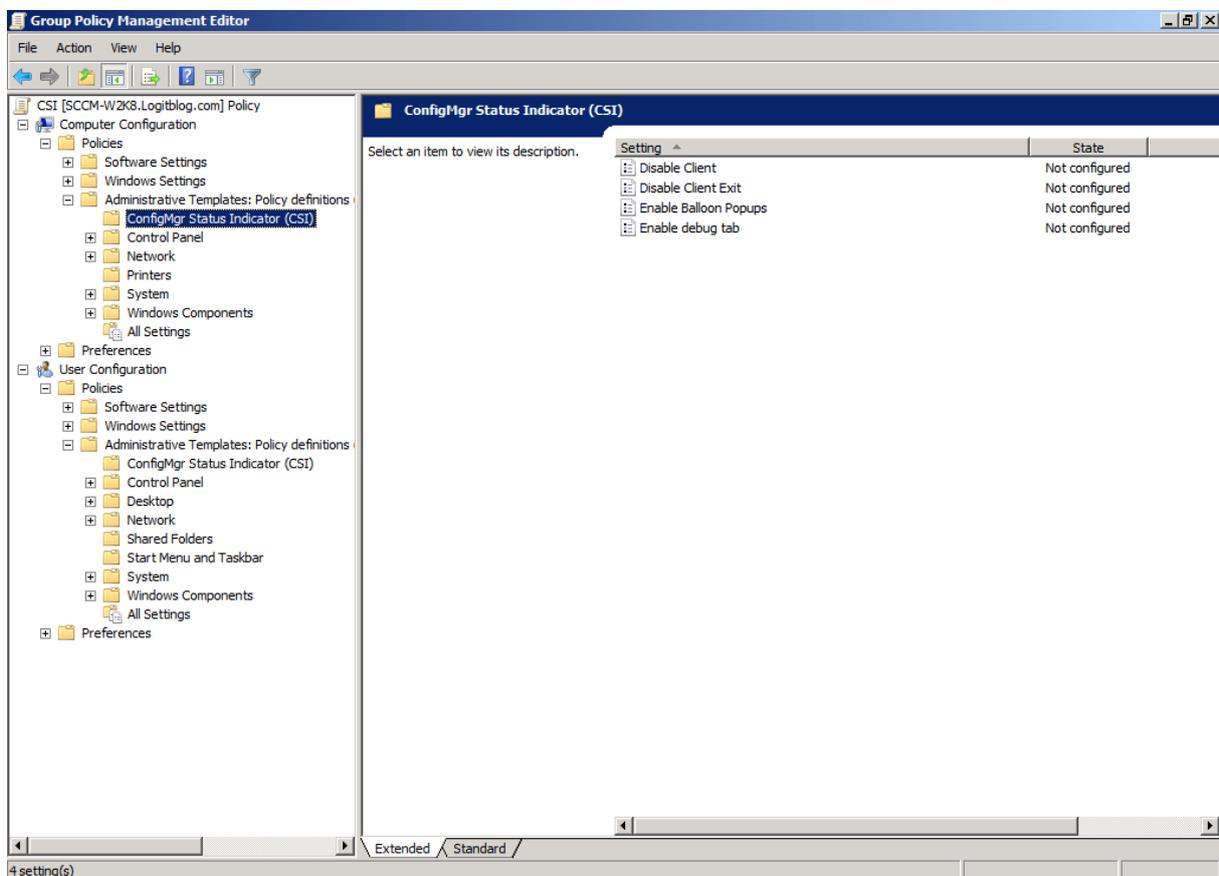
**Note:** The following steps are based on a local scenario.

1. Copy "*ConfigMgr Status Indicator (CSI).adm*" to "*%systemroot%\PolicyDefinitions*" and "*ConfigMgr Status Indicator (CSI).adml*" from the "*en-US*" directory to "*%systemroot%\PolicyDefinitions/en-US*".
2. Open *Group Policy Management Console*. Create a new Group Policy Object (GPO) or select an existing GPO that is applied to the machines or users for which you want to configure the CSI client.

3. Now the ConfigMgr Status Indicator (CSI).admx template is available under *Machine or User configuration\ConfigMgr Status Indicator (CSI)* (only on Windows 7, Windows Vista and Windows Server 2008 only)
4. As a final step, apply the Policy and reboot the machines or log off the users that the Group Policy Object is applied on. The policy can also be applied by running *GpUpdate /Force* on the Client machine.

## 9.4 Group Policy Object Reference with ADMX

After importing the ConfigMgr Status Indicator (CSI).admx, all CSI settings can be configured through the Group Policy Object in Active Directory, using Group Policy Management Editor.



## 9.5 Group Policy Settings

In the following list, all CSI Group Policy settings that can be configured through GPOs are described.

Policy	Description
Enable balloon Popups	Enabling this setting causes the CSI client to force balloon popups even if users have disabled them. Disabling this setting causes the CSI client to prevent balloon popups even if users have enabled them.
	Leaving this setting undefined allows users to set this setting manually.
Disable Client	With this setting you can disable the CSI client.
Disable Client Exit	With this setting you can disable (grey out) the exit button in the CSI client. This way the user can't close the CSI client, only minimize.
Enable Debug Tab	With this setting you can enable the CSI debug tab. This tab contains detailed information about the activity of both CSI and the Microsoft Configuration Manager client.

**IMPORTANT:** When using the group policy setting "Disable Client" the client automatic closes and cannot be used even when the client is installed. Be careful applying this group policy setting!

## 10. About Login Consultants

Login Consultants is an international IT service provider specialized in virtualization, migration, desktop deployment and application delivery. We are experts in these areas for the technologies of Microsoft, Citrix and VMware. The comprehensive services portfolio of Login Consultants is arranged around our three core activities: consultancy, implementation and support. With our services we help our customers to maximize the benefits from the technical innovations for traditional and hosted desktops, application virtualization, and server virtualization.

Login Consultants has an experienced team with over one hundred consultants in The Netherlands, Belgium and Germany. Our consultants have accreditations from Microsoft, Citrix and VMware, and are regularly invited to speak at national and international events. They are involved as experts in online and printed IT publications and actively participate in relevant technical blogs.

The innovative abilities of Login Consultants are also expressed by our suite of free software tools for SBC, App-V, SCCM and ThinApp, which are used worldwide by thousands of organizations.

## 11. Contact Information



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Comments and suggestions are always welcome, they are a great help in improving our services.

You can provide us with your comments and suggestions at <http://www.loginconsultants.com/forum> under "SCCM Tooling"

More information about the development can be found at <http://www.logitblog.com>

The logo for Logit Blog. 'Logit' is in green and 'Blog' is in grey.

ConfigMgr Status Indicator (CSI) is created by [Dennis Geerlings](#), [Ryan Bijkerk](#) and [Ment van der Plas](#).  
Special thanks to [Nazim Demiröz](#) for the gadgets design.