



# Intel® Setup and Configuration Software (Intel® SCS)

## Remote Configuration Service Utility

Version 11.1

Document Release Date: December 22, 2016

## License

Intel® Setup and Configuration Software (Intel® SCS) is furnished under license and may only be used or copied in accordance with the terms of that license. For more information, refer to the "Exhibit A" section of the "Intel(R) SCS License Agreement.rtf", located in the Licenses folder.

## Legal Information

No license (express or implied, by estoppel or otherwise) to any intellectual property rights is granted by this document.

Intel disclaims all express and implied warranties, including without limitation, the implied warranties of merchantability, fitness for a particular purpose, and non-infringement, as well as any warranty arising from course of performance, course of dealing, or usage in trade.

The products described may contain design defects or errors known as errata which may cause the product to deviate from published specifications. Current characterized errata are available on request.

Intel technologies may require enabled hardware, specific software, or services activation. Check with your system manufacturer or retailer.

Intel technologies' features and benefits depend on system configuration and may require enabled hardware, software or service activation. Performance varies depending on system configuration.

No computer system can be absolutely secure. Intel does not assume any liability for lost or stolen data or systems or any damages resulting from such losses.

Intel® AMT should be used by a knowledgeable IT administrator and requires enabled systems, software, activation, and connection to a corporate network. Intel AMT functionality on mobile systems may be limited in some situations. Your results will depend on your specific implementation.

Learn more by visiting [Intel® Active Management Technology](#).

Intel® vPro™ Technology requires setup and activation by a knowledgeable IT administrator. Availability of features and results will depend upon the setup and configuration of your hardware, software and IT environment. Learn more at: <http://www.intel.com/technology/vpro>.

KVM Remote Control (Keyboard, Video, Mouse) is only available with Intel® Core™ i5 vPro™ and Core™ i7 vPro™ processors with integrated graphics and Intel® Active Management technology activated. Discrete graphics are not supported.

Intel, Intel vPro, and the Intel logo, are trademarks of Intel Corporation in the U.S. and/or other countries.

Microsoft, Windows, and the Windows logo are trademarks, or registered trademarks of Microsoft Corporation in the U.S. and/or other countries.

\* Other names and brands may be claimed as the property of others.

© 2016 Intel Corporation

# Table of Contents

- 1 Introduction..... 1**
- 2 Using the RCS Utility..... 1**
  - 2.1 Required Permissions..... 1
  - 2.2 CLI Syntax..... 1
- 3 /Certificate Parameter..... 2**
  - 3.1 Examples..... 3
  - 3.2 Network Service Account..... 3
- 4 /Permissions Parameter..... 4**
  - 4.1 Examples..... 5
- 5 /LogParameter..... 5**

# 1 Introduction

Intel® Setup and Configuration Software (Intel® SCS) includes several methods that you can use to configure Intel® Active Management Technology (Intel® AMT). In addition, Intel SCS includes options to discover, configure, and maintain other Intel products and capabilities on systems in your network. These methods and options require installation and setup of the Remote Configuration Service (RCS).

This document describes how to use the Remote Configuration Service Utility (RCS Utility).

The RCS Utility is a Command Line Interface (CLI) that was created to make some of the RCS setup tasks easier. These tasks include installing certificates and giving Windows Management Instrumentation (WMI) permissions to user accounts so that they can access the RCS.

## 2 Using the RCS Utility

The RCS Utility (`RCSUtils.exe`) is located in the `Utils` folder. You can run the RCS Utility from a command line prompt or using a batch file.

### 2.1 Required Permissions

You must run the RCS Utility on the computer where the RCS is installed and running. The local user account running the RCS Utility must have administrator permissions on the computer. On operating systems with User Account Control (UAC), the RCS Utility must be "Run as administrator".

### 2.2 CLI Syntax

The RCS Utility CLI is not case-sensitive. This is the general syntax:

```
RCSUtils.exe {/Certificate | /Permissions} [/Log]
```

To view the help of the CLI, type `RCSUtils.exe /?` and press <Enter>.

To view syntax of a specific parameter, type the parameter followed by `/?`.

To view examples, type `RCSUtils.exe examples` and press <Enter>.

These conventions are used in the syntax:

- Optional parameters are enclosed in square brackets [ ]
- User defined variables are enclosed in angled brackets < >
- Mutually exclusive parameters are separated with a pipe |
- Where necessary, braces { } are used to group elements together to eliminate ambiguity in the syntax

## 3 /Certificate Parameter

<b>Parameter</b>	/Certificate
<b>Description</b>	<p>Performs operations on certificates used by the RCS for remote configuration and mutual TLS.</p> <p><b>Note:</b> See also <a href="#">Network Service Account</a> on the next page.</p>
<b>Syntax</b>	<pre>RCSutils.exe /Certificate {{Add &lt;filename&gt; [&lt;file password&gt;]}  {Remove &lt;certificateID&gt;} View {Validate &lt;certificateID&gt;}} [/RCSuser &lt;username&gt; &lt;password&gt;]</pre>
<b>Values</b>	
Add	Installs the supplied certificate into the personal certificate store of the user running the RCS (RCSServer.exe)
Remove	Removes a certificate from the personal certificate store of the specified user account
View	Gets general information about all the certificates in the personal certificate store of the specified user account. To make this information easier to read, use the /Log parameter to send the output to a file (see <a href="#">/LogParameter</a> on page 5).
Validate	Checks if the certificate is valid and can be used by the RCS. The RCS Utility also checks that the certificate private key exists and that the RCS can build the certificate chain. If the certificate is valid, the RCS Utility then checks if the certificate is compatible for remote configuration or mutual TLS communication.
<filename>	The full path to the certificate file in PFX format
<file password>	The password to decrypt the certificate file (only necessary if the certificate file is encrypted)
<certificateID>	The unique ID hash of the certificate. You can get this ID by using the "View" option, described above, and looking for the "Thumbprint" value returned in the output. For example: Thumbprint:7C4656C3061F7F4C0D67B319A855F60EBC11FC44
/RCSuser <username> <password>	<p>Defines the user account (and thus the personal certificate store) for which the specified action will occur. If a user account is not supplied, then by default the action will occur for the user account that is currently running the RCS Utility. To define the Network Service user account, type <code>NetworkService</code> and do not supply a password. To use any other account, supply the correct username and password. If the supplied username or password are incorrect, the requested action will fail.</p> <p><b>Note:</b> /RCSUser is only relevant when removing or viewing a certificate. When adding a certificate, the RCS Utility always adds the certificate to the user account running the RCS.</p>

## 3.1 Examples

**Example #1:** Installing a certificate to the certificate store of the user account running the RCS:

```
RCSutils.exe /Certificate Add c:\certificate.pfx P@ssw0rd
```

**Example #2:** Viewing certificates installed in the certificate store of a user account named "MyServiceUser":

```
RCSutils.exe /Certificate View /RCSuser MyServiceUser P@ssw0rd
```

**Example #3:** Viewing certificates installed in the certificate store of the Network Service user account:

```
RCSutils.exe /Certificate View /RCSuser NetworkService /Log File c:\logfile.txt
```

**Example #4:** Validating a certificate:

```
RCSutils.exe /Certificate Validate 7C4656C3061F7F4C0D67B319A855F60EBC11FC44 /Log  
File c:\logfile.txt
```

**Example #5:** Removing a certificate from the certificate store of a user account named "MyServiceUser":

```
RCSutils.exe /Certificate Remove 7C4656C3061F7F4C0D67B319A855F60EBC11FC44  
/RCSuser MyServiceUser P@ssw0rd
```

**Example #6:** Removing a certificate from the certificate store of the Network Service user account:

```
RCSutils.exe /Certificate Remove 7C4656C3061F7F4C0D67B319A855F60EBC11FC44  
/RCSuser NetworkService /Log File c:\logfile.txt
```

## 3.2 Network Service Account

If the specified user account is the Network Service account, the results of these /Certificate parameter actions are NOT sent to the console screen:

- View
- Remove

This is because, for these actions, the RCS Utility uses the Windows Task Scheduler to impersonate the Network Service account. To do this, a task is created and run immediately. The results from this task cannot be sent to the console screen.

This means that:

- If the task fails, you must look in the Windows Event log to find the cause
- If the task succeeds, the results can be recorded in a log file generated by the RCS Utility. By looking in the log file, you will know that the task completed successfully and see the results. To send the results to the log file, you must make sure that you supply the /Log parameter with the value of "File <filename>".

## 4 /Permissions Parameter

<b>Parameter</b>	/Permissions
<b>Description</b>	Performs operations on the users and namespace permissions used to grant access to the RCS
<b>Syntax</b>	<pre>RCSutils.exe /Permissions Add &lt;username&gt; [/RCSnamespace &lt;namespace&gt; [&lt;namespace&gt;...] ]</pre>
<b>Values</b>	
Add	<p>Adds the supplied user or user group to the specified RCS namespace and gives them full permissions on the namespace.</p> <p><b>Note:</b></p> <ul style="list-style-type: none"> <li>In addition to WMI permissions, the user accounts will also automatically be given the DCOM permissions necessary to connect to the RCS. If the user accounts did not have any DCOM permissions on the computer running the RCS, you will need to restart the computer. (This is because of a Microsoft limitation the first time that a user account is granted DCOM permissions on a computer.)</li> <li>When the user/group is added, any existing deny permissions that exist for that user/group are NOT removed.</li> </ul>
<username>	The name of the user or user group.
/RCSnamespace <namespace>	<p>Defines the namespaces to which the requested action applies. If not supplied, the default is RCS. Valid values are:</p> <ul style="list-style-type: none"> <li>All — Give permissions on all the RCS namespaces</li> <li>RCS — Intel_RCS namespace. Necessary for users who need to do operations on Intel AMT systems using the RCS. For example, the user account running the Configurator (ACUConfig.exe).</li> <li>RCSConfig — The Intel_RCS_Config namespace. Necessary for enabling domain computers (and if desired, users) to perform configuration and maintenance operations. Similar to the RCS namespace, above, but with more limited capabilities to prevent domain users from performing operations reserved for administrators. For example, <code>RCSutils.exe /permissions add &lt;domain computers&gt; /RCSnamespace RCSconfig</code></li> <li>Systems — Intel_RCS_Systems namespace. Necessary for users who need to use the monitoring options of RCS (in database mode).</li> <li>Editor — Intel_RCS_Editor namespace. Necessary for users who need to connect to the RCS to define profiles or settings in the RCS.</li> <li>DMP — Intel_RCS_Master_Password namespace. Necessary for users who need to use the RCS to calculate or get the Digest Master Password (DMP) for an Intel AMT system. (Only relevant if you are using the DMP option.)</li> </ul>

## 4.1 Examples

**Example #1:** Adding a user named “MyUser” to the Intel\_RCS namespace:

```
RCSutils.exe /Permissions Add MyUser
```

**Example #2:** Adding a user named “MyUser” to the Intel\_RCS\_Editor and Intel\_RCS\_Systems namespaces:

```
RCSutils.exe /Permissions Add MyUser /RCSnamespace Systems Editor
```

**Example #3:** Adding permissions for domain computers to the Intel\_RCS namespace:

```
RCSutils.exe /Permissions Add “domain computers” /RCSnamespace RCS
```

## 5 /LogParameter

<b>Parameter</b>	/Log
<b>Description</b>	Defines where errors and other log messages are recorded. If not supplied, the default is used (console screen). You can also record log messages to the console screen and a file, like this: /Log Console File <filepath>
<b>Syntax</b>	/Log {Console   File <filepath>   Silent}
<b>Values</b>	
Console	Show log messages on the console screen
File <filepath>	Saves the log messages in a file
Silent	Do not record any log messages (console screen or log file)