



Hawaii Green IT

The NightWatchman Installation Guide

A unique power management solution. Save energy, the environment and money

The NightWatchman Installation Guide

Version 5.6 document revision 2

© 1E Ltd 2009

All rights reserved. No part of this document or of the software ("the software") to which it relates shall be reproduced, adapted, stored in a retrieval system, or transmitted by any means, electronic, mechanical, photocopying, recording, or otherwise, without permission from 1E Ltd. It is the responsibility of the user to use the software in accordance with this document and 1E Ltd shall not be responsible if the user fails to do so. Although every precaution has been taken in the preparation of this document, 1E Ltd and the authors assume no responsibility for errors or omissions, nor shall they be liable for damages resulting from any information in it.

Trade marks

1E is a trade mark of 1E Ltd registered in the UK[, EU and US], with registration applied for in Australia. The 1E device is a trade mark of 1E Ltd registered in the UK and EU, with registration applied for in the US and Australia. NIGHTWATCHMAN is a trade mark of 1E Ltd registered in the US, with registration applied for in the EU and Australia. MICROSOFT, WINDOWS NT, WINDOWS 2000, WINDOWS XP are all trademarks of Microsoft Corporation in the United States and other countries.

SHA-2 Algorithm

Copyright (c) 2002, Dr Brian Gladman, Worcester, UK. All rights reserved.

LICENSE TERMS

The free distribution and use of this software in both source and binary form is allowed (with or without changes) provided that:

1. distributions of this source code include the above copyright notice, this list of conditions and the following disclaimer;
2. distributions in binary form include the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other associated materials;
3. the copyright holder's name is not used to endorse products built using this software without specific written permission.

ALTERNATIVELY, provided that this notice is retained in full, this product may be distributed under the terms of the GNU General Public License (GPL), in which case the provisions of the GPL apply INSTEAD OF those given above.

DISCLAIMER

This software is provided 'as is' with no explicit or implied warranties in respect of its properties, including, but not limited to, correctness and/or fitness for purpose.

Contents

Section 1	Introduction	1
1.1	What will NightWatchman do for me?	1
1.2	New in NightWatchman 5.6.....	1
1.3	Conventions used in this guide	2
	Cross references	2
	Notes	2
	Code fragments and command-lines	2
1.4	Who is this guide for?	2
Section 2	Requirements	3
2.1	OS requirements	3
2.2	System requirements.....	3
2.3	Security requirements.....	3
2.4	NightWatchman Reporting and the 1E Agility Framework.....	3
	Reporting Requirements	3
Section 3	What is NightWatchman?	4
3.1	How does NightWatchman operate?	4
	Logging off	4
	Power-off	4
	Capabilities of the administrator	5
	Capabilities of the end-user	5
Section 4	Installing NightWatchman for first use	6
4.1	How do I install NightWatchman?	6
	Selecting the right NightWatchman variant.....	6
	Simple interactive installation.....	7
	Changing defaults during interactive installation	8
4.2	Installing using quiet mode.....	11
4.3	Installing using SMS	11
4.4	Licensing NightWatchman.....	11
4.5	Default file locations	12
Section 5	Uninstalling NightWatchman	13
5.1	Additional information.....	13
Section 6	Beyond installation	14
6.1	How do I manage shutdowns using NightWatchman?.....	14
6.2	NightWatchman and the NightWatchman Console	14
6.3	NightWatchman, SMS/ConfigMgr and 1E WakeUp.....	14
Section 7	Troubleshooting	15
7.1	Contact 1E support.....	15
	Creating a technical report.....	15
Section 8	Further Information	16
8.1	Contact details.....	16

Website	16
Telephone and fax	16
Post	16
Sales	16
Technical support	16
Appendix A Glossary	17
A.1 Technical Terms	17
Appendix B The NightWatchman install switches	18
ACMONDAYTIME	18
ACSATURDAYTIME	18
ACSUNDAYTIME	18
ACTHURSDAYTIME	18
ACTUESDAYTIME	18
ACWEDNESDAYTIME	18
CERTISSUER	19
CERTSUBJECT	19
COUNTDOWNSECS	19
DISKAC	19
DISKDC	19
FRIDAYCLOSEACTION	20
FRIDAYOPENTIME	20
FRIDAYPERIODMINS	20
HIBERNATEAC	20
HIBERNATEDC	20
HTTP	20
IGNOREERRORS	21
INSTALLDIR	21
INSTALLSCRIPTS	21
KEEPAWAKEAFTERWAKEUPMINS	21
LOGOFFACTION	21
MONDAYCLOSEACTION	22
MONDAYOPENTIME	22
MONDAYPERIODMINS	22
MONITORAC	22
MONITORDC	22
MONITORJOBS	22
PENDINGJOBWINDOWMINS	23
PIDKEY	24
POWERScheme	24
REPORTING	24
REPORTINGSERVER	24

RETRYATTEMPTS	24
RETRYINTERVAL.....	24
RUNALWAYS.....	25
SATURDAYCLOSEACTION	25
SATURDAYOPENTIME.....	25
SATURDAYPERIODMINS	25
SCRIPTTIMEOUTSECS	25
SECUREREPORTINGSERVER.....	25
SHUTDOWN_HOUR.....	26
SHUTDOWN_MIN	26
SHUTDOWNACTION.....	26
STANDBYAC	26
STANDBYDC	26
SUNDAYCLOSEACTION.....	27
SUNDAYOPENTIME	27
SUNDAYPERIODMINS.....	27
SYSTEMTRAY	27
THURSDAYCLOSEACTION	28
THURSDAYOPENTIME.....	28
THURSDAYPERIODMINS	28
TUESDAYCLOSEACTION	28
TUESDAYOPENTIME.....	28
TUESDAYPERIODMINS	29
TURNONMONITOR	29
USERACTIVITYMAXIDLEMINs	29
WEDNESDAYCLOSEACTION	29
WEDNESDAYOPENTIME	29
WEDNESDAYPERIODMINS	30

Section 1 Introduction

A unique power management solution. Save energy, the environment and money

- NightWatchman® saves energy, saves the environment and saves money.
- NightWatchman is one of a range of management products available from 1E. It saves money and effort by coordinating power management into a company wide strategy.
- The main purpose of NightWatchman is to shut down machines.

This guide will help you to install, run and evaluate NightWatchman in its most widely used format. For more complex installations we recommend that you contact 1E to determine the most suitable solution.

1.1 What will NightWatchman do for me?

NightWatchman saves you money by automatically shutting down machines, or putting them into a sleep state, when they are not in use. Shutdowns can proceed painlessly, ensuring that current work and data are kept safe.

NightWatchman also enhances the security of your network, reducing the danger of uncontrolled network wide access and the possibility of electrical failure and fire.

NightWatchman makes the lives of IT staff easier, enabling the easy management of each user's power consumption and corresponding internal policies on PC power consumption from a central location.

NightWatchman in conjunction with 1E WakeUp, a machine power-up product from 1E, coordinates these capabilities by enabling the power state for machines to be fully controlled and scheduled. So on the one hand, financial directors and facilities management can control general PC power consumption with minimal disruption to staff. On the other hand systems administrators can ensure that PCs are on, and in a fresh "re-started" state, for scheduled out-of-office-hours software deployments.

1.2 New in NightWatchman 5.6

NightWatchman has been enhanced to provide: sleepless client detection to help machines go into a sleep state, alarm clocks and maintenance windows to allow computers to be brought out of a sleep state and a new "keep active" end-user feature that allows the user to prevent shutdown for a selected time. These are described in more detail below:

- **Sleepless Client Detection** - NightWatchman can now detect why a particular computer is not going into a sleep state and enable you to bypass the cause to allow even more power savings. Certain application interactions with the Operating System have the unnecessary side effect of keeping computers from going into a sleep state, even though the user has not been active on the computer. NightWatchman can detect the processes that keep a computer awake and lets you bypass them to allow the computer to go into a sleep state.

For more information on this feature see *Section 4 - Sleepless Client Detection* in the *NightWatchman Administrator's Guide*.

- **Alarm Clocks and Maintenance Windows** - NightWatchman now lets you define maintenance windows whereby machines will be brought out of a sleep state for a configurable maintenance period and then returned to a sleep state afterwards. When configured from the NightWatchman Console and combined with 1E WakeUp you can even power up computers from an off state.

For more information on this feature see *Section 5 - Alarm Clocks and Maintenance Windows* in the *NightWatchman Administrator's Guide*.

- **Keep Active** - NightWatchman now lets end users inhibit passive or active NightWatchman shutdowns for a selectable period of time. The functionality empowers the end user to choose to opt out of scheduled events so that they can run a batch processing job overnight for example.

For more information on this feature see heading *8.4 - Keep Active* in the *NightWatchman Administrator's Guide*.

1.3 Conventions used in this guide

This section shows how to interpret the different styles used in this document to denote various types of information.

Cross references

Cross references are shown in italics. Cross references may be to diagrams or tables in the current document or to other documents. For example, the following paragraph references another document in the NightWatchman set:

After reading this installation guide, you can get more detailed information in *The NightWatchman Administrator's Guide*.

Notes

Notes are shown in white on an orange background. For example, the following note provides some useful information:

NOTE: always pay attention to notes.

Code fragments and command-lines

This manual uses *Lucida Console* typeface plus a shaded background to denote code fragments and command-lines. For example, the following shows a NightWatchman installer command-line, and a note:

```
C>msiexec /i Nightwatchman50.msi LOGOFFACTION=ACTIVE SHUTDOWN_HOUR=20  
SHUTDOWN_MIN=30 PIDKEY=ABCD-1234-5678-8765-4321 /qn
```

NOTE: the text "ABCD-1234-5678-8675-4321" in the above example should be replaced with the NightWatchman license key you got from the 1E sales department.

1.4 Who is this guide for?

This Installation Guide is aimed at systems administrators who intend to install and configure NightWatchman for first use. In order to run and install NightWatchman successfully in its basic mode of use you need to have some knowledge of the following:

- The operating system that each client machine is running.
- The type of power management available on each client machine.

Section 2 Requirements

The following OS and security requirements need to be met for a successful installation of NightWatchman.

2.1 OS requirements

NightWatchman should install and be configurable on any Workstation running the following Microsoft operating systems:

- Windows Vista (Business, Enterprise, Enterprise x64 and Ultimate)
- Windows XP (including x64)
- Windows 2000 SP4

NightWatchman will **not** install on any Microsoft Server systems.

2.2 System requirements

- We recommend that Terminal Services is enabled and running, though NightWatchman will run without it. If security is a concern, Remote Desktop does not need to be enabled in System Properties
- The machine NightWatchman runs on must be APM/ACPI compliant

2.3 Security requirements

NightWatchman is a service that is installed on client machines and run as local system. To install NightWatchman successfully you will need administrator privileges for the PC where NightWatchman is to be installed.

2.4 NightWatchman Reporting and the 1E Agility Framework

NightWatchman connects to the 1E Agility Framework to provide detailed reporting on the energy consumption of your network. To use the reporting features of NightWatchman you will need to have previously installed the 1E Agility Framework. The Agility Framework is available for download from the 1E website where you can also find a description of its features and benefits and details on its installation.

To enable reporting you will need to provide details of the 1E Agility Framework server during the installation of NightWatchman. See the heading *Changing defaults during interactive installation* for more details.

Reporting Requirements

To create and view reports related to NightWatchman you will need to have installed the following products:

- The Agility Framework from 1E must be installed and running. See *The Agility Framework Installation Guide* for more details and specific requirements for this product.
- The NightWatchman Agility Framework Product Pack must be installed on the Agility Framework server, see *The NightWatchman Reporting Guide* for more details.

Section 3 What is NightWatchman?

NightWatchman is a client-side service that allows administrators to control the power state of PCs on a network. NightWatchman is installed on each client. It may be installed remotely and silently enabling easy power management control over a large number of machines.

In addition to controlling the power state of PCs NightWatchman also detects the currently running applications on the machine that is about to be shut down, and attempts to save any edited files that may be open. To do this NightWatchman works in conjunction with script files, one for each application type, that define what actions are needed to control the application and successfully shut down with no loss of data.

NightWatchman is provided with pre-defined scripts that handle the following products: Microsoft Outlook, Microsoft Word, Microsoft PowerPoint, Microsoft Excel and Notepad. To handle other applications you can either contact 1E or write your own additional scripts using the details provided in *The NightWatchman Scripting Guide*.

3.1 How does NightWatchman operate?

There are two main phases to NightWatchman operations. The first is the action taken to log-off the current user of the system being shut down. The second is to power-off the machine. There are extra controls in NightWatchman to wrap up these phases in a scheduling service, and additional actions depending on whether a user is logged on and what type of software they are running, but the basic functionality remains the same.

Logging off

There are two main participants in the day-to-day use of NightWatchman: the administrator, responsible for implementing the power management policy, and the end-user, using the machine that is controlled by the policy. NightWatchman has three modes for logging off the end-user that can be set by the administrator: passive, active and force. Each of these modes sets NightWatchman to interact with the end-user in different ways, as described in the following text:

Table 1 - NightWatchman modes

Mode	Description
passive	Shutdown will only take place if there are no users currently logged on to the machine.
active	The user is presented with a dialog when a system shutdown is requested or scheduled with an additional countdown timer. In this mode, the user may click OK or allow the countdown to expire to proceed with the shutdown. The user may also click Cancel to prevent the shutdown. Any unsaved data in an application for which a shutdown script does not exist will cause the overall shutdown process to abort.
force	Logoff is forced regardless of the actions of the user. A countdown timer is displayed but there is no option to cancel. Any applications that do not have corresponding shutdown scripts will be forced to terminate resulting in possible data loss. Although the logoff is forced in this instance the user still has the option to interact with the machine during the countdown period, allowing them to close applications or save documents up until the countdown timer expires.

Power-off

In the majority of cases NightWatchman will be able to turn the power off for a machine after log off. If the machine does not support power management standards, power-off may not be possible, or may need some additional configuration. In these cases, NightWatchman will do the next best thing and restart the machine to leave it in a manageable, but secure, state. If you find that NightWatchman does this for certain PCs, contact the 1E technical department who may be able to provide additional configuration information that will enable complete power management. Details on how to contact the 1E technical department are provided in *Section 8 Further Information*.

Capabilities of the administrator

The administrator can determine various settings for NightWatchman, the most basic settings include:

- The mode of use.
- The shutdown schedule.
- The length of the shutdown counter
- The power scheme.
- The availability of the end-user interface.

Capabilities of the end-user

When the end-user interface is enabled, as it is by default, the end-user will be able to set the following items:

- Defer shutdown for 24 hours
- Initiate a local shutdown
- View the list of files backed-up during the last log-off process
- Exit the system tray application

Section 4 Installing NightWatchman for first use

The successful implementation of NightWatchman depends on installing the NightWatchman service onto all machines. Configuration of the service can be done at install time or it can be done later using the NightWatchman executable. This section shows how to install and configure NightWatchman for first time use.

4.1 How do I install NightWatchman?

To install and configure NightWatchman on a particular machine you will need administrator privileges for that machine, as the installation and configuration process will need to make changes to the *Windows* Registry.

Note: on Windows 2000 the host PC must be restarted after NightWatchman installation in order for NightWatchman to work correctly.

Selecting the right NightWatchman variant

You need to select the correct NightWatchman installer depending on whether you are running on the 32-bit or 64-bit variants of Windows XP or Windows Vista. To install on 32-bit variants you use the following installer:

```
Nightwatchman50.msi
```

To install on 64-bit variants you should use the following installer:

```
Nightwatchman-x64.msi
```

Note: you can install the 32-bit variant of NightWatchman on the 64-bit variants of Windows XP and Windows Vista, but you will not be able to use it to close open 64-bit versions of applications.

To switch between the 32-bit and 64-bit variants of NightWatchman you must first uninstall the currently used variant and then install the other.

Simple interactive installation

The quickest way to install NightWatchman is to use the default settings provided in the install wizard. The install wizard can be run by double-clicking on either of the *Nightwatchman50.msi* or *Nightwatchman50-x64.msi* files, depending on whether you want to install the 32-bit or 64-bit variants. Alternatively you can run the installer via the command-line. In the following example command-line the 32-bit variant of the NightWatchman installer is assumed to have been saved in the directory *C:\1E_DOWNLOAD*.

```
C:\1E_DOWNLOAD>msiexec /i Nightwatchman50.msi
```

The following table shows the screens and the interactions needed to create a default installation. These screens are the same regardless of the 32- or 64-bit variant of NightWatchman being installed:

Table 2 - Default installation steps

1. The Welcome Screen	
No interaction required here, just click <i>Next</i>	
2. License Agreement	
You must read and then accept this license information, by clicking on the <i>I accept the terms in the license agreement</i> option, before you can continue with the installation. Once this is done click <i>Next</i> to go to the next screen	
3. User Information	
Enter your details and the license key and then click <i>Next</i> to continue. A default 30-day license key is provided to allow the easy evaluation of the NightWatchman product. To run NightWatchman for any longer period the product needs to be licensed. The license key should have been provided with your purchase. If this is not present you can contact sales@1e.com to obtain a suitable key	
4. Destination Folder	
Click <i>Next</i> to accept the default installation directory of:	
C:\Program Files\1E\Nightwatchman50\	
or click the <i>Browse</i> button to change this	
5. Select Installation Type	
Here you select the type of installation you want to perform.	
Setup Type	Description
Typical	Select this option to perform a default installation. Note: Typical installation does not enable reporting. This must be enabled using the Custom option, as described in Table 4 - Advanced interactive installation steps below
Custom	Select this option to customize the components being installed
For the simple installation select the <i>Typical</i> option. This installs NightWatchman with its default settings that are outlined in <i>Table 3 - Default installation settings</i> below	
6. Ready to Install the Application	
Click <i>Next</i> to begin the installation	

The standard installation will configure NightWatchman to use the following settings:

Table 3 - Default installation settings

Setting	Description
Logoff mode is active	The user will be queried prior to the shutdown
Shutdown action is normal	NightWatchman will detect if power management is enabled on the machine and shut down or restart the machine as appropriate
No shutdowns initially scheduled	Until a shutdown is scheduled, NightWatchman shutdowns may only be initiated by the user selecting shutdown from the systray icon

Changing defaults during interactive installation

If the default settings are not sufficient for your requirements you can also install the software using the .msi wizard to define customised settings.

In this case you should follow through the same steps 1-4 as for the simple installation and then change the subsequent steps as follows:

Table 4 - Advanced interactive installation steps

5. Select Installation Type									
For the custom installation select the <i>Custom</i> option. This allows you to change the initial settings according to the following steps									
6. Advanced Configuration									
This screen sets the properties for the NightWatchman service. There are 3 different parameters that can be configured on this screen, as described in the following table:									
Parameter	Description								
Shutdown Time	<p>Here you set the time that you want a NightWatchman sequence to run. First check the checkbox to enable the time controls then set the hours and minutes using the dropdowns to set when the sequence should be initiated</p> <p>The time is defined in 24 hour format so the first (hours) dropdown shows the hours from 00 (midnight) to 23 (11PM)</p> <p>The second (minutes) dropdown lets you set the minutes past the hour in 10 minute intervals</p>								
Logoff Action	<p>This must be set to one of the following:</p> <table border="1"> <thead> <tr> <th>Action</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>ACTIVE</td> <td>User may postpone or cancel the NightWatchman sequence</td> </tr> <tr> <td>PASSIVE</td> <td>The NightWatchman sequence only runs if there are no logged on users</td> </tr> <tr> <td>FORCE</td> <td>The user will be logged off when the NightWatchman sequence runs</td> </tr> </tbody> </table>	Action	Description	ACTIVE	User may postpone or cancel the NightWatchman sequence	PASSIVE	The NightWatchman sequence only runs if there are no logged on users	FORCE	The user will be logged off when the NightWatchman sequence runs
Action	Description								
ACTIVE	User may postpone or cancel the NightWatchman sequence								
PASSIVE	The NightWatchman sequence only runs if there are no logged on users								
FORCE	The user will be logged off when the NightWatchman sequence runs								

Shutdown Action	This sets the action to be performed at the end of the NightWatchman sequence. It must be one of the following:	
	Action	Description
	Normal	System will shutdown
	Hibernate	System will be placed into hibernate state
	Standby	System will be placed into standby on Windows XP or sleep on Windows Vista
	Logoff	The user will be logged off. No further actions will be performed
	Reboot	The system will be rebooted

7. Power Scheme Configuration

This screen lets you enable the advanced power management options to control the screen, hard disk, sleep and hibernate settings. To set the power scheme settings you must first check the *Enable Power Scheme* checkbox. This enables the controls to set the power scheme parameters for when the computer is plugged in or running on batteries, as described in the following table:

Control	Description
Turn off monitor	Configures when the monitor should be turned off following the selected periods of inactivity for when the computer is plugged in and when running on batteries
Turn off hard disks	Configures when the hard disks should be turned off following the selected periods of inactivity for when the computer is plugged in and when running on batteries
Sleep after	Configures when the computer should be put into a sleep state following the selected periods of inactivity for when the computer is plugged in and when running on batteries
Hibernate after	Configures when the computer should be put into a hibernate state following the selected periods of inactivity for when the computer is plugged in and when running on batteries. The hibernate inactivity periods must always be longer than their sleep counterparts

8. Reporting Configuration

This screen lets you enable and configure the connection between NightWatchman and the NightWatchman Management Center Web Service. This sets the NightWatchman client to report information back to the NightWatchman Management Center database and to retrieve power policy updates. The connection can be configured for HTTP and HTTPS communications, as described in the following table:

Protocol	Description
Enable HTTP	Check this box to enable HTTP communications. You will then have to set the location of the NightWatchman Management Center Web Service configured for HTTP communications. This should be entered as the fully qualified domain name for the server where the HTTP configured Web Service is installed
Enable HTTPS	<p>Check this box to enable HTTPS communications. You will then have to set the location of the NightWatchman Management Center Web Service configured for HTTPS communications. This should be entered as the fully qualified domain name for the server where the HTTPS configured Web Service is installed</p> <p>HTTPS normally requires a client certificate for authentication which is matched against a certificate stored on the IIS server. If your HTTPS site is configured to require a client certificate you will need to check the <i>Use client certificate from local certificate store checkbox</i></p> <p>If you have more than one client certificate you will need to identify the correct one using either the certificate issuer or the certificate subject. The certificate subject is normally more unique than the issuer. You need to ensure that you do not have more than one certificate with the same issuer and subject, as the NightWatchman client will only use the first matching certificate found</p> <p>Searching using the certificate issuer or subject is set by selecting one of the <i>Match Certificate Issuer</i> or <i>Match Certificate Subject</i> radio buttons. You then enter the issuer or subject text in the <i>Search Text</i> field</p>

9. Start Installation

Click *Next* to begin the installation

4.2 Installing using quiet mode

You can install NightWatchman quickly, and without interaction, by using the silent option provided by the Microsoft Installer application. This option allows you to batch the installation and install onto a large number of machines easily.

The silent option is set on the Microsoft Installer command line using the "/qn" switch.

NOTE: you will need to set the PIDKEY value on the Microsoft Installer command line to a valid NightWatchman license key in order to license NightWatchman for use. If the license key is not provided a limited 30 day license will be applied.

In addition to the NightWatchman license key switch there are a number of optional configuration switches which are described in *Appendix B The NightWatchman install switches*

To use the command line options, start a DOS session and change to the directory where the NightWatchman downloaded MSI install script has been placed. In the following example the NightWatchman installer is assumed to have been saved in the directory "C:\1E_DOWNLOAD". The following MSIEEXEC command line installs NightWatchman to attempt a shutdown at 8:30 PM with the action on log-off set to normal.

```
C:\1E_DOWNLOAD>msiexec /i Nightwatchman50.msi LOGOFFACTION=ACTIVE SHUTDOWN_HOUR=20
SHUTDOWN_MIN=30 PIDKEY=ABCD-1234-5678-8765-4321 /qn
```

The following example sets NightWatchman to install in the directory "C:\1E\NightWatchman":

```
C:\1E_DOWNLOAD>msiexec /i Nightwatchman50.msi INSTALLDIR="C:\1E\Nightwatchman"
PIDKEY=ABCD-1234-5678-8765-4321 /qn
```

NOTE: the text "ABCD-1234-5678-8765-4321" in the above examples should be replaced with the NightWatchman license key you got from the 1E sales department.

4.3 Installing using SMS

When installing NightWatchman via SMS/ConfigMgr you must set the ALLUSERS flag to 1 on the command-line. The previous example would have to have the following command line set:

```
msiexec /i Nightwatchman50.msi INSTALLDIR="C:\1E\Nightwatchman" PIDKEY=ABCD-1234-
5678-8765-4321 ALLUSERS=1 /qn
```

4.4 Licensing NightWatchman

A default 30-day license key is provided with the NightWatchman installation to allow the easy evaluation of the NightWatchman product.

To run NightWatchman for any longer period the product needs to be licensed. A license key should have been provided with your purchase. If this is not present you can contact sales@1e.com to obtain a suitable key.

To relicense the product when an existing installation has an expired key you run the NightWatchman service command line with the *-relicense* switch, as follows:

```
c:> nwmsvc.exe -relicense=ABCD-1234-5678-8765-4321
```

In the above command-line you must replace the example text "ABCD-1234-5678-8765-4321" with the NightWatchman license key you got from the 1E sales department

If a license expires you will be notified the next time the system attempts to run the NightWatchman service. At this point no NightWatchman behaviour will be available, NightWatchman shutdown will not be supported and information will not be logged with the Agility Framework Reporting.

Note: A license will only expire if it is time limited, for example the 30-day evaluation license or any subsequent extension to this period. Please check your licensing details to confirm the status of the license.

If you are not running with a time-limited license and you see the license expiry notification on NightWatchman service startup, please contact 1E customer support.

4.5 Default file locations

After a default installation the main NightWatchman executable, and various associated programs, will be placed in the default installation directory. This can be accessed by the following command:

```
> cd C:\Program Files\1E\Nightwatchman50
```

To run the executable to set additional configuration options you will either need to add this directory to your *Windows* PATH environment variable, or change to that directory.

Section 5 Uninstalling NightWatchman

NightWatchman can be removed from a machine using the *Add or Remove Programs* item in the *Control Panel*. NightWatchman has its own entry in the *Currently Installed Programs:* listbox. To uninstall NightWatchman select the NightWatchman item and click on the *Remove* button subsequently displayed. Doing this removes the NightWatchman programs and registry entries.

5.1 Additional information

The NightWatchman entry in the *Add or Remove Programs* dialog also contains a means to access support information for the product. This contains links to the 1E website and the currently installed NightWatchman package version number.

Section 6 Beyond installation

Using any *Windows* systems management software product, you can distribute changes to the NightWatchman policies using command line switches to the NightWatchman executable.

6.1 How do I manage shutdowns using NightWatchman?

The NightWatchman command line allows you to set specific attributes for the NightWatchman service. For example, to change the shutdown policy for a particular machine to "force" and remove the user's ability to defer shutdown you could open a console on the machine with administrator privileges and enter the following command line:

```
> <NightWatchmanPath>\nightwatchman -shutdownaction=FORCE -systemtray=off
```

where <NightWatchmanPath> should be replaced with the installation location for the NightWatchman executable. Another common usage is to change the shutdown time for machines. For example, on a holiday where the company is only working a half day, you can reconfigure the machines to shut down at 1:30 PM instead of the usual time of 8:30 PM. The following command line sets the new time:

```
> <NightWatchmanPath>\nightwatchman.exe -shutdowntime=13:30
```

More details on configuring NightWatchman from the command line can be found in *The NightWatchman Administrator's Guide*.

6.2 NightWatchman and the NightWatchman Console

NightWatchman now comes with a centralized management console that enables administrators to model their company network structure and apply power policies that are suitable to particular groups of machines.

The NightWatchman console also provides a bridge between NightWatchman, 1E WakeUp and the Agility Framework to enable complete control over computer power states without the need for additional network management software.

6.3 NightWatchman, SMS/ConfigMgr and 1E WakeUp

NightWatchman can work in collaboration with 1E WakeUp to achieve 100% software distribution success.

NightWatchman is a stand-alone product, needing only power management to be enabled on the machine. However, in conjunction with 1E WakeUp, NightWatchman can add real benefit to SMS/ConfigMgr. 1E WakeUp is used to ensure that PCs are started up for a scheduled software distribution. NightWatchman ensures that all the PCs are available for management.

NightWatchman provides this functionality in two ways. First it can ensure that PCs are either fully switched off or restarted. Secondly it can ensure that systems are started from a known baseline.

NightWatchman also integrates with 1E WakeUp initiated wakeups - enabling computers that have been awoken for the purposes of patching or software updates to be shut down once the operation is complete.

More details on the integration between NightWatchman and 1E WakeUp can be found in *The NightWatchman Administrator's Guide*.

Section 7 Troubleshooting

When troubleshooting problems with NightWatchman you should first check that the machine it is installed on meets the requirements set out in *Section 2 - Requirements*.

If the requirements are met, before contacting the technical support department at 1E be sure to check out the troubleshooting page on the 1E website at the following location

<http://www.1e.com/Support/Nightwatchman-TroubleShooting.aspx>

7.1 Contact 1E support

If following the troubleshooting steps on the 1E website does not help, the next step should be to contact the 1E support department. To help 1E determine the solution quickly, you should create a technical report of the problem according to the steps described below.

Creating a technical report

The technical report should contain the following information:

- The NightWatchman logfile.
- Version number of NightWatchman.
- The OS, version number and patch level the machine is running.
- Which type of power management is available on the client machine?

To help determine the cause of technical problems NightWatchman keeps a logfile of all its settings and interactions. This is the main source of information in the technical report. By default this logfile is called *NightWatchman.log* and is located in one of the following directories, depending on which OS you are running.

In Windows Vista this file is located in:

```
C:\ProgramData\1E\Nightwatchman50
```

In Windows XP and Windows 2000 this file is located in:

```
C:\Documents and Settings\All Users\Application Data\1E\Nightwatchman50
```

The version number for NightWatchman can be found using the following NightWatchman command line option:

```
> <NightWatchmanPath>\nightwatchman.exe -version
```

where *<NightWatchmanPath>* should be replaced with the installation location for the NightWatchman executable. You should then email the details of the problem encountered along with the above information to <mailto:support@1e.com>. A technical consultant will then contact you to help find a suitable solution.

Section 8 Further Information

After you have completed the installation and initial configuration of NightWatchman, additional detailed configuration can be found in *The NightWatchman Administrator's Guide*. That guide provides information about how to set the command line switches, details on integration with 1E WakeUp and a comprehensive annotated guide to the application shutdown scripting facility.

For more detailed questions about specific situations that may be relevant to your network you are always welcome to contact 1E directly. Our contact details are provided below.

8.1 Contact details

1E provide a number of SMS/ConfigMgr enhancement tools as well as consultancy services. This section provides information on how to get information about 1E and contact details for the various departments within 1E.

Website

The essential resource for information about 1E and its products is the website.

<http://www.1e.com/>

Telephone and fax

The following UK numbers are available for telephone and fax enquiries:

Tel: +44 (0)20 8326 3880

Fax: +44 (0)20 8840 9578

The following number is available in the United States of America:

Tel: 1-800 516 6938

Post

The postal address for 1E is:

Head Office:
1E Ltd,
97-107 Uxbridge Rd,
London W5 5TL, UK

Sales

To contact the sales department at 1E you can use the following email address:

<mailto:sales@1e.com>

Technical support

To contact the technical support department at 1E you can use the following address:

<mailto:support@1e.com>

Appendix A Glossary

The terms contained in this glossary are used throughout this document and are provided here for quick reference.

A.1 Technical Terms

The following table describes the technical acronyms used in this document.

Table 5 - Technical acronyms

Term	Description
ACPI	Advanced Configuration and Power Interface. The successor to APM, ACPI allows the best control over a PC's power settings.
APM	Advanced Power Management. An older standard for controlling a PC's power settings, APM can be problematic in terms of shutdown and power-off of PC's.
SMS	Systems Management Server. A system from Microsoft for managing Microsoft networks.
MSI	Microsoft Installer utility. This Microsoft utility is the basis for installing most current MS applications and a few third party applications. MSI includes many install enhancements such as registry and file tracking.

Appendix B The NightWatchman install switches

NightWatchman contains various switches that can be set on the MSIEXEC command line. The complete set is provided in the following table. The default values are shown in bold.

Table 6 - The complete NightWatchman installation switches

Switch	Description
ACMONDAYTIME	<p>Sets the time for the start of a Monday alarm clock. This must be set to a string value defining the start time in the format <i>hour:minutes</i> for a 24hr day</p> <p>For example the following sets a Monday alarm clock of 08:00 am:</p> <pre>ACMONDAYTIME=08:00</pre> <p>There is no value for this switch set by default</p>
ACSATURDAYTIME	<p>Sets the time for the start of a Saturday alarm clock. This must be set to a string value defining the start time in the format <i>hour:minutes</i> for a 24hr day</p> <p>For example the following sets a Saturday alarm clock of 08:00 am:</p> <pre>ACSATURDAYTIME =08:00</pre> <p>There is no value for this switch set by default</p>
ACSUNDAYTIME	<p>Sets the time for the start of a Sunday alarm clock. This must be set to a string value defining the start time in the format <i>hour:minutes</i> for a 24hr day</p> <p>For example the following sets a Sunday alarm clock of 08:00 am:</p> <pre>ACSUNDAYTIME=08:00</pre> <p>There is no value for this switch set by default</p>
ACTHURSDAYTIME	<p>Sets the time for the start of a Thursday alarm clock. This must be set to a string value defining the start time in the format <i>hour:minutes</i> for a 24hr day</p> <p>For example the following sets a Thursday alarm clock of 08:00 am:</p> <pre>ACTHURSDAYTIME =08:00</pre> <p>There is no value for this switch set by default</p>
ACTUESDAYTIME	<p>Sets the time for the start of a Tuesday alarm clock. This must be set to a string value defining the start time in the format <i>hour:minutes</i> for a 24hr day</p> <p>For example the following sets a Tuesday alarm clock of 08:00 am:</p> <pre>ACTUESDAYTIME=08:00</pre> <p>There is no value for this switch set by default</p>
ACWEDNESDAYTIME	<p>Sets the time for the start of a Wednesday alarm clock. This must be set to a string value defining the start time in the format <i>hour:minutes</i> for a 24hr day</p> <p>For example the following sets a Wednesday alarm clock of 08:00 am:</p> <pre>ACWEDNESDAYTIME =08:00</pre>

	There is no value for this switch set by default
CERTISSUER	When using HTTPS for communications and using client certificate authentication, set this to the certificate issuer text
CERTSUBJECT	When using HTTPS for communications and using client certificate authentication, set this to the certificate subject text
COUNTDOWNSECS	<p>An integer value that sets the number of seconds that the countdown timer dialog box will be displayed before the shutdown or log-off action is executed</p> <p>The minimum value for this switch is 0 seconds</p> <p>The maximum value is 3600 seconds</p> <p>The default value for this switch is 30 seconds</p>
DISKAC	<p>An integer value that sets the hard disks to switch to standby after the specified number of minutes of system idle time, when the computer is running on mains power</p> <p>A value of zero turns this power management option off</p> <p>The maximum supported value for this switch is 1440</p> <p>The default value for this switch is 60 minutes</p>
DISKDC	<p>An integer value that sets the hard disks to switch to standby after the specified number of minutes of system idle time, when the computer is running on battery power</p> <p>A value of zero turns this power management option off</p> <p>The maximum supported value for this switch is 1440</p> <p>The default value for this switch is 5 minutes</p>

FRIDAYCLOSEACTION	<p>Sets the action to run upon closing the maintenance window</p> <p>This may be one of:</p> <table border="1" data-bbox="592 282 1316 546"> <thead> <tr> <th>Action Value</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>Leave the computer in its current state, i.e. do nothing.</td> </tr> <tr> <td>1</td> <td>Sets close action to standby.</td> </tr> <tr> <td>2</td> <td>Sets close action to hibernate</td> </tr> <tr> <td>3</td> <td>Sets close action to power off</td> </tr> </tbody> </table> <p>For example, the following sets the close action for a Friday maintenance window to put the computer in standby:</p> <pre>FRIDAYCLOSEACTION=1</pre> <p>The default for this switch is 0</p>	Action Value	Description	0	Leave the computer in its current state, i.e. do nothing.	1	Sets close action to standby.	2	Sets close action to hibernate	3	Sets close action to power off
Action Value	Description										
0	Leave the computer in its current state, i.e. do nothing.										
1	Sets close action to standby.										
2	Sets close action to hibernate										
3	Sets close action to power off										
FRIDAYOPENTIME	<p>Sets the time for the start of a Friday maintenance window. This must be set to a string value defining the start time in the format <i>hour:minutes</i> for a 24hr day</p> <p>For example the following sets a Friday open time of 02:00 am:</p> <pre>FRIDAYOPENTIME=02:00</pre> <p>There is no value for this switch set by default</p>										
FRIDAYPERIODMINS	<p>Sets the duration, in minutes, for the maintenance window on a Friday.</p> <p>For example the following sets the Friday maintenance window to be 1 hour:</p> <pre>FRIDAYPERIODMINS=60</pre> <p>There is no value set for this switch by default</p>										
HIBERNATEAC	<p>An integer value that sets the computer to hibernate after a specified number of minutes of system idle time, when the computer is running on mains power</p> <p>A value of zero turns this power management option off</p> <p>The maximum supported value for this switch is 1440</p> <p>The default value for this switch is 0</p>										
HIBERNATEDC	<p>An integer value that sets the computer to hibernate after a specified number of minutes of system idle time when the computer is running on battery power</p> <p>A value of zero turns this power management option off</p> <p>The maximum supported value for this switch is 1440</p> <p>The default value for this switch is 0</p>										
HTTP	<p>This switch is now deprecated. See <i>CERTISSUER</i>, <i>CERTSUBJECT</i>, <i>REPORTINGSERVER</i> and <i>SECUREREPORTINGSERVER</i> for the new methods of setting communications with the NightWatchman Management Center Web Service</p>										

IGNOREERRORS	<p>Sets the behaviour of NightWatchman when errors are encountered during shutdown</p> <table border="1" data-bbox="592 271 1316 528"> <thead> <tr> <th>Value</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>OFF</td> <td>Cancel shutdown when a shutdown script error is encountered</td> </tr> <tr> <td>ON</td> <td>Ignore errors from the shutdown scripts. The shutdown will be allowed to continue. The user will be presented with the option of cancelling shutdown</td> </tr> </tbody> </table> <p>The default value for this switch is <i>OFF</i></p>	Value	Description	OFF	Cancel shutdown when a shutdown script error is encountered	ON	Ignore errors from the shutdown scripts. The shutdown will be allowed to continue. The user will be presented with the option of cancelling shutdown		
Value	Description								
OFF	Cancel shutdown when a shutdown script error is encountered								
ON	Ignore errors from the shutdown scripts. The shutdown will be allowed to continue. The user will be presented with the option of cancelling shutdown								
INSTALLDIR	<p>Sets the install directory for NightWatchman</p> <p>The default value for this switch is:</p> <p><code>\Program Files\1E\Nightwatchman50</code></p>								
INSTALLSCRIPTS	<p>Selects whether the shutdown scripts are installed or not</p> <table border="1" data-bbox="592 763 1316 902"> <thead> <tr> <th>Value</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>Does not install the shutdown scripts</td> </tr> <tr> <td>1</td> <td>Installs the shutdown scripts</td> </tr> </tbody> </table> <p>The default value for this switch is 1</p>	Value	Description	0	Does not install the shutdown scripts	1	Installs the shutdown scripts		
Value	Description								
0	Does not install the shutdown scripts								
1	Installs the shutdown scripts								
KEEPAWAKEAFTERWAKEUPMINS	<p>This sets a time that a computer will be kept awake for following an alarm clock wake up</p> <p>The minimum setting for this switch is 5. If you attempt to set a lower value the switch will default to 60</p> <p>The default value is 60</p> <p>The maximum is 1440 (24hrs)</p>								
LOGOFFACTION	<p>Determines the behaviour when a user is logged onto the system. In all instances, scripts will be executed to close down applications gracefully</p> <table border="1" data-bbox="592 1312 1316 1731"> <thead> <tr> <th>Value</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>Passive</td> <td>The machine will be shut down providing no-one is currently logged on</td> </tr> <tr> <td>Active</td> <td>User will be given the option to postpone a log-off. If the user is not present and the countdown timer dialog expires, log-off will occur. Log-off will be stopped if any scripts generate an error</td> </tr> <tr> <td>Force</td> <td>Will force a log-off. The countdown timer dialog has no cancel option. The log-off will ignore any errors generated by the shutdown scripts. Unsaved data may be lost. This action cannot be postponed or cancelled</td> </tr> </tbody> </table> <p>The default value for this switch is <i>Active</i></p>	Value	Description	Passive	The machine will be shut down providing no-one is currently logged on	Active	User will be given the option to postpone a log-off. If the user is not present and the countdown timer dialog expires, log-off will occur. Log-off will be stopped if any scripts generate an error	Force	Will force a log-off. The countdown timer dialog has no cancel option. The log-off will ignore any errors generated by the shutdown scripts. Unsaved data may be lost. This action cannot be postponed or cancelled
Value	Description								
Passive	The machine will be shut down providing no-one is currently logged on								
Active	User will be given the option to postpone a log-off. If the user is not present and the countdown timer dialog expires, log-off will occur. Log-off will be stopped if any scripts generate an error								
Force	Will force a log-off. The countdown timer dialog has no cancel option. The log-off will ignore any errors generated by the shutdown scripts. Unsaved data may be lost. This action cannot be postponed or cancelled								

MONDAYCLOSEACTION	<p>Sets the action to run upon closing the maintenance window</p> <p>This may be one of:</p> <table border="1" data-bbox="592 286 1316 548"> <thead> <tr> <th>Action Value</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>Leave the computer in its current state, i.e. do nothing.</td> </tr> <tr> <td>1</td> <td>Sets close action to standby.</td> </tr> <tr> <td>2</td> <td>Sets close action to hibernate</td> </tr> <tr> <td>3</td> <td>Sets close action to power off</td> </tr> </tbody> </table> <p>For example, the following sets the close action for a Monday maintenance window to get the computer to hibernate:</p> <pre>MONDAYCLOSEACTION=2</pre> <p>The default for this switch is 0</p>	Action Value	Description	0	Leave the computer in its current state, i.e. do nothing.	1	Sets close action to standby.	2	Sets close action to hibernate	3	Sets close action to power off
Action Value	Description										
0	Leave the computer in its current state, i.e. do nothing.										
1	Sets close action to standby.										
2	Sets close action to hibernate										
3	Sets close action to power off										
MONDAYOPENTIME	<p>Sets the time for the start of a Monday maintenance window. This must be set to a string value defining the start time in the format <i>hour:minutes</i> for a 24hr day</p> <p>For example the following sets a Monday open time of 02:00 am:</p> <pre>MONDAYOPENTIME=02:00</pre> <p>There is no value for this switch set by default</p>										
MONDAYPERIODMINS	<p>Sets the duration, in minutes, for the maintenance window on a Monday</p> <p>For example the following sets the Monday maintenance window to be 1 hour:</p> <pre>MONDAYPERIODMINS=60</pre> <p>There is no value set for this switch by default</p>										
MONITORAC	<p>An integer value that sets the monitor to switch to standby after the specified number of minutes of system idle time, when the computer is running on mains power</p> <p>A value of zero turns this power management option off</p> <p>The maximum supported value for this switch is 1440</p> <p>The default value for this switch is 15 minutes</p>										
MONITORDC	<p>An integer value that sets the monitor to switch to standby after a specified number of minutes of system idle time, when the computer is running on battery power</p> <p>A value of zero turns this power management option off</p> <p>The maximum supported value for this switch is 1440</p> <p>The default value for this switch is 3 minutes</p>										
MONITORJOBS	<p>Turn the SMS/ConfigMgr and Configuration Manager job monitoring on or off. This switch takes the values <i>ON</i> or <i>OFF</i> and sets the corresponding behaviour for the job monitoring</p> <p>The setting for this switch also controls the integration with 1E WakeUp. When monitorjobs is set to <i>ON</i>, NightWatchman will perform auto-shutdown for machines awoken by a scheduled 1E WakeUp signal</p> <p>The default value for this switch is <i>ON</i></p>										

PENDINGJOBWINDOWMINS	<p>The <i>PENDINGJOBWINDOWMINS</i> value is used to modify the NightWatchman shutdown behaviour according to pending SMS/ConfigMgr or CM jobs. It takes an integer that defines the number of minutes in the look-ahead window</p> <p>The behaviour of this switch depends on the setting for the <i>MONITORJOBS</i> switch. For NightWatchman to check the pending/running SMS/ConfigMgr or Configuration Manager jobs the <i>MONITORJOBS</i> switch must be set to <i>ON</i>, as it is by default</p> <p>The way that the shutdown behaviour is modified is dependent on the type of shutdown, as shown in the following table:</p> <table border="1" data-bbox="592 533 1318 1346"> <thead> <tr> <th data-bbox="592 533 876 577">Shutdown type</th> <th data-bbox="876 533 1318 577">Behaviour</th> </tr> </thead> <tbody> <tr> <td data-bbox="592 577 876 947">Shutdown now</td> <td data-bbox="876 577 1318 947">NightWatchman checks if there are any pending jobs within the specified look-ahead window starting from the current time, and also checks for currently running jobs. If either of these exist NightWatchman then checks the state of the corresponding Advertised Program and aborts the shutdown attempt if appropriate; otherwise the shutdown continues as requested</td> </tr> <tr> <td data-bbox="592 947 876 1346">Scheduled Shutdown</td> <td data-bbox="876 947 1318 1346">NightWatchman checks if there are any pending jobs within the specified look-ahead window starting from the current time, and also checks for currently running jobs. If either of these exist NightWatchman then checks the state of the corresponding Advertised Program and the shutdown attempt is deferred, if appropriate, until the next retry time; otherwise the shutdown continues as requested</td> </tr> </tbody> </table> <p data-bbox="592 1375 1334 1491">For the best behaviour we recommend that the <i>pendingjobwindowmins</i> value is set to slightly larger than the SMS/ConfigMgr or Configuration Manager poll refresh interval on the client.</p> <p data-bbox="592 1509 1334 1682">When the <i>PENDINGJOBWINDOWMINS</i> switch is set to 0, but the <i>MONITORJOBS</i> switch is set to <i>ON</i>, the look-ahead functionality is turned off but the check for running SMS/ConfigMgr jobs will still happen. To turn off SMS/ConfigMgr and Configuration Manager job monitoring altogether you should set the <i>MONITORJOBS</i> switch to <i>OFF</i></p> <p data-bbox="592 1704 1334 1877">Note: this behaviour is dependent on checking the list of pending SMS/ConfigMgr or Configuration Manager jobs with the local SMS/ConfigMgr or Configuration Manager Client. If the Client is not installed on the local PC then shutdown will proceed as normal regardless of the setting of the switch</p> <p data-bbox="592 1895 1334 1924">The default value for this switch is 5</p>	Shutdown type	Behaviour	Shutdown now	NightWatchman checks if there are any pending jobs within the specified look-ahead window starting from the current time, and also checks for currently running jobs. If either of these exist NightWatchman then checks the state of the corresponding Advertised Program and aborts the shutdown attempt if appropriate; otherwise the shutdown continues as requested	Scheduled Shutdown	NightWatchman checks if there are any pending jobs within the specified look-ahead window starting from the current time, and also checks for currently running jobs. If either of these exist NightWatchman then checks the state of the corresponding Advertised Program and the shutdown attempt is deferred, if appropriate, until the next retry time; otherwise the shutdown continues as requested
Shutdown type	Behaviour						
Shutdown now	NightWatchman checks if there are any pending jobs within the specified look-ahead window starting from the current time, and also checks for currently running jobs. If either of these exist NightWatchman then checks the state of the corresponding Advertised Program and aborts the shutdown attempt if appropriate; otherwise the shutdown continues as requested						
Scheduled Shutdown	NightWatchman checks if there are any pending jobs within the specified look-ahead window starting from the current time, and also checks for currently running jobs. If either of these exist NightWatchman then checks the state of the corresponding Advertised Program and the shutdown attempt is deferred, if appropriate, until the next retry time; otherwise the shutdown continues as requested						

PIDKEY	<p>Set the NightWatchman license key. This value should be set to a valid license key obtained from sales@1e.com</p> <p>The default behaviour if this switch is not defined is to generate a 30 day evaluation license key</p>								
POWERScheme	<p>Controls the setting of a NightWatchman power scheme when the service starts and at user login</p> <p>Note: The logged in user requires permissions to be able to change their local power scheme</p> <table border="1"> <thead> <tr> <th>Value</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>AUTO</td> <td>This value is no longer supported as a separate option. If you set the POWERScheme switch to <i>AUTO</i> it will behave as if set to <i>ON</i></td> </tr> <tr> <td>ON</td> <td>The NightWatchman power scheme will be applied when the service starts and when a user logs in</td> </tr> <tr> <td>OFF</td> <td>The power scheme will not be applied</td> </tr> </tbody> </table> <p>The default value for this switch is <i>OFF</i></p>	Value	Description	AUTO	This value is no longer supported as a separate option. If you set the POWERScheme switch to <i>AUTO</i> it will behave as if set to <i>ON</i>	ON	The NightWatchman power scheme will be applied when the service starts and when a user logs in	OFF	The power scheme will not be applied
Value	Description								
AUTO	This value is no longer supported as a separate option. If you set the POWERScheme switch to <i>AUTO</i> it will behave as if set to <i>ON</i>								
ON	The NightWatchman power scheme will be applied when the service starts and when a user logs in								
OFF	The power scheme will not be applied								
REPORTING	<p>Sets the NightWatchman reporting state</p> <table border="1"> <thead> <tr> <th>Value</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>ON</td> <td>NightWatchman reporting is enabled. NightWatchman will then forward information to the 1E Agility Framework server specified in REPORTINGSERVER</td> </tr> <tr> <td>OFF</td> <td>No reporting information is sent</td> </tr> </tbody> </table> <p>The default value for this switch is <i>OFF</i></p>	Value	Description	ON	NightWatchman reporting is enabled. NightWatchman will then forward information to the 1E Agility Framework server specified in REPORTINGSERVER	OFF	No reporting information is sent		
Value	Description								
ON	NightWatchman reporting is enabled. NightWatchman will then forward information to the 1E Agility Framework server specified in REPORTINGSERVER								
OFF	No reporting information is sent								
REPORTINGSERVER	<p>When using HTTP for communications, set this parameter to the host server name where the NightWatchman Management Center Web Service Component has been installed</p>								
RETRYATTEMPTS	<p>Integer value that sets the number of repeat times that a shutdown will be attempted if cancelled by the user</p> <p>The minimum value for this switch is 0 retries</p> <p>The maximum value is 1440 retries</p> <p>The default value for this switch is 3</p>								
RETRYINTERVAL	<p>Integer value that sets the interval in minutes at which the service will retry shutdown if cancelled by the user or if shutdown cannot be performed</p> <p>The minimum value for this switch is 1 minute</p> <p>The maximum value is 60 minutes</p> <p>The default value for this switch is 60</p>								

RUNALWAYS	<p>Determines the state of the run always functionality</p> <table border="1" data-bbox="592 237 1318 524"> <thead> <tr> <th>Value</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>ON</td> <td>The following script (if it exists) will always be run when logging off a user after any other scripts have run: <InstallDir>\Scripts\RunAlways.vbs Note: when the flag is set to on the script will run even if there is a script error and the machine fails to shut down</td> </tr> <tr> <td>OFF</td> <td>The script is not run</td> </tr> </tbody> </table> <p>Note: the NightWatchman scripts, including RunAlways.vbs, are only run if a user is logged into the machine.</p> <p>The default value for this switch is OFF</p>	Value	Description	ON	The following script (if it exists) will always be run when logging off a user after any other scripts have run: <InstallDir>\Scripts\RunAlways.vbs Note: when the flag is set to on the script will run even if there is a script error and the machine fails to shut down	OFF	The script is not run				
Value	Description										
ON	The following script (if it exists) will always be run when logging off a user after any other scripts have run: <InstallDir>\Scripts\RunAlways.vbs Note: when the flag is set to on the script will run even if there is a script error and the machine fails to shut down										
OFF	The script is not run										
SATURDAYCLOSEACTION	<p>Sets the action to run upon closing the maintenance window</p> <p>This may be one of:</p> <table border="1" data-bbox="592 792 1318 1057"> <thead> <tr> <th>Action Value</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>Leave the computer in its current state, i.e. do nothing.</td> </tr> <tr> <td>1</td> <td>Sets close action to standby.</td> </tr> <tr> <td>2</td> <td>Sets close action to hibernate</td> </tr> <tr> <td>3</td> <td>Sets close action to power off</td> </tr> </tbody> </table> <p>For example, the following sets the close action for a Saturday maintenance window to power off:</p> <pre>SATURDAYCLOSEACTION=3</pre> <p>The default for this switch is 0</p>	Action Value	Description	0	Leave the computer in its current state, i.e. do nothing.	1	Sets close action to standby.	2	Sets close action to hibernate	3	Sets close action to power off
Action Value	Description										
0	Leave the computer in its current state, i.e. do nothing.										
1	Sets close action to standby.										
2	Sets close action to hibernate										
3	Sets close action to power off										
SATURDAYOPENTIME	<p>Sets the time for the start of a Saturday maintenance window. This must be set to a string value defining the start time in the format <i>hour:minutes</i> for a 24hr day</p> <p>For example the following sets a Saturday open time of 02:00 am:</p> <pre>SATURDAYOPENTIME=02:00</pre> <p>There is no value for this switch set by default</p>										
SATURDAYPERIODMINS	<p>Sets the duration, in minutes, for the maintenance window on a Saturday</p> <p>For example the following sets the Saturday maintenance window to be 1 hour:</p> <pre>SATURDAYPERIODMINS=60</pre> <p>There is no value set for this switch by default</p>										
SCRIPTTIMEOUTSECS	<p>Integer value that controls how many seconds NightWatchman waits before it decides that a script has timed out</p> <p>The minimum value for this switch is 1</p> <p>The maximum value is 120</p> <p>The default value for this switch is 10</p>										
SECUREREPORTINGSERVER	<p>When using HTTPS for communications, set this parameter to the host server name where the NightWatchman Management</p>										

	Center Web Service Component secure site has been installed														
SHUTDOWN_HOUR	<p>The integer value in this flag sets the hour that shutdown will be started.</p> <p>This value must be set between -1 and 23 inclusive.</p> <p>The default value for this switch is -1 which defines no shutdown time. If you set just this switch the <i>SHUTDOWN_MIN</i> switch will default to -1.</p>														
SHUTDOWN_MIN	<p>The integer value in this flag sets the hour that shutdown will be started.</p> <p>This value must be set between -1 and 59 inclusive.</p> <p>The default value for this switch is -1 which defines no shutdown time. If you set just this switch the <i>SHUTDOWN_HOUR</i> switch will default to -1.</p>														
SHUTDOWNACTION	<p>Determines the shutdown type. This switch takes one of the values described in the following table:</p> <table border="1"> <thead> <tr> <th>Value</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>Hibernate</td> <td>This value sets NightWatchman to put the machine into hibernate mode</td> </tr> <tr> <td>Standby</td> <td>This value sets NightWatchman to put the machine into standby mode</td> </tr> <tr> <td>Logoff</td> <td>Performs the log-off action only. No shut down performed. The machine will be left at the log-on prompt. This action has no power management value but can be used to enforce security</td> </tr> <tr> <td>Normal</td> <td>The system will shut down and poweroff</td> </tr> <tr> <td>Poweroff</td> <td>The system will shut down and poweroff. This is a synonym for <i>Normal</i></td> </tr> <tr> <td>Reboot</td> <td>The system will be restarted. This action has no power management value other than to enforce a good housekeeping practice of a daily reboot</td> </tr> </tbody> </table> <p>The default setting for this switch is <i>Normal</i>.</p>	Value	Description	Hibernate	This value sets NightWatchman to put the machine into hibernate mode	Standby	This value sets NightWatchman to put the machine into standby mode	Logoff	Performs the log-off action only. No shut down performed. The machine will be left at the log-on prompt. This action has no power management value but can be used to enforce security	Normal	The system will shut down and poweroff	Poweroff	The system will shut down and poweroff. This is a synonym for <i>Normal</i>	Reboot	The system will be restarted. This action has no power management value other than to enforce a good housekeeping practice of a daily reboot
Value	Description														
Hibernate	This value sets NightWatchman to put the machine into hibernate mode														
Standby	This value sets NightWatchman to put the machine into standby mode														
Logoff	Performs the log-off action only. No shut down performed. The machine will be left at the log-on prompt. This action has no power management value but can be used to enforce security														
Normal	The system will shut down and poweroff														
Poweroff	The system will shut down and poweroff. This is a synonym for <i>Normal</i>														
Reboot	The system will be restarted. This action has no power management value other than to enforce a good housekeeping practice of a daily reboot														
STANDBYAC	<p>Integer value that sets the computer to switch to standby after the specified number of minutes of system idle time when the computer is running on mains power.</p> <p>A value of zero turns this power management option off.</p> <p>The maximum supported value for this switch is 1440</p> <p>The default value for this switch is 60 minutes.</p>														
STANDBYDC	<p>Integer value that sets the computer to switch to standby after a specified number of minutes of system idle time when the computer is running on battery power.</p> <p>A value of zero turns this power management option off.</p> <p>The maximum supported value for this switch is 1440</p> <p>The default value for this switch is 5 minutes.</p>														

SUNDAYCLOSEACTION	<p>Sets the action to run upon closing the maintenance window.</p> <p>This may be one of:</p> <table border="1" data-bbox="592 282 1316 546"> <thead> <tr> <th>Action Value</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>Leave the computer in its current state, i.e. do nothing.</td> </tr> <tr> <td>1</td> <td>Sets close action to standby.</td> </tr> <tr> <td>2</td> <td>Sets close action to hibernate</td> </tr> <tr> <td>3</td> <td>Sets close action to power off</td> </tr> </tbody> </table> <p>For example, the following sets the close action for a Sunday maintenance window to hibernate:</p> <pre>SUNDAYCLOSEACTION=2</pre> <p>The default for this switch is 0.</p>	Action Value	Description	0	Leave the computer in its current state, i.e. do nothing.	1	Sets close action to standby.	2	Sets close action to hibernate	3	Sets close action to power off
Action Value	Description										
0	Leave the computer in its current state, i.e. do nothing.										
1	Sets close action to standby.										
2	Sets close action to hibernate										
3	Sets close action to power off										
SUNDAYOPENTIME	<p>Sets the time for the start of a Sunday maintenance window. This must be set to a string value defining the start time in the format <i>hour:minutes</i> for a 24hr day.</p> <p>For example the following sets a Sunday open time of 02:00 am:</p> <pre>SUNDAYOPENTIME=02:00</pre> <p>There is no value for this switch set by default.</p>										
SUNDAYPERIODMINS	<p>Sets the duration, in minutes, for the maintenance window on a Sunday.</p> <p>For example the following sets the Sunday maintenance window to be 1 hour:</p> <pre>SUNDAYPERIODMINS=60</pre> <p>There is no value set for this switch by default.</p>										
SYSTEMTRAY	<p>Controls the display of the system tray applet.</p> <table border="1" data-bbox="592 1308 1316 1447"> <thead> <tr> <th>Value</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>ON</td> <td>Displays system tray applet</td> </tr> <tr> <td>OFF</td> <td>Removes system tray applet.</td> </tr> </tbody> </table> <p>The default value for this switch is ON.</p>	Value	Description	ON	Displays system tray applet	OFF	Removes system tray applet.				
Value	Description										
ON	Displays system tray applet										
OFF	Removes system tray applet.										

THURSDAYCLOSEACTION	<p>Sets the action to run upon closing the maintenance window.</p> <p>This may be one of:</p> <table border="1" data-bbox="592 282 1316 546"> <thead> <tr> <th>Action Value</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>Leave the computer in its current state, i.e. do nothing.</td> </tr> <tr> <td>1</td> <td>Sets close action to standby.</td> </tr> <tr> <td>2</td> <td>Sets close action to hibernate</td> </tr> <tr> <td>3</td> <td>Sets close action to power off</td> </tr> </tbody> </table> <p>For example, the following sets the close action for a Thursday maintenance window to standby:</p> <pre>THURSDAYCLOSEACTION=1</pre> <p>The default for this switch is 0.</p>	Action Value	Description	0	Leave the computer in its current state, i.e. do nothing.	1	Sets close action to standby.	2	Sets close action to hibernate	3	Sets close action to power off
Action Value	Description										
0	Leave the computer in its current state, i.e. do nothing.										
1	Sets close action to standby.										
2	Sets close action to hibernate										
3	Sets close action to power off										
THURSDAYOPENTIME	<p>Sets the time for the start of a Thursday maintenance window. This must be set to a string value defining the start time in the format <i>hour:minutes</i> for a 24hr day.</p> <p>For example the following sets a Thursday open time of 02:00 am:</p> <pre>THURSDAYOPENTIME=02:00</pre> <p>There is no value for this switch set by default.</p>										
THURSDAYPERIODMINS	<p>Sets the duration, in minutes, for the maintenance window on a Thursday.</p> <p>For example the following sets the Thursday maintenance window to be 1 hour:</p> <pre>THURSDAYPERIODMINS=60</pre> <p>There is no value set for this switch by default.</p>										
TUESDAYCLOSEACTION	<p>Sets the action to run upon closing the maintenance window.</p> <p>This may be one of:</p> <table border="1" data-bbox="592 1350 1316 1615"> <thead> <tr> <th>Action Value</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>Leave the computer in its current state, i.e. do nothing.</td> </tr> <tr> <td>1</td> <td>Sets close action to standby.</td> </tr> <tr> <td>2</td> <td>Sets close action to hibernate</td> </tr> <tr> <td>3</td> <td>Sets close action to power off</td> </tr> </tbody> </table> <p>For example, the following sets the close action for a Tuesday maintenance window to leave the computer in its awakened state:</p> <pre>TUESDAYCLOSEACTION=0</pre> <p>The default for this switch is 0.</p>	Action Value	Description	0	Leave the computer in its current state, i.e. do nothing.	1	Sets close action to standby.	2	Sets close action to hibernate	3	Sets close action to power off
Action Value	Description										
0	Leave the computer in its current state, i.e. do nothing.										
1	Sets close action to standby.										
2	Sets close action to hibernate										
3	Sets close action to power off										
TUESDAYOPENTIME	<p>Sets the time for the start of a Tuesday maintenance window. This must be set to a string value defining the start time in the format <i>hour:minutes</i> for a 24hr day.</p> <p>For example the following sets a Tuesday open time of 02:00 am:</p>										

	<p>TUESDAYOPENTIME=02:00</p> <p>There is no value for this switch set by default.</p>										
TUESDAYPERIODMINS	<p>Sets the duration, in minutes, for the maintenance window on a Tuesday.</p> <p>For example the following sets the Tuesday maintenance window to be 1 hour:</p> <p>TUESDAYPERIODMINS=60</p> <p>There is no value set for this switch by default.</p>										
TURNONMONITOR	<p>Specifies whether the monitor should be turned on during maintenance windows and alarm clocks. Can be set to <i>ON</i> to turn monitors on during a maintenance window, or to <i>OFF</i> which leaves the monitor in its original state.</p> <p>The default value for this switch is <i>ON</i>.</p>										
USERACTIVITYMAXIDLEMIN	<p>Set the length in minutes for the window that governs the recent user activity test. If the user has been active during the specified period prior to a NightWatchman scheduled shutdown the shutdown will be postponed.</p> <p>This switch must be set to a value between 0 and 1440 (24 hours) inclusive. A value of 0 disables the feature.</p> <p>The postponement time is governed by the NightWatchman <i>RETRYINTERVAL</i> switch setting.</p> <p>Note: this switch does not affect shutdowns started from the system tray or those where the NightWatchman <i>logoffaction=Force</i>.</p> <p>The default value for this switch is 0.</p>										
WEDNESDAYCLOSEACTION	<p>Sets the action to run upon closing the maintenance window.</p> <p>This may be one of:</p> <table border="1"> <thead> <tr> <th>Action Value</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>Leave the computer in its current state, i.e. do nothing.</td> </tr> <tr> <td>1</td> <td>Sets close action to standby.</td> </tr> <tr> <td>2</td> <td>Sets close action to hibernate</td> </tr> <tr> <td>3</td> <td>Sets close action to power off</td> </tr> </tbody> </table> <p>For example, the following sets the close action for a Wednesday maintenance window to power off:</p> <p>WEDNESDAYCLOSEACTION=3</p> <p>The default for this switch is 0.</p>	Action Value	Description	0	Leave the computer in its current state, i.e. do nothing.	1	Sets close action to standby.	2	Sets close action to hibernate	3	Sets close action to power off
Action Value	Description										
0	Leave the computer in its current state, i.e. do nothing.										
1	Sets close action to standby.										
2	Sets close action to hibernate										
3	Sets close action to power off										
WEDNESDAYOPENTIME	<p>Sets the time for the start of a Wednesday maintenance window. This must be set to a string value defining the start time in the format <i>hour:minutes</i> for a 24hr day.</p> <p>For example the following sets a Wednesday open time of 02:00 am:</p> <p>WEDNESDAYOPENTIME=02:00</p> <p>There is no value for this switch set by default.</p>										

WEDNESDAYPERIODMINS	<p>Sets the duration, in minutes, for the maintenance window on a Wednesday.</p> <p>For example the following sets the Wednesday maintenance window to be 1 hour:</p> <pre>WEDNESDAYPERIODMINS=60</pre> <p>There is no value set for this switch by default.</p>
---------------------	--