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# Administrator's Guide

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Version 5.2

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## Introduction:

IntelliPerform dynamically manages desktop infrastructure resources. It consists of a centralized configuration platform coupled with an advanced rules engine, that enables IT to configure these rules to manage and optimize desktop infrastructure resources. Each rule can be applied either on a Per Process, Per Session or System Wide basis, and can be targeted at users, groups, or the name of the process.

Installing IntelliPerform into the Windows desktop OS (physical, virtual, or both) delivers granular levels of configuration and management allowing IT to configure rules against specific users, and groups of users within Active Directory, or even against specific processes that are running on the desktop machines. This level of configuration allows you to target specific users, groups and processes that you know are resource intensive, while leaving the rest to run normally. The result being a system that is running in a fully optimized state using the resources available more intelligently.

IntelliPerform will optimize the CPU and Memory resources being used by the processes on the system.

### **CPU Resource Optimization features**

In terms of the CPU configuration there are several different configuration options or sub-features:

**CPU Core Selection (Affinity)**– CPU Core selection allows you to assign processes to certain CPU cores in the system. This means the process will only run on the assigned cores. The benefit is that you can allocate a resource intensive process to have its own dedicated CPU or CPU core. This leaves the rest of the CPU resources free for all the other processes allowing them to run without hitting performance issues.

**Max CPU Usage** – The maximize CPU usage feature allows you to assign a maximum amount of CPU that a process or application can consume at any given time. To do this it sets a maximum threshold that the process or application cannot exceed, and therefore prevents that process or application from taking all the available CPU resources and preventing others from running in a usable way for the end users.

**CPU Reduction** - Applying a CPU reduction gradually reduces the amount of CPU a process can consume at any one time. If a process is consuming more CPU than the configured threshold, IntelliPerform will reduce the amount by the configured percentage each second until the threshold is no longer exceeded.

**CPU Priority** – CPU priority allows you to set the priority level of a process. By doing this the operating system can understand which processes it needs to prioritize when the CPU starts to become constrained. Assigning a higher CPU priority to business-critical processes will ensure they always have priority over other processes running in the system.

**Set I/O Priority** – Set I/O Priority allows you to set the priority level of input and output for the specified process when the configured threshold is exceeded.

**Execute a Process** – The Execute Process functionality allows you to specify a process to launch when the configured threshold is exceeded.

**Stop/ Restart the Process** – The Stop/ Restart the Process functionality allows you to stop/ restart process when the configured threshold is exceeded. Alternatively, you can also add a message to display to the users.

## Memory Resource Optimization features

In terms of the memory optimization configuration there are several different configuration options or sub-features:

**Flush Working Set** – Flushing a process's working set will force the operating system to remove as much physical memory as possible from the process, freeing it up to be used by other processes in the system. This is particularly useful for applications that allocate a lot more memory than they will ever actually use. Flushing the working set ensures only the memory being used is located in physical memory regardless of how much memory was actually allocated.

**Maximum Working Set Size** – IntelliPerform allows you to configure the maximum amount of memory that a process can have in physical RAM at any one time. It prevents a process from taking too much memory which would starve other processes causing poor desktop performance or system hangs.

**Working Set Reduction** – Applying a working set reduction gradually reduces the amount of memory a process can have in physical memory at any one time. If a process has more memory allocated than the configured threshold, IntelliPerform will reduce the amount by the configured percentage each second until the threshold is no longer exceeded.

**Memory Priority** – Process memory priorities help the operating system determine which physical memory pages to move to the paging file when memory resources are running low. Memory allocated by processes with a lower memory priority will be moved first. Assigning higher memory priorities to your business-critical applications ensures the memory they have allocated remains in physical memory longer.

## IntelliPerform Requirements:

IntelliPerform has a specific set of requirements detailed below:

- Windows 7 / Windows Server 2008 R2 and above
- At least 2 CPU cores (to utilise affinity actions)
- .NET Framework 4.5+

## Licensing

### Trial

When IntelliPerform is first installed, it will install a 30-day license trial for you to test the entire product. A trial license can also be used with the ThinScale Management Platform.

When the trial expires, you must request an enterprise or community license and publish this license to the client to continue to work undisturbed.

You can request licensing information from [sales@thinscaletechnology.com](mailto:sales@thinscaletechnology.com)

### Enterprise Edition SaaS

Enterprise SaaS license entitles you to all IntelliPerform features. Details of these features can be found [here](#)

You can request licensing information from [sales@thinscale.com](mailto:sales@thinscale.com)

## Profile Sources

IntelliPerform configuration settings are stored in a profile; this profile file is stored locally and can be modified with the IntelliPerform Profile Editor.

The profile (TLProfile.json) is located in the installation directory. This file is directly editable via the IntelliPerform Profile Editor Utility. *(Please see the Profile Editor Section for more details).*

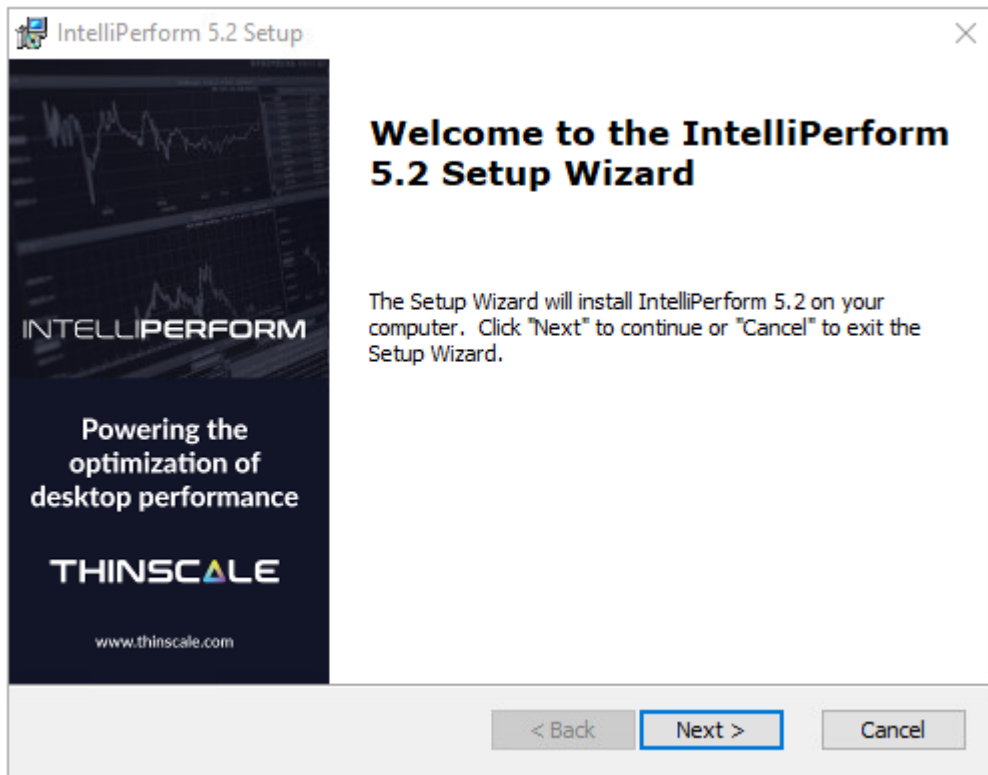
Alternatively, you can have the configuration centrally managed by connecting IntelliPerform to the ThinScale Management Platform.

**Note:** If configured to use the ThinScale Management Platform IntelliPerform will keep a local copy of the profile (encrypted) it receives just in case it loses access to the Management Server. This allows IntelliPerform to work offline for extended periods without interruption.

## Installation

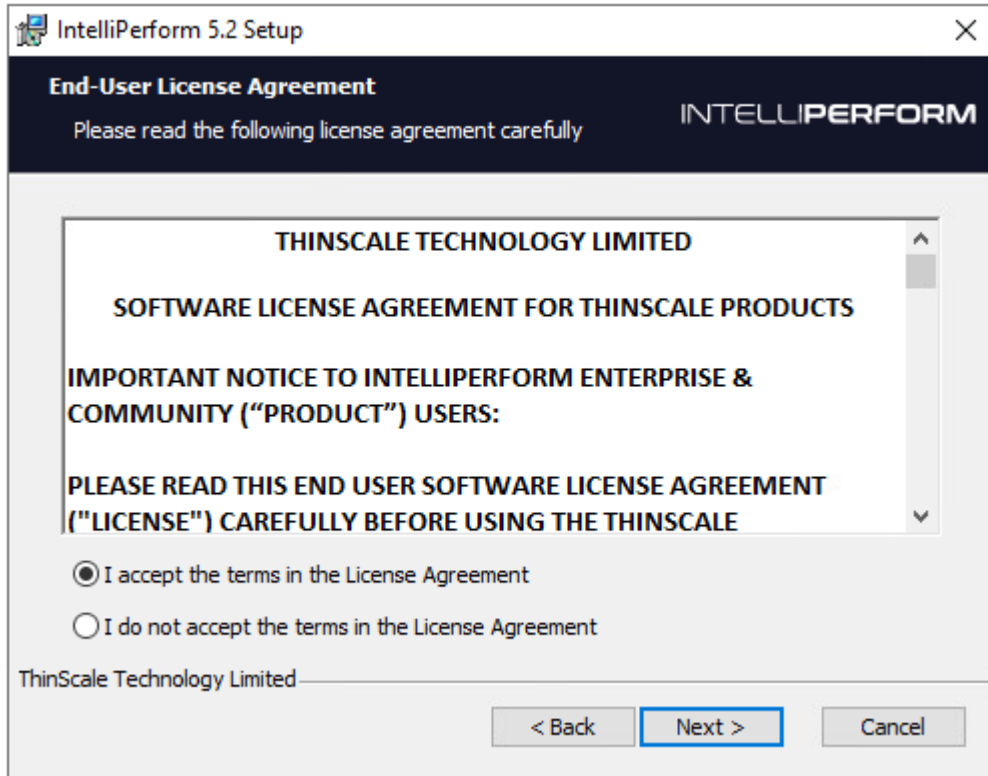
### Local profile installation

Without the ThinScale Management Platform no reporting capabilities are available but all the rule-based settings, system wide and session-based options are still available to be used. IntelliPerform profiles will need to be configured individually, however it will be possible to deploy the TLProfile.json file with any deployment tool, to replicate the configuration to all other servers in the environment.

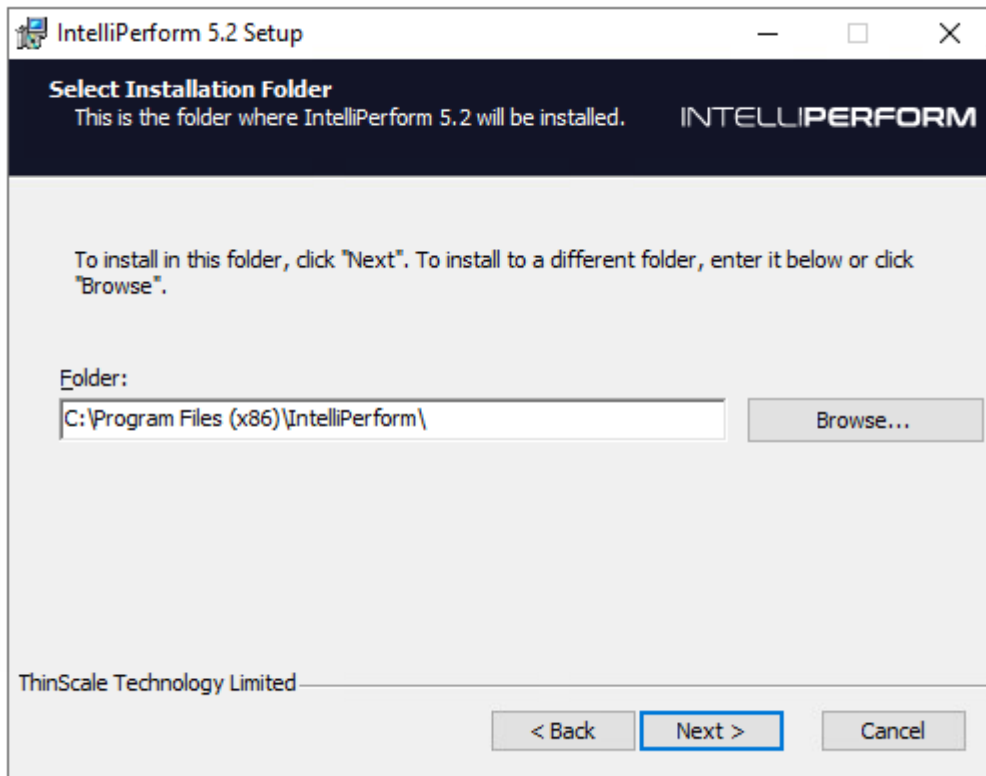


Click Next.

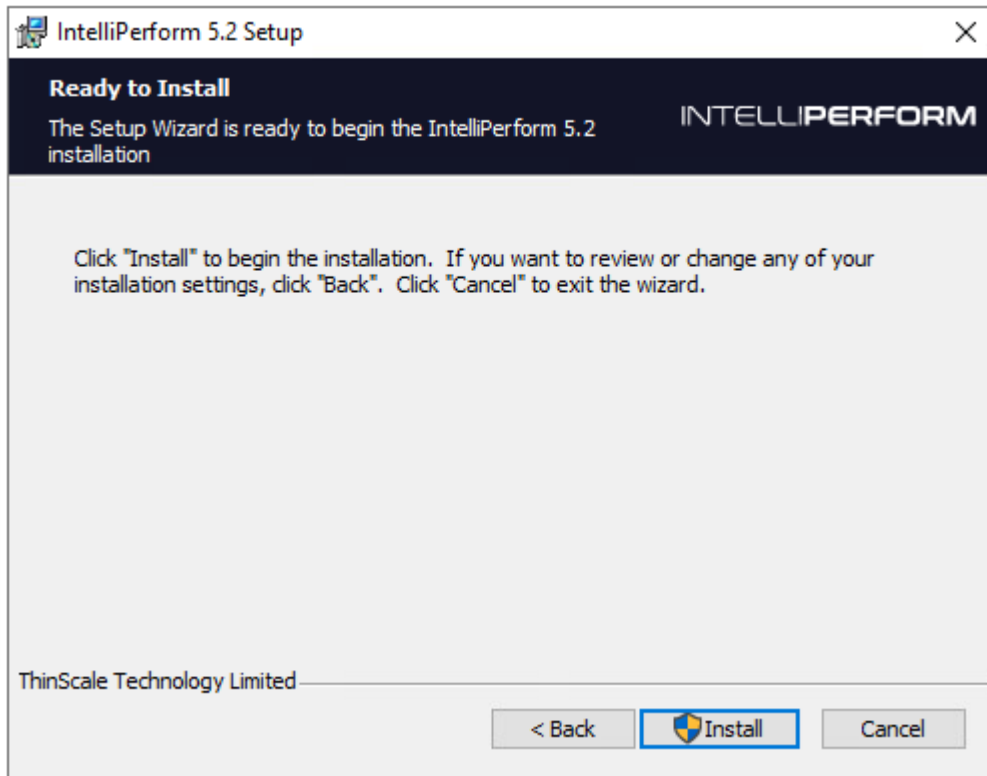




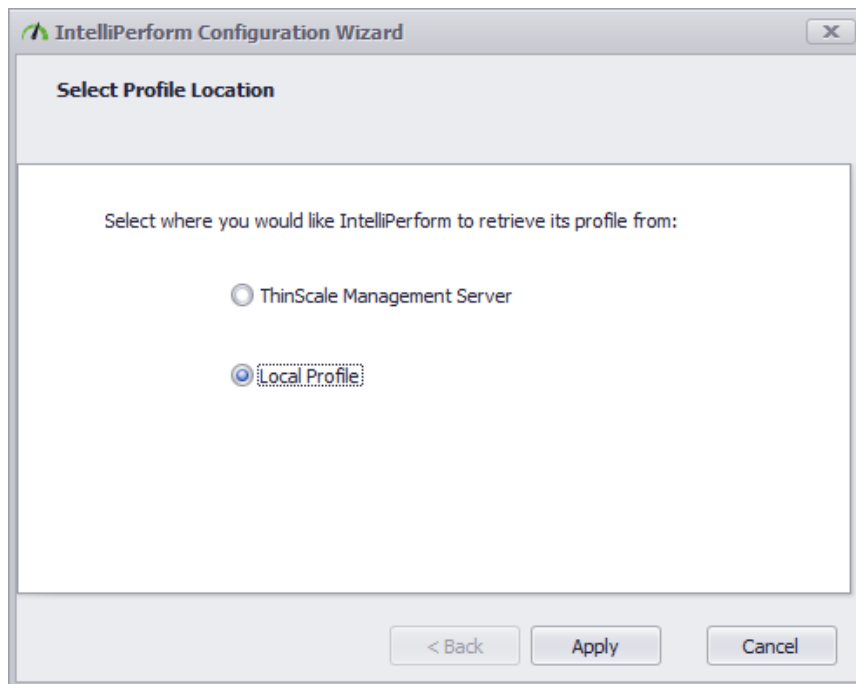
Accept the End-User License Agreement and click Next.



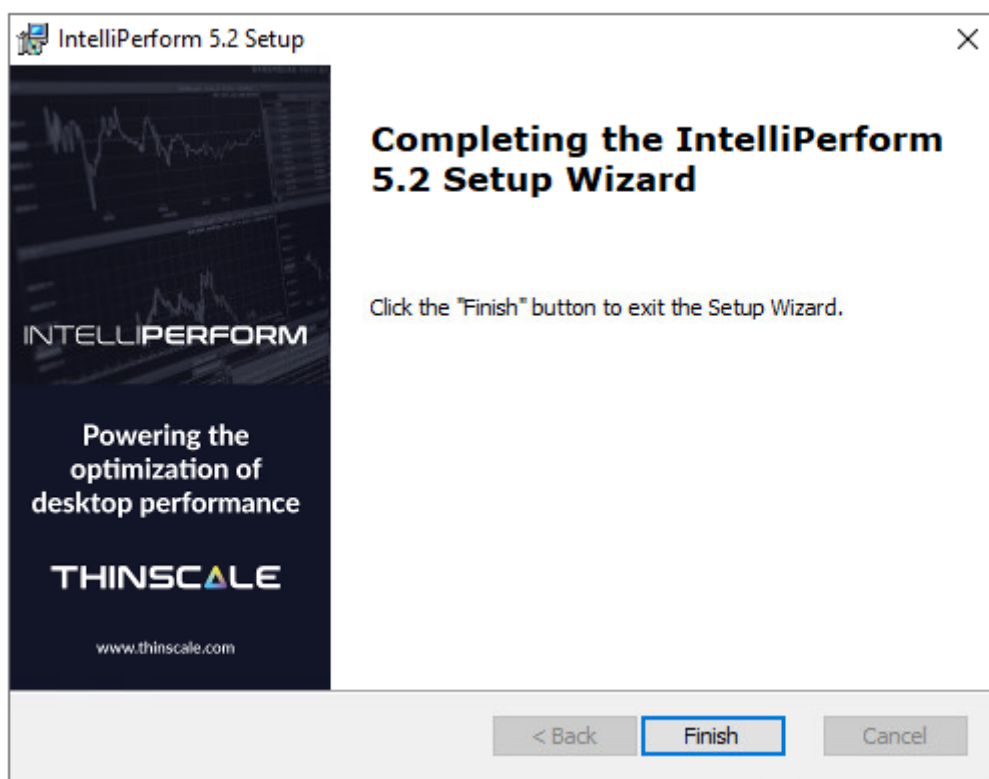
Select the destination installation folder and click 'Next.'



Click Install and you are almost done.



When installing a standalone IntelliPerform select Local Profile, click Apply and you are finished.



A reboot might be required after Finish.

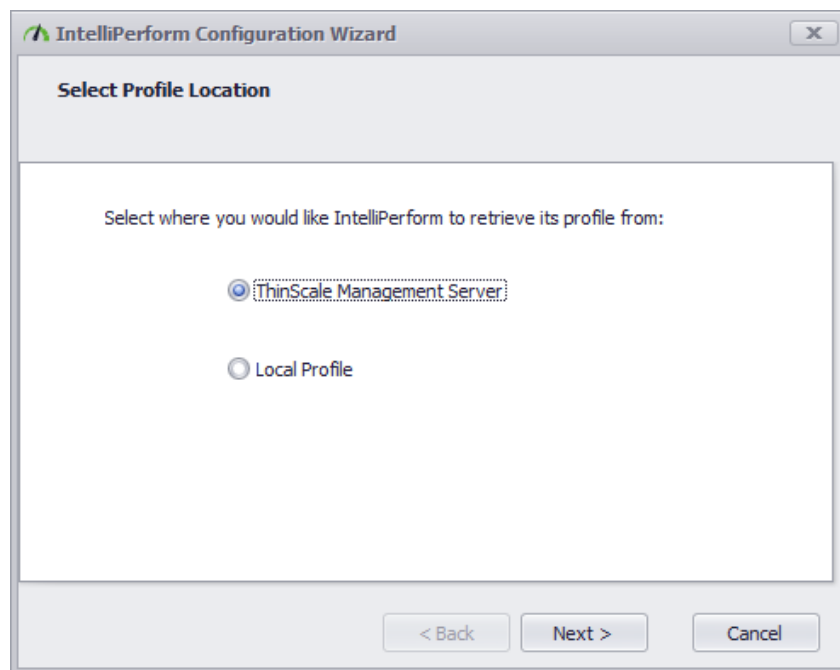
## Management Platform installation

IntelliPerform together with the ThinScale Management Platform lets you create a centralized environment for controlling and monitoring every single device connected to it. Centrally deploy configurations to all your devices and view monitoring and reporting data for your entire estate from a single management console.

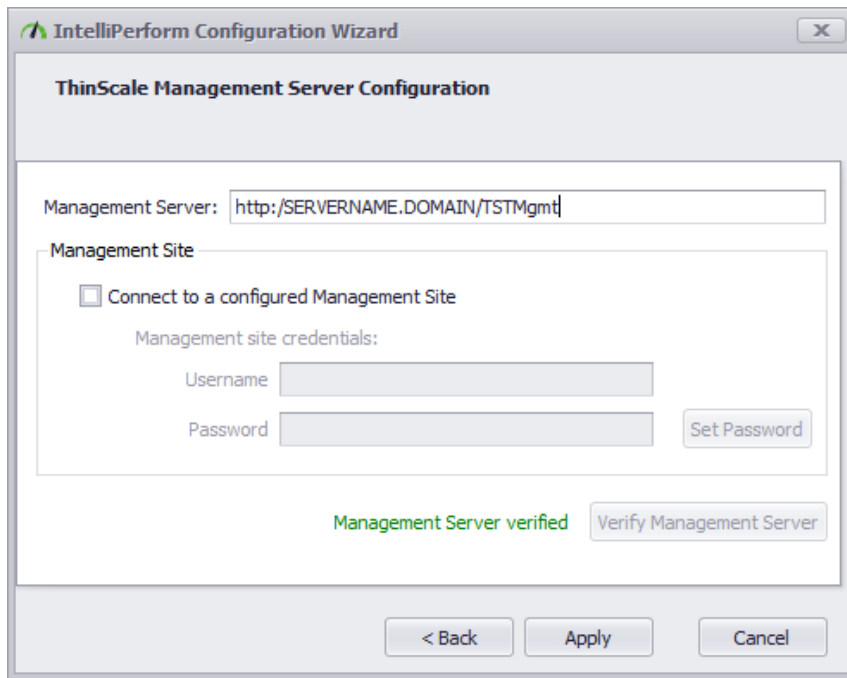
Simply select the reporting tab within the Management Console to view CPU Usage, Memory Usage, Connected Users and details on what actions IntelliPerform has been applying to your systems when your configured thresholds have been met.

*(For more information on Management Platforms reporting capabilities, please see the ThinScale Management Console Administrators Guide)*

The installation steps to connect IntelliPerform to the Management Server are the same as standalone installation, the only difference is the use of ThinScale Management Server option.



Select the ThinScale Management Server option and click Next.



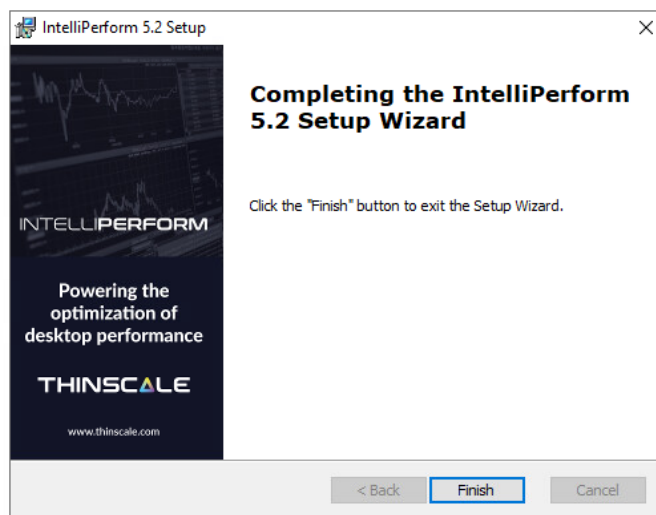
Enter the Management Server's URI

To connect to the 'Default Site' within the Management Console, leave 'Connect to a configured Management Site' unselected. If want to connect to an alternative site you have created, select 'Connect to a configured Management Site' and enter the credentials of the site.

*(Note: for more information on Management Server Sites, please refer to the ThinScale Management Console Administrators guide)*

Click 'Verify Management Server'.

Click 'Apply'.



Click 'Finish'.

## Silent installation:

IntelliPerform 's installation MSI supports silent installation for both a local profile and connecting to the Management Platform

## Silent install options

Command Line Option	Description
<b>CONNECTIONTYPE</b>	Configures the IntelliPerform profile source 0 = ThinScale Management Server 2 = Standalone
<b>MGMTURI</b>	The address of a ThinScale Management Server e.g., <a href="https://tstmgtserver.domain.local/TSTMgmt">https://tstmgtserver.domain.local/TSTMgmt</a>
<b>MGMTDEFAULTSITE</b>	Configures IntelliPerform to connect to the 'Default Site' in the Management Platform 1 = Use Default Site
<b>MGMTUSERNAME</b>	The username associated with the Management Site you want this IntelliPerform device to connect via. <i>(For more information on Management Sites, please see the ThinScale Management Console Administrators Guide)</i>
<b>MGMTPASSWORD</b>	The password associated with the Management Site you want this IntelliPerform device to connect via. <i>(For more information on Management Sites, please see the ThinScale Management Console Administrators Guide)</i>

## Examples

1. Install IntelliPerform with no interaction with a centrally delivered profile from the Management Server using your own Access Key and enabling "Legacy Auth":
  - Please note a "Access Key" must have been created beforehand within the ThinScale Management Console

The screenshot shows a configuration window with the following elements:

- Allow unknown devices to authenticate
- Default device folder:
  - IP**
  - Move device to the default folder during installation
  - Move device to the default folder during authentication
- Enable legacy auth
- Username:
- Password:

```
msiexec /I IntelliPerform.msi CONNECTIONTYPE=0 MGMTURI=https://tstmgmt.domain.local  
MGMTUSERNAME=accessKeyLegacyUsername MGMTPASSWORD=accessKeyLegacyPassword  
/QB /L*V "%USERPROFILE%\IP.LOG"
```

2. Auto install ThinKiosk with no interaction, and use a local profile:

```
msiexec /I IntelliPerform.msi CONNECTIONTYPE=2 /QB /L*V "%USERPROFILE%\IP.LOG"
```

## Uninstalling IntelliPerform:

**Note:** The Uninstall must be performed by a user with administrator privileges on the local device.

IntelliPerform is an MSI based installation and will appear in Program and Features within Windows Control Panel.

To uninstall:

- Open Control Panel
- Select Programs -> Program and Features
- Right click IntelliPerform and select 'Uninstall.'
- Follow the uninstall instructions.

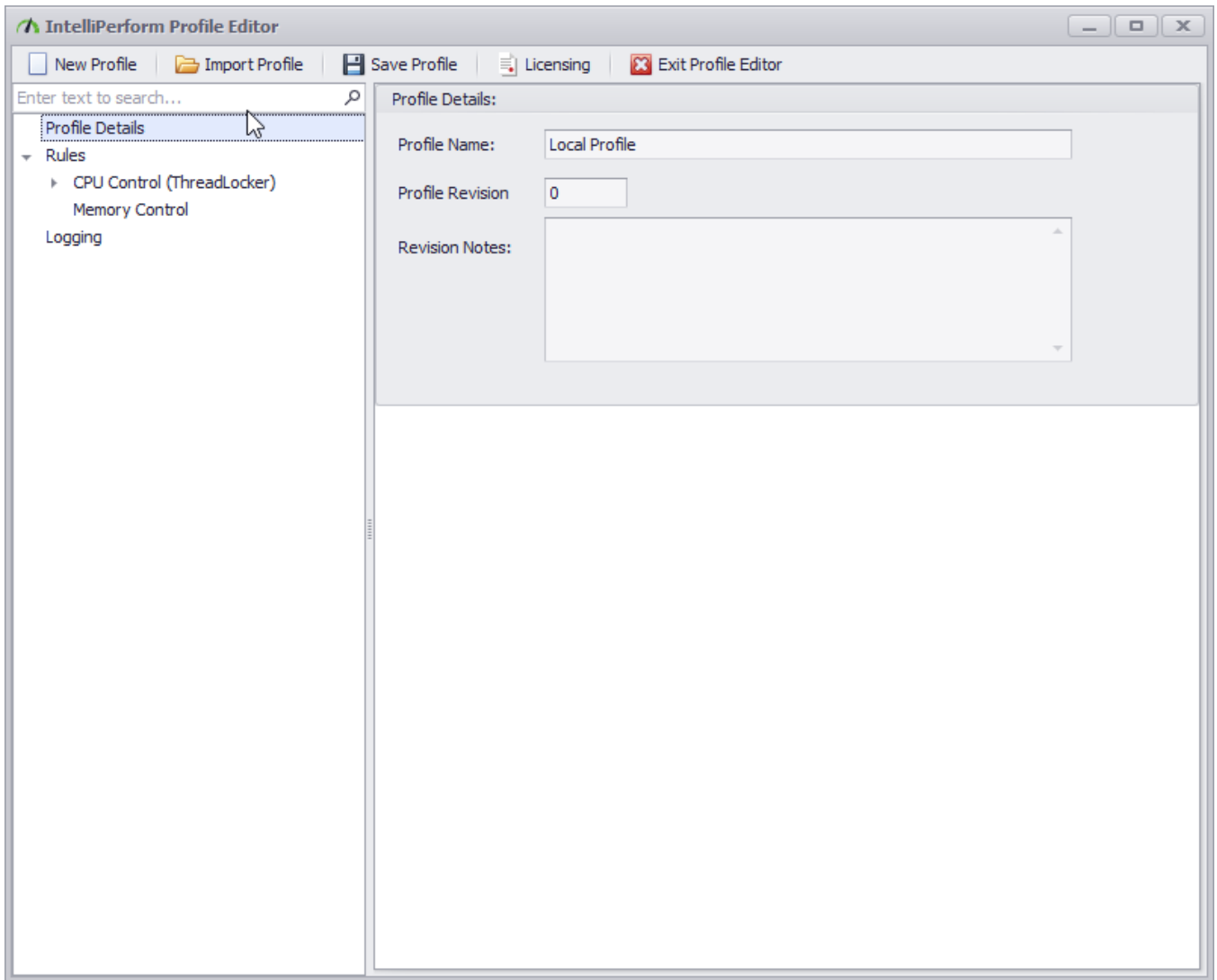
A reboot will be required once the uninstall has been completed.



## IntelliPerform Profile Editor:

The profile editor can be accessed in 2 separate ways depending on the profile delivery method you have enabled:

- **ThinScale Management Server** - From the ThinScale Management Console, right click your profile. and select 'Edit Profile'.
- **Local Profile** - From the IntelliPerform device select the 'IntelliPerform Profile Editor' from the Start Menu.

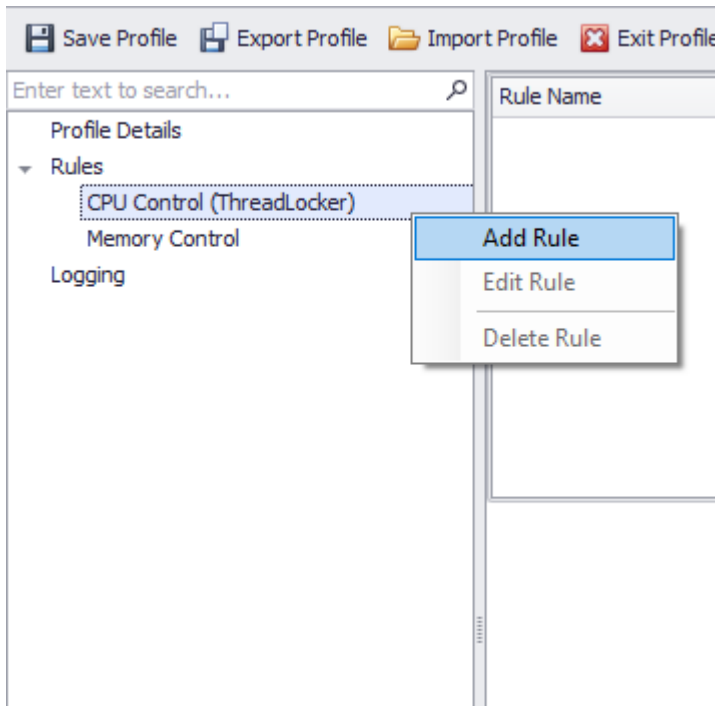


## Rules

IntelliPerform configuration is entirely rule based. You can create single or multiple rules depending on your requirements.

You may have a single rule that covers your requirements, or you may need a couple of rules to apply different thresholds to different groups of users for example.

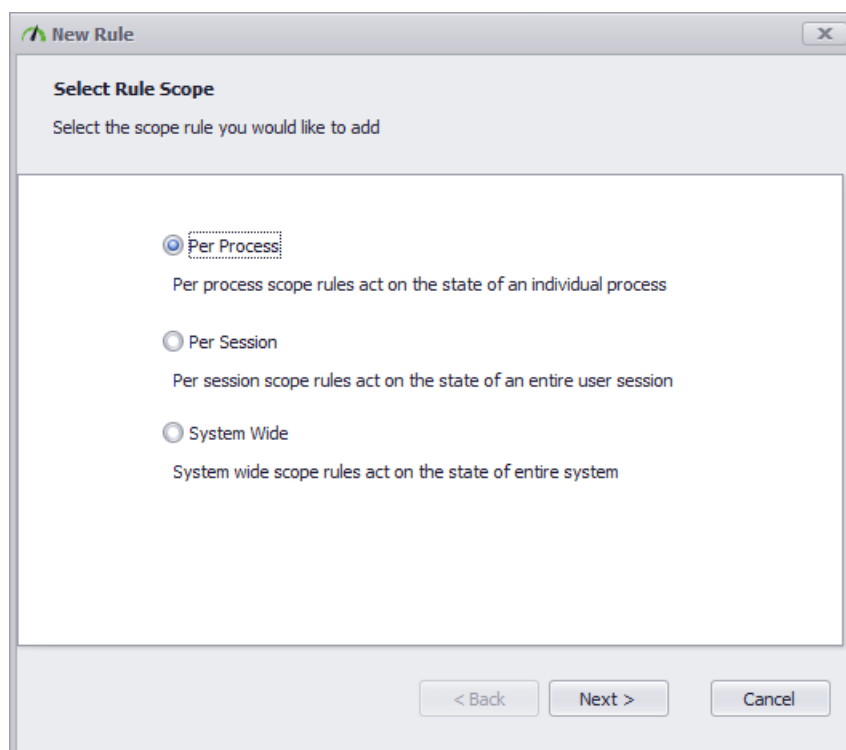
To create a new rule, right click on the CPU Control or Memory Control nodes depending on the type of rule you want.



This will start the rule creation wizard.

## Rule Scope:

When creating a rule, you need to select the rule scope, there are three different scenarios:



## Per Process

With the per process rules scope, you can target an individual process and apply the configured actions to that process when it exceeds the thresholds that have been configured.

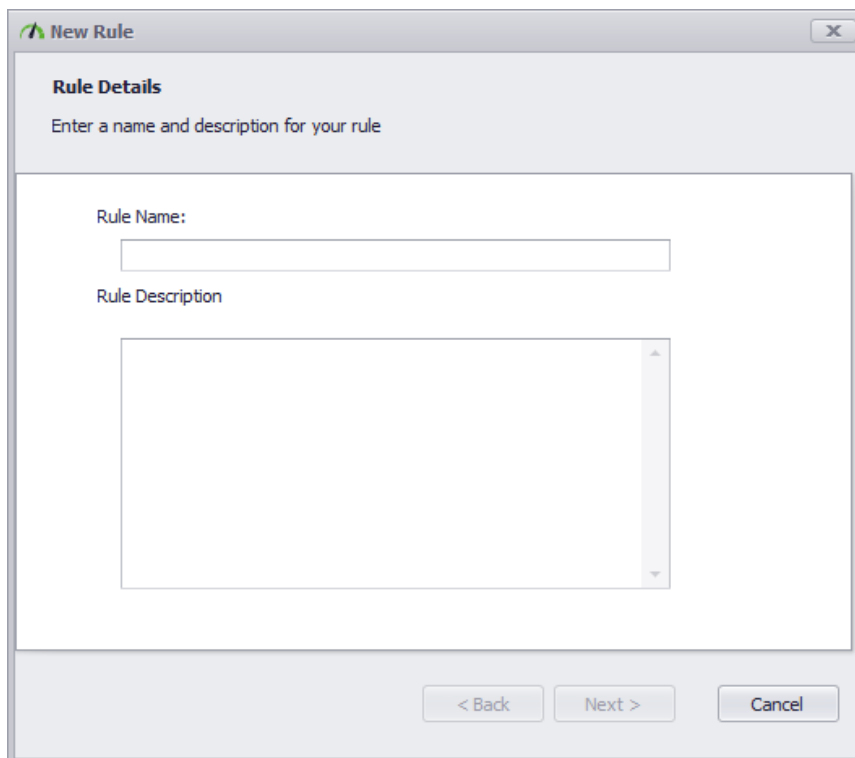
## Per Session

Monitor the user session applying the configured actions to all processes running in that session when they collectively exceed the configured thresholds or when the session state meets the configured criteria

## System Wide

System wide rules monitor the entire system and will apply the configured actions when thresholds have been reached to the highest consuming process at the time. Then the system falls below the thresholds and the actions applied to the processes will be removed.

## Rules Details:



The image shows a 'New Rule' dialog box with a 'Rule Details' section. The section contains a 'Rule Name' text field and a 'Rule Description' text area. At the bottom of the dialog, there are three buttons: '< Back', 'Next >', and 'Cancel'.

### Rule Name:

Enter a name for your rule.

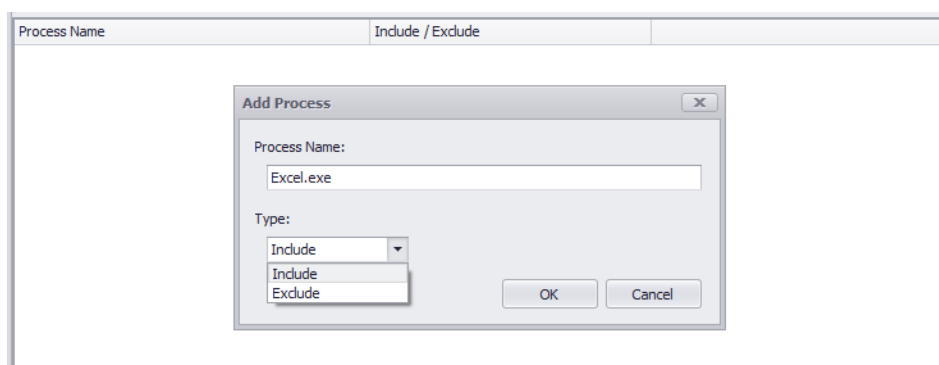
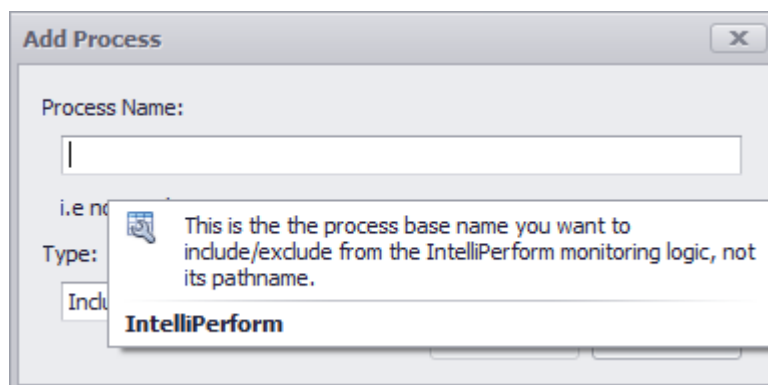
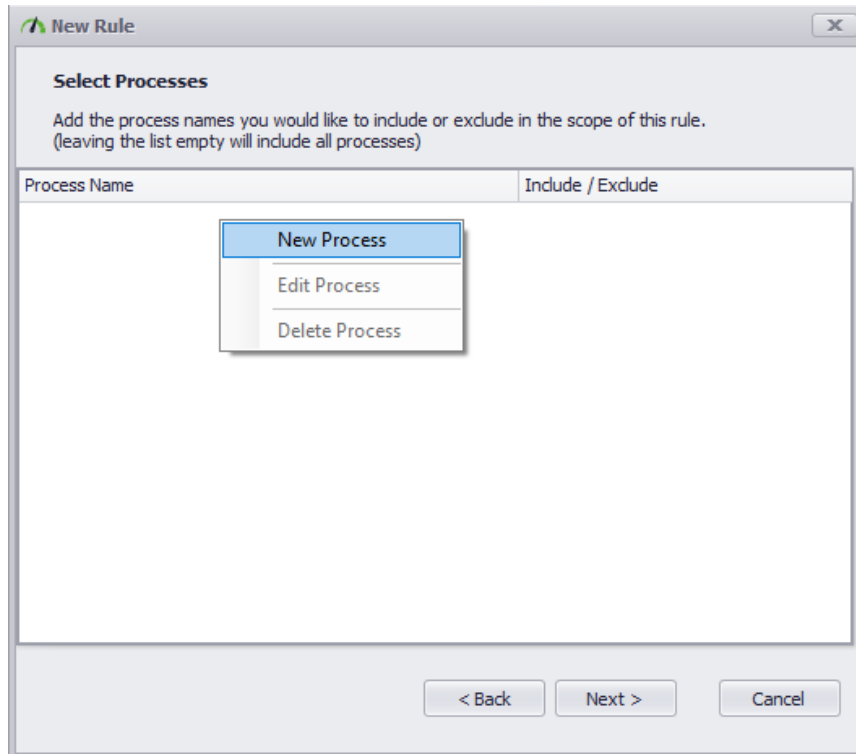
### Rule Description:

A brief description of the rule

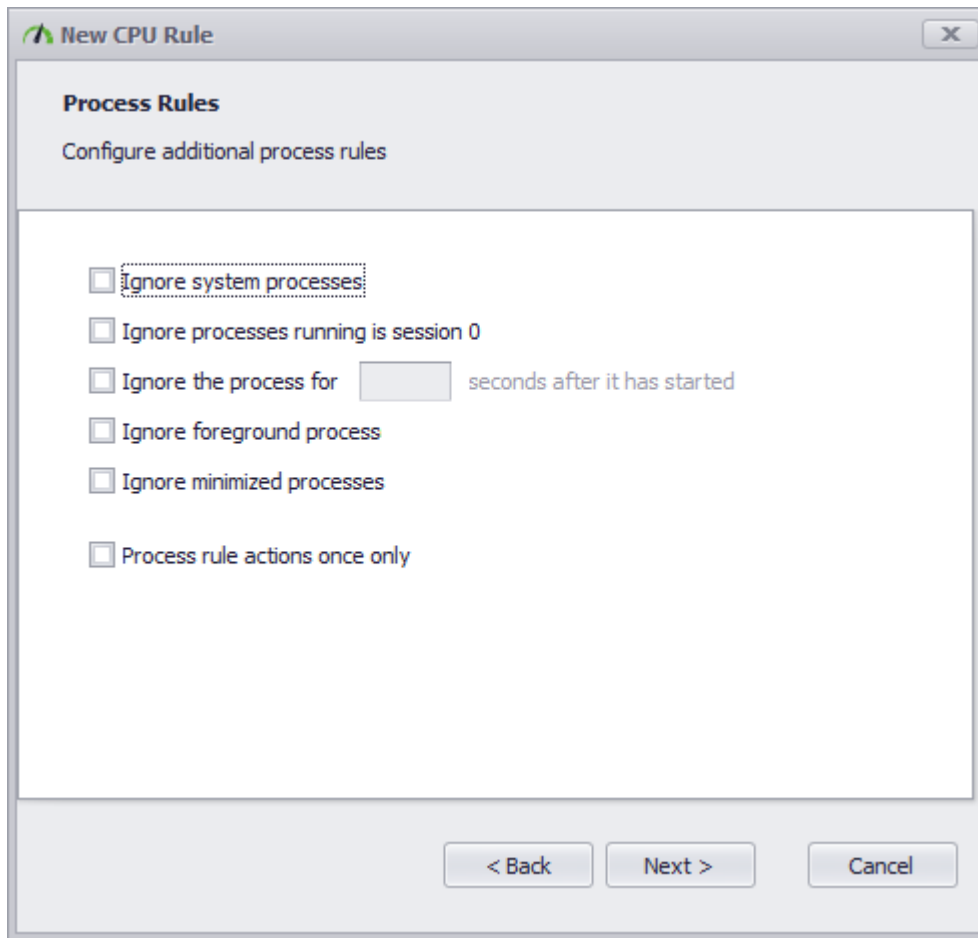
## Select Processes:

This section is used to include or exclude a process from the rule. If you leave the list empty, all processes will be included.

To add a process to the list simply right click and click New Process.



## Process Rules:



### Ignore system processes:

Any processes running under the SYSTEM account will be excluded from the rule. (*Recommended*).

### Ignore processes running in Session 0:

Any processes running in session id zero (typically services or processes belonging to the system account) will be excluded from the rule. (*Recommended*).

### Ignore the process for:

When this option is enabled IntelliPerform will ignore the process for the specified number of seconds after it has started.

### Ignore foreground process:

When this option is enabled IntelliPerform will ignore foreground processes.

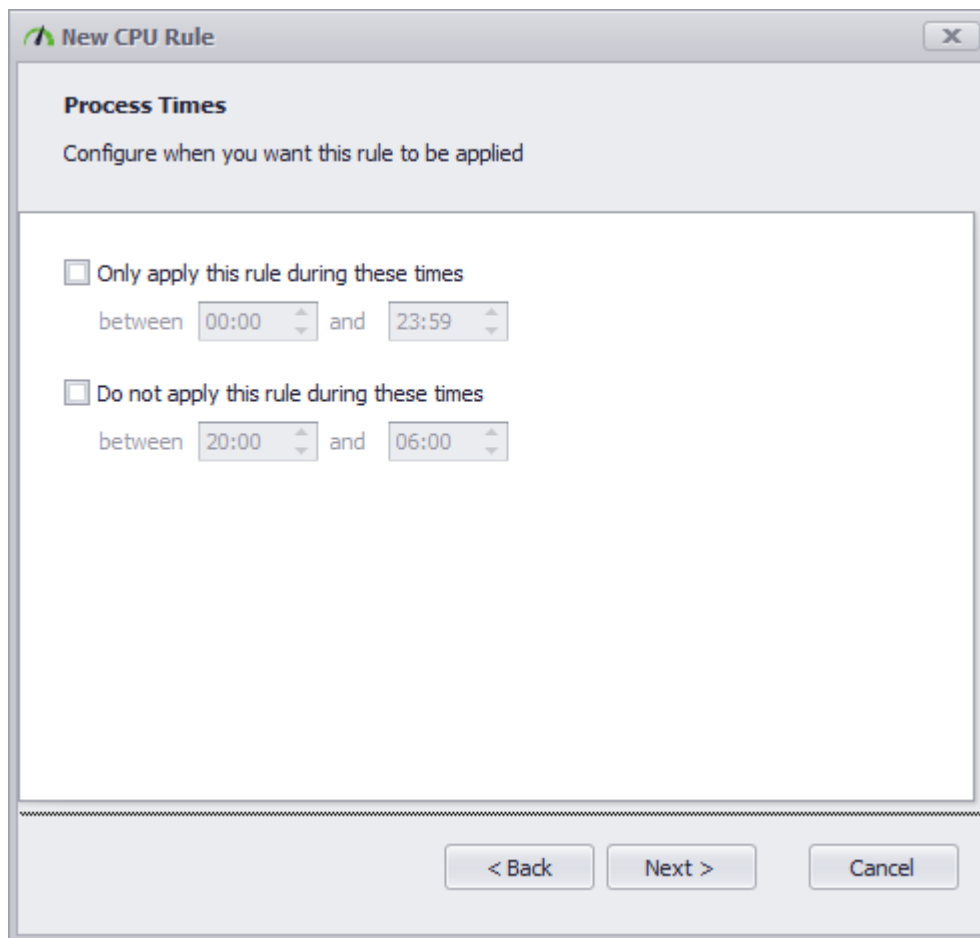
### Ignore minimized process:

When this option is enabled IntelliPerform will ignore minimized processes.

### Process rule actions once only

When this option is enabled IntelliPerform will perform the “Flush Working Set” action only once during the entire process life.

## Process Times:



The screenshot shows a dialog box titled "New CPU Rule" with a close button (X) in the top right corner. The main heading is "Process Times" with the instruction "Configure when you want this rule to be applied". There are two options, each with a checkbox and a time range:

- Only apply this rule during these times  
between 00:00 and 23:59
- Do not apply this rule during these times  
between 20:00 and 06:00

At the bottom of the dialog box are three buttons: "< Back", "Next >", and "Cancel".

### Only apply this rule during these times:

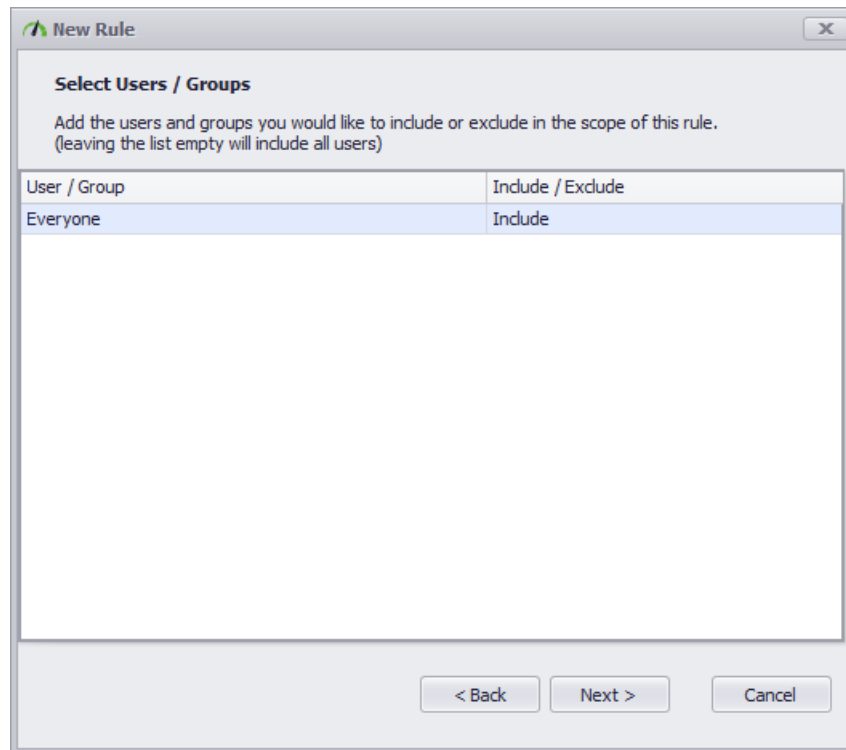
When this option is enabled, IntelliPerform will only apply the actions between the specified hours.

### Do not apply this rule during these times:

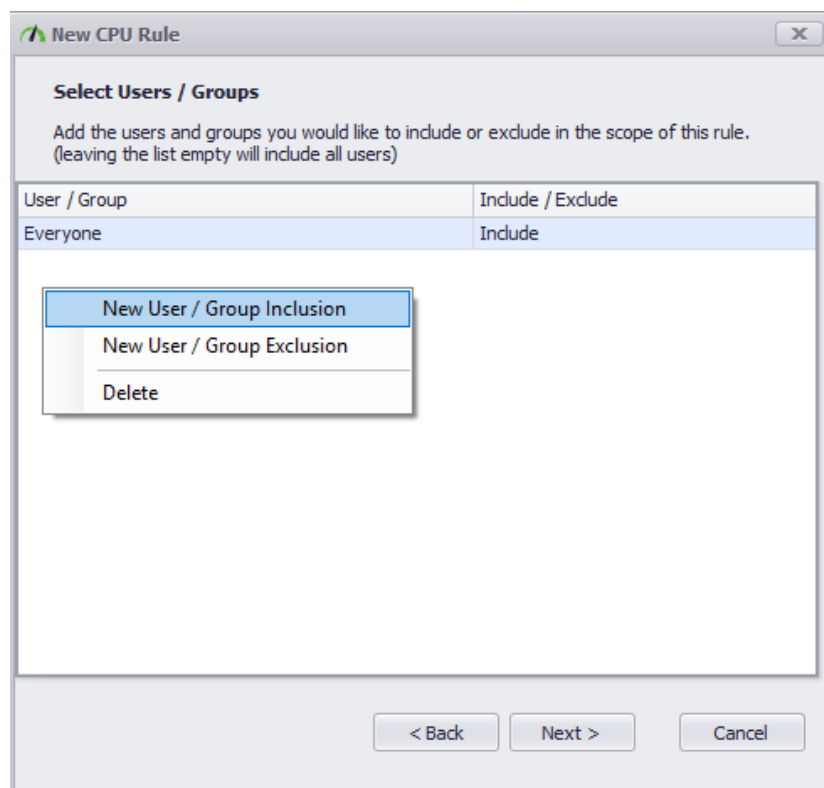
When this option is enabled, IntelliPerform will not apply the actions between the specified hours.

## Select Users / Groups

This section is used to include or exclude users or groups from the rule. If you leave the list empty, all users will be included.



To add a user or group to the list simply right click and select click New User / Group Inclusion or Exclusion.



## Rule Conditions

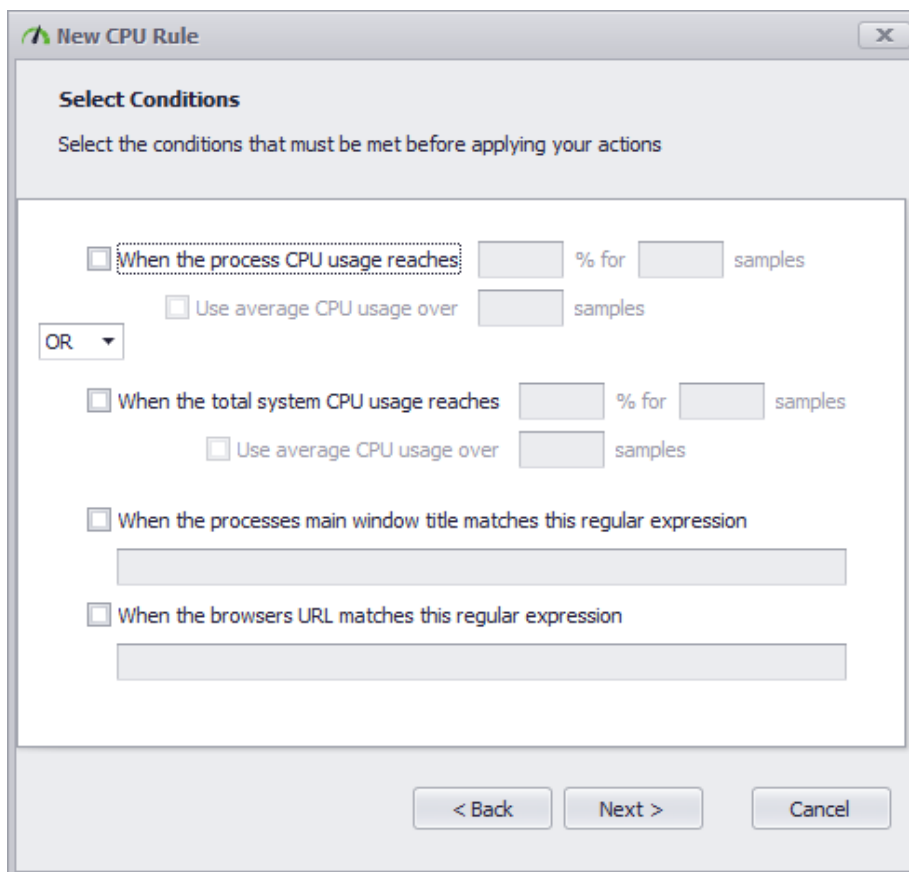
Conditions are tests that are performed and must be met before any rule actions are applied to processes in the system.

If you don't enable any conditions then the rule actions will always be applied, this can be useful if you always want to apply an affinity setting to a process regardless of how much CPU it is using.

Conditions are ignored when using a community edition license and therefore actions are always applied to processes.

Conditions that can be applied vary depending on the type of rule you are creating.

### Per Process CPU Conditions



There are different conditions that can be applied:

- When the process CPU usage reaches the configured percentage for the number of samples, you specified.
- When the total system CPU usage reaches the configured percentage for the number of samples, you specified.



Additionally, you can use an average CPU calculation, where system CPU usage and process CPU usage are calculated using averages of their recent consumption.

*Note: the **AND/OR** are only applied on the first two conditions, while the regex (regular) conditions are always ANDED.*

When the process main window title matches this regular expression:

When this option is enabled IntelliPerform will perform the specified action only when the title matches the expression.

i.e.: `(.*)Notepad(.*)` => the action will only apply when using Notepad.

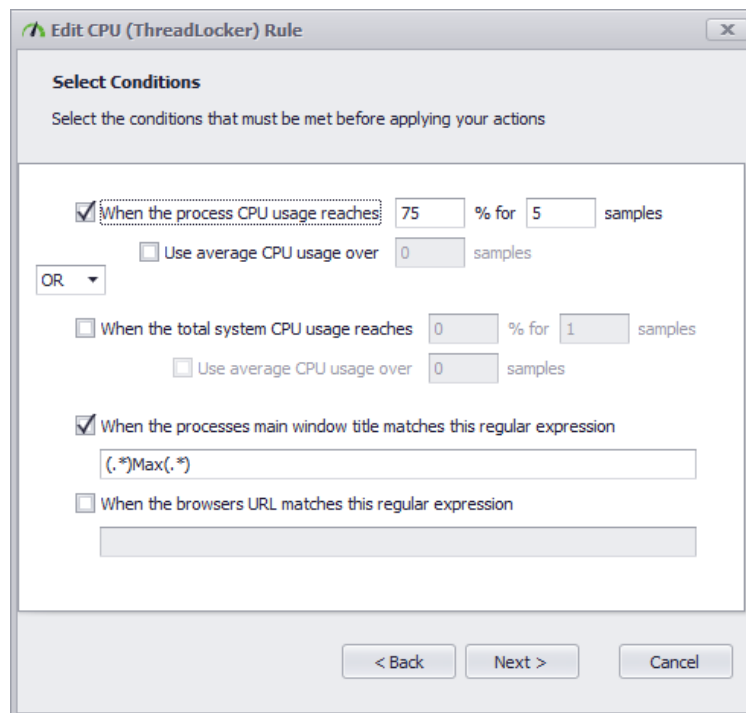
When the browser URL matches this regular expression:

When this option is enabled IntelliPerform will perform the specified action only when the browser URL matches the expression.

i.e.: `(.*)Facebook(.*)` => the action will only apply when browsing Facebook.

**Note: regular expressions are case sensitive so make sure to type the exact title name!!!**

Example:



In this case, IntelliPerform will act only when a process title starting with Max **AND** a process CPU is above 75% for 5 seconds.

## Per Session CPU Conditions

The screenshot shows a dialog box titled "New CPU Rule" with a close button (X) in the top right corner. The main heading is "Select Conditions" with the instruction "Select the conditions that must be met before applying your actions". There are four conditions listed, each with a checkbox and input fields:

- When the session CPU usage reaches [ ] % for [ ] samples
  - Use average CPU usage over [ ] samples
- When the total system CPU usage reaches [ ] % for [ ] samples
  - Use average CPU usage over [ ] samples
- When the session has been disconnected for [ ] seconds
- When the session has been idle for [ ] seconds

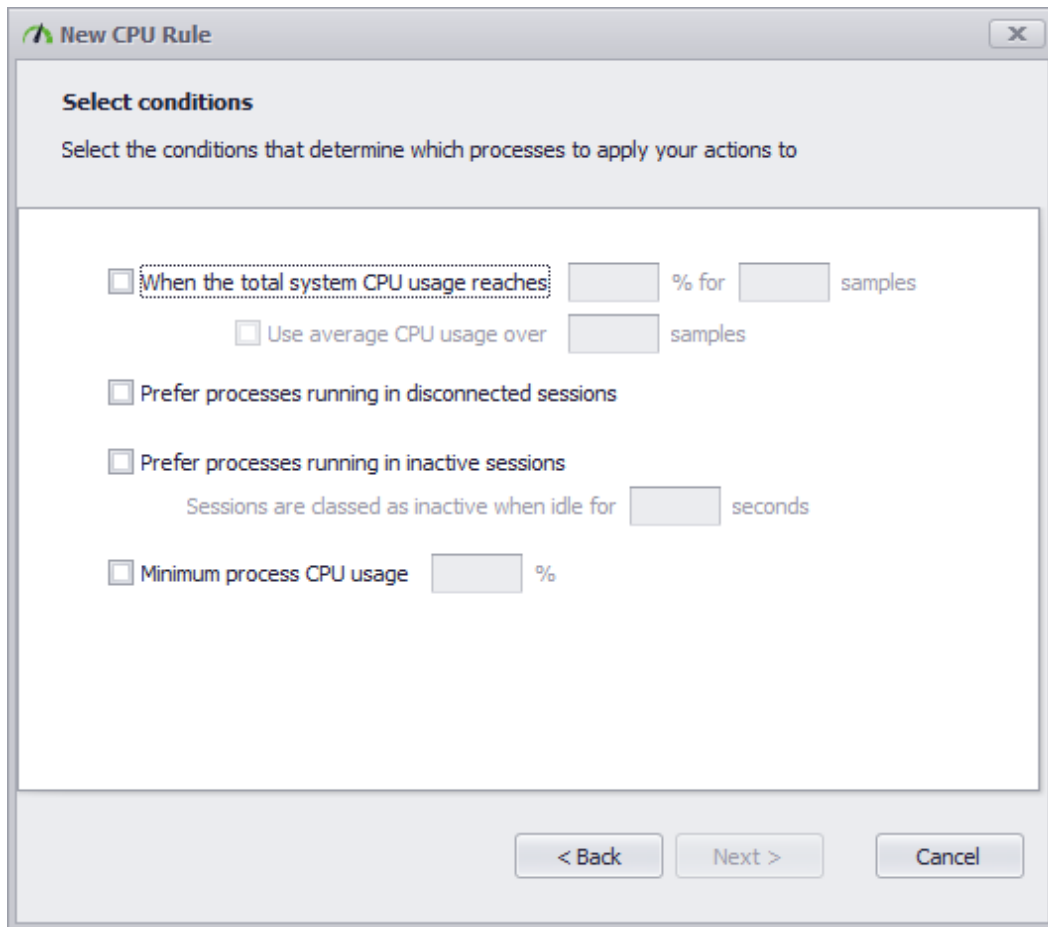
At the bottom of the dialog are three buttons: "< Back", "Next >", and "Cancel".

The following conditions can be applied:

- When the session CPU usage reaches the configured percentage for the number of samples, you specified.
- When the total system CPU usage reaches the configured percentage for the number of samples, you specified.
- When the session enters a disconnected state for the configured time
- When the session has been idle for the configured time

Additionally, you can use an average CPU calculation, where system CPU usage and session CPU usage are calculated using averages of their recent consumption.

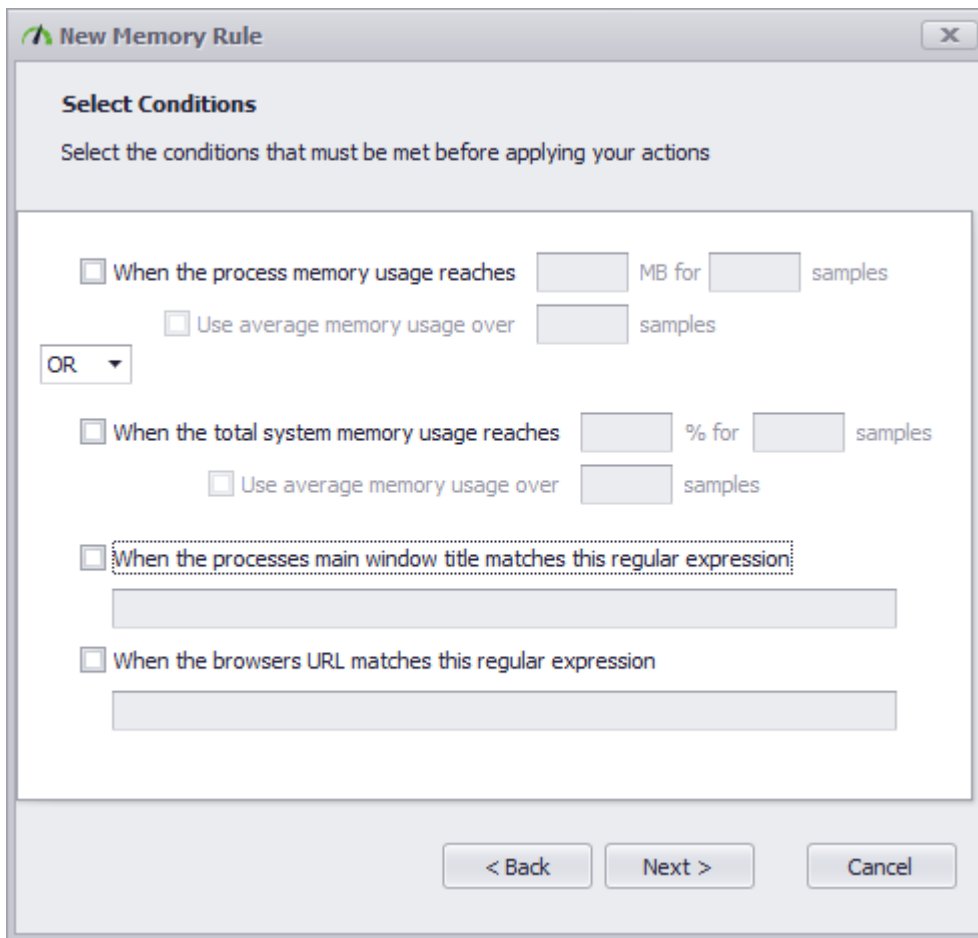
If multiple conditions are enabled, then all must be met before the rule actions are applied.



The following conditions can be applied:

- When the total system CPU usage reaches the configured percentage for the number of samples, you specified.
- Prefer processes running in disconnected sessions. If this condition is enabled, IntelliPerform will prioritize processes in disconnected session when looking for a process to apply the rule actions to.
- Prefer processes running in inactive sessions. If this condition is enabled, IntelliPerform will prioritize processes in session that have been idle for the configured period when looking for a process to apply the rule actions to.
- Minimum process CPU usage prevents IntelliPerform from selecting processes to apply actions to that are using less CPU than the configured threshold.

Additionally, you can use an average CPU calculation, where system CPU usage is calculated using averages of its recent consumption.



There are different conditions that can be applied:

- When the process memory usage reaches the configured memory limit for the number of samples, you specified.
- When the total system memory usage reaches the configured percentage for the number of samples, you specified.

Additionally, you can use an average memory calculation, where system memory usage and process memory usage are calculated using averages of their recent consumption.

If both conditions are enabled, then both have to be met before the rule actions are applied.

*Note: the **AND/OR** are only applied on the first two conditions, while the regex (regular) conditions are always ANDED.*

When the process main window title matches this regular expression:

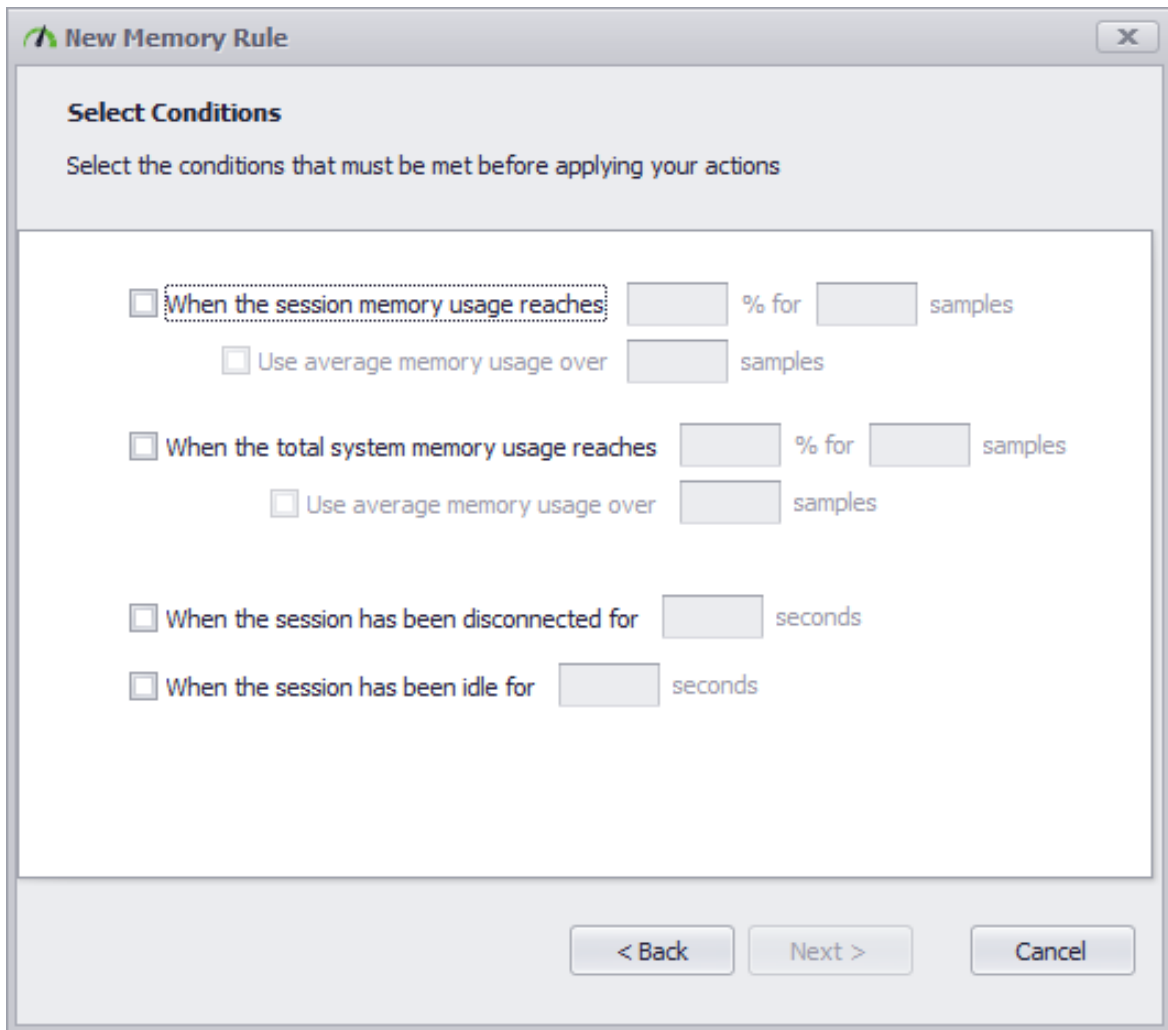
When this option is enabled IntelliPerform will perform the specified action only when the title matches the expression.

i.e.: `(.*)notepad(.*)` => the action will only apply when using Notepad.

When the browser URL matches this regular expression:

When this option is enabled IntelliPerform will perform the specified action only when the browser URL matches the expression.

i.e.: `(.*)Facebook(.*)` => the action will only apply when browsing Facebook.



The following conditions can be applied:

- When the session memory usage reaches the configured percentage for the number of samples, you specified.
- When the total system memory usage reaches the configured percentage for the number of samples, you specified.
- When the session enters a disconnected state for the configured time
- When the session has been idle for the configured time

Additionally, you can use an average memory calculation, where system memory usage and session memory usage are calculated using averages of their recent consumption.

If multiple conditions are enabled, then all must be met before the rule actions are applied.

The screenshot shows a dialog box titled "New Memory Rule" with a close button (X) in the top right corner. The main heading is "Select Conditions" with the instruction "Select the conditions that must be met before applying your actions". Below this, there are four main conditions, each with a checkbox and a text input field:

- When the total system memory usage reaches  % for  samples
  - Use average memory usage over  samples
- Prefer processes running in disconnected sessions
- Prefer processes running in inactive sessions
  - Sessions are classed as inactive when idle for  seconds
- Minimum process memory usage  MB

At the bottom of the dialog box, there are three buttons: "< Back", "Next >", and "Cancel".

The following conditions can be applied:

- When the total system memory usage reaches the configured percentage for the number of samples, you specified.
- Prefer processes running in disconnected sessions. If this condition is enabled, IntelliPerform will prioritize processes in disconnected session when looking for a process to apply the rule actions to.
- Prefer processes running in inactive sessions. If this condition is enabled, IntelliPerform will prioritize processes in session that have been idle for the configured period when looking for a process to apply the rule actions to.
- Minimum process memory usage prevents IntelliPerform from selecting processes to apply actions to that are using less memory than the configured threshold.

Additionally, you can use an average memory calculation, where system memory usage is calculated using averages of its recent consumption.

## Actions

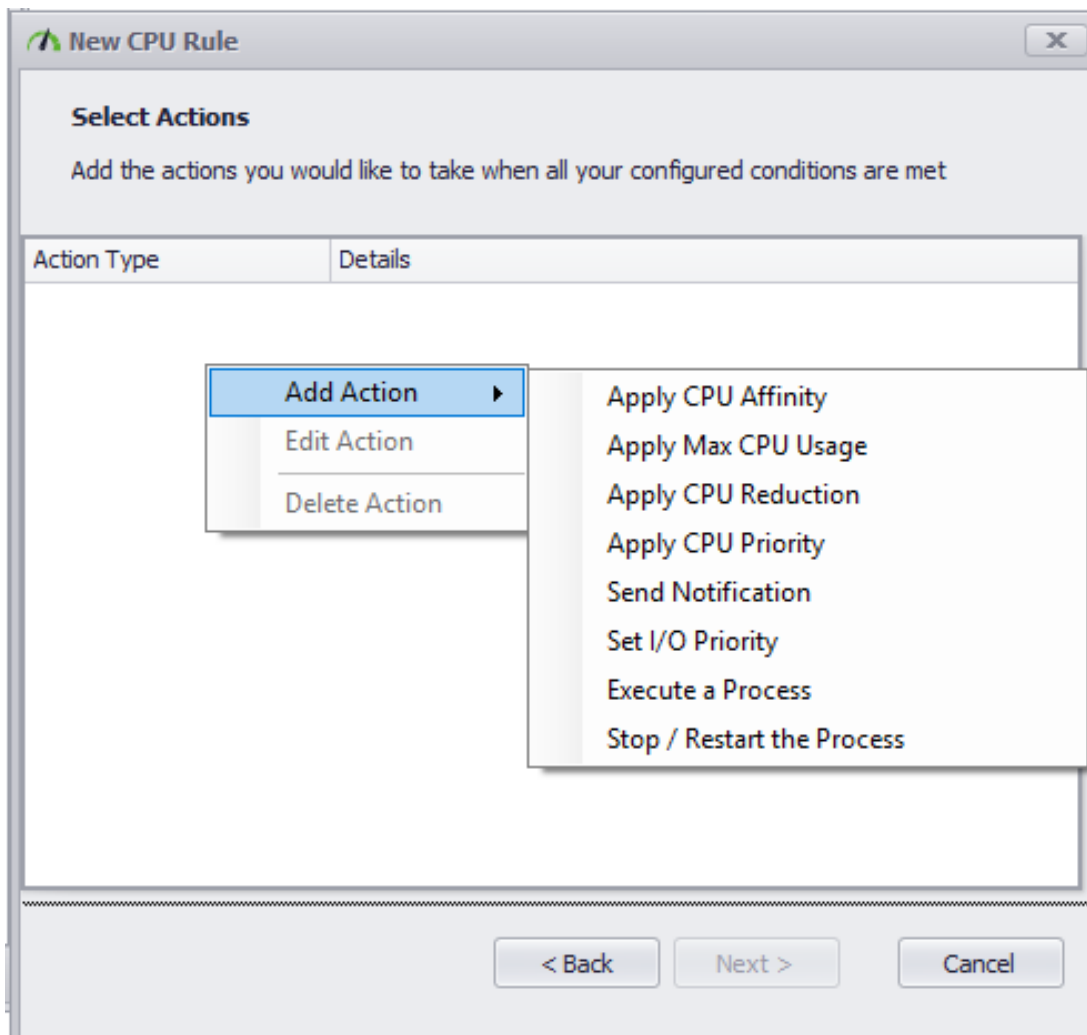
Actions are applied to a process / process when the configured rule conditions have been met.

### CPU Actions

IntelliPerform has the following CPU action types:

- Apply CPU Affinity
- Apply Max CPU Usage
- Apply CPU Reduction
- Apply CPU Priority
- Send Notification
- Set I/O Priority
- Execute a Process
- Stop/ Restart the Process

To create an action just right click and click Add Action.

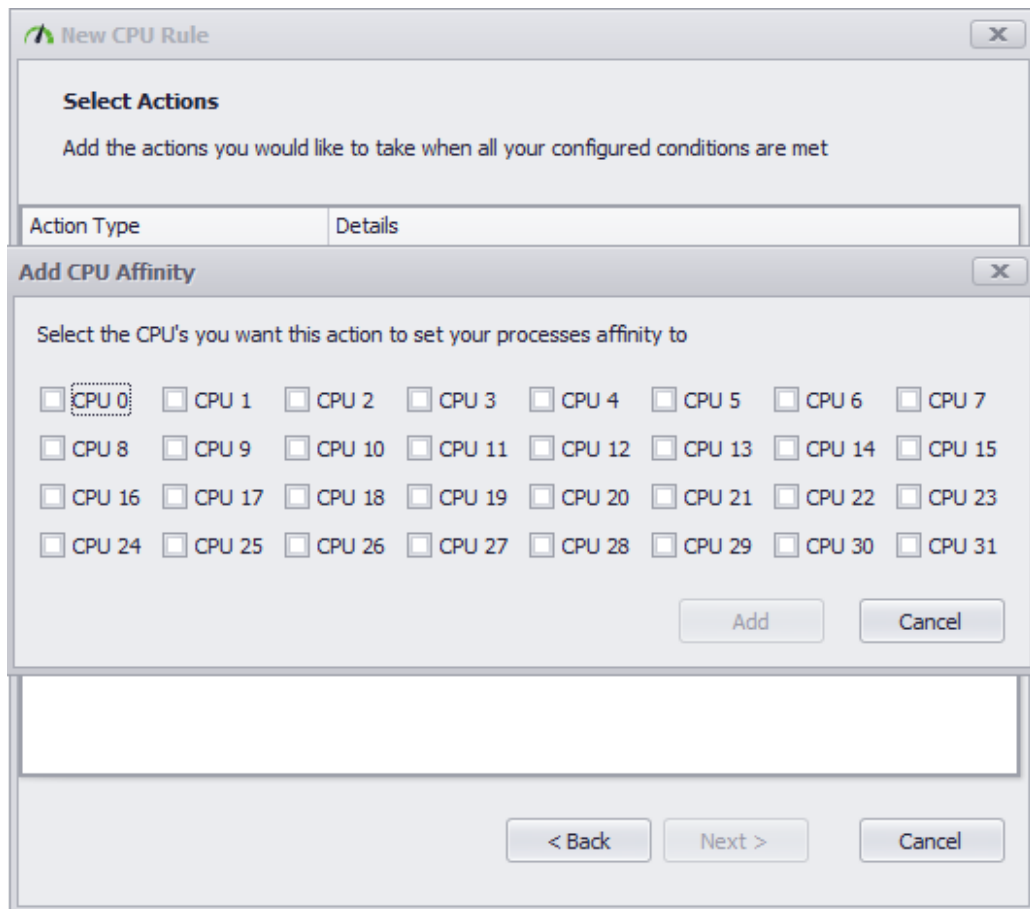




### Apply CPU Affinity:

Apply CPU Affinity allows you to assign processes to certain CPU cores in the system. This means the process will only run on the assigned cores.

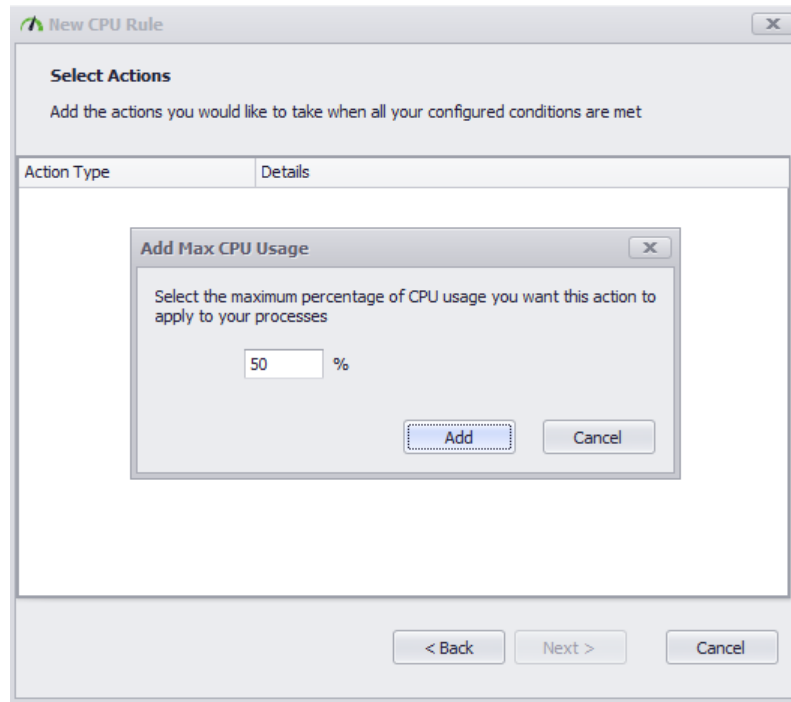
**Note:** if you select a core that is not present in the target system, the action will not be applied. When creating an affinity action ensure you know how many cores are in the target system.



### Apply Max CPU Usage:

This action will assign a maximum amount of CPU that a process or application can consume at any given time. To do this it sets a maximum threshold that the process or application cannot exceed, and therefore prevents that process or application from taking all the available CPU resources and preventing others from running in a usable way for the end users.

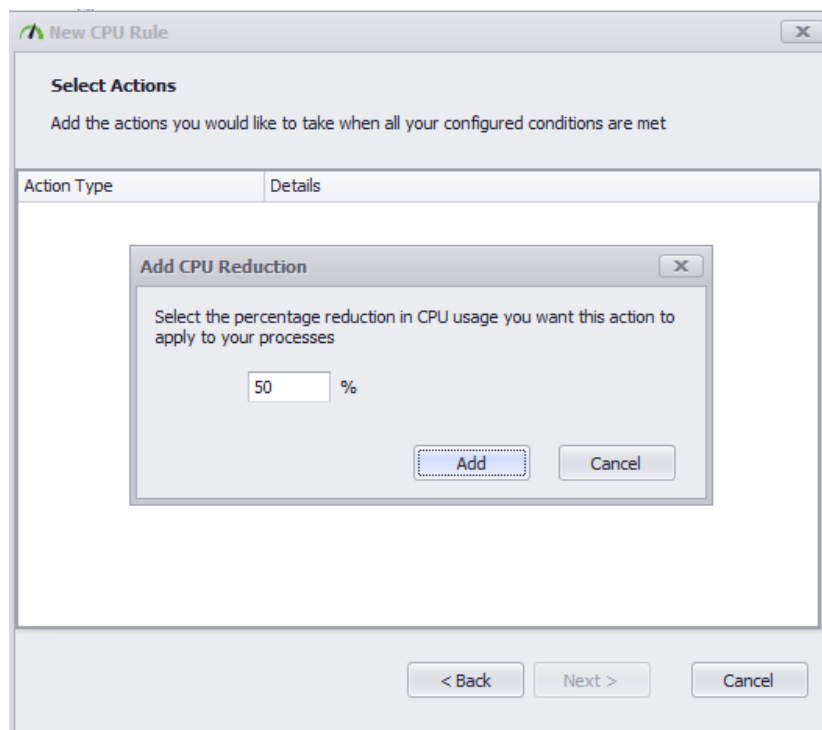
When used in combination with the affinity action, the process usage calculation is based on the percentage of every core in the system not the cores the affinity action rule has applied.



### Apply CPU Reduction

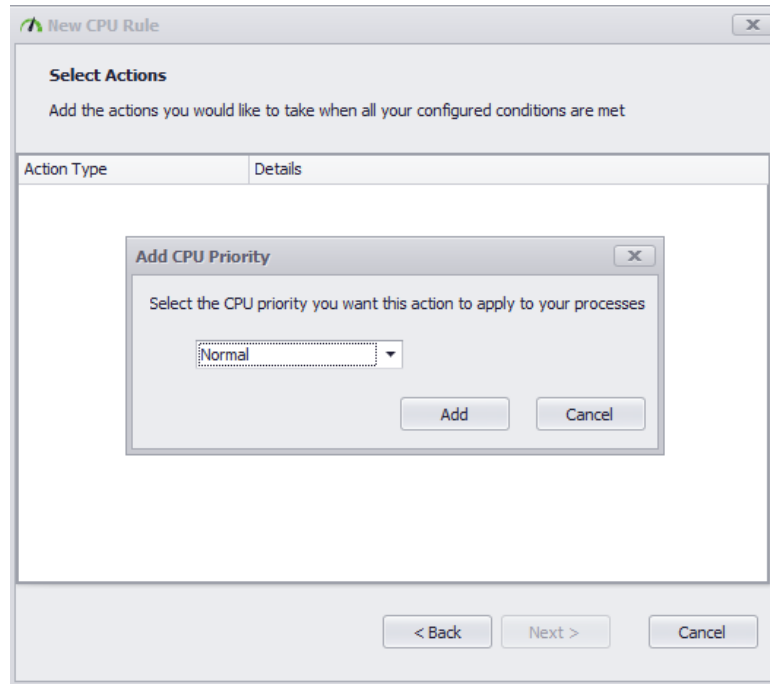
Applying a CPU reduction gradually reduces the amount of CPU a process can consume at any one time. If a process is consuming more CPU than the configured threshold, IntelliPerform will reduce the amount by the configured percentage each second until the threshold is no longer exceeded.

i.e. if process x is at 100% and you apply a 10% CPU reduction, the max amount of CPU that process can use will be 90%



## Apply Priority

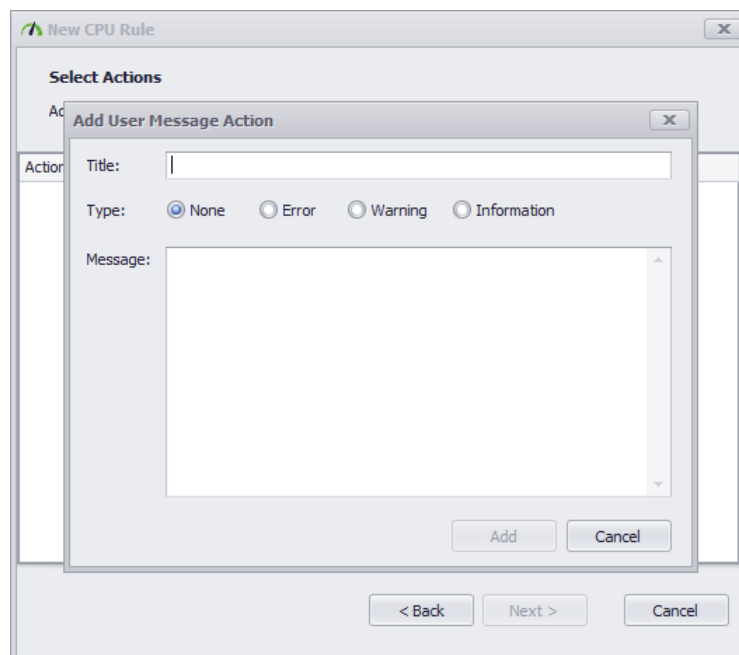
CPU priority allows you to set the priority level of a process. By doing this the operating system can understand which processes it needs to prioritize when the CPU starts to become constrained. Assigning a higher CPU priority to business-critical processes will ensure they always have priority over other processes running in the system.



## Send Notification

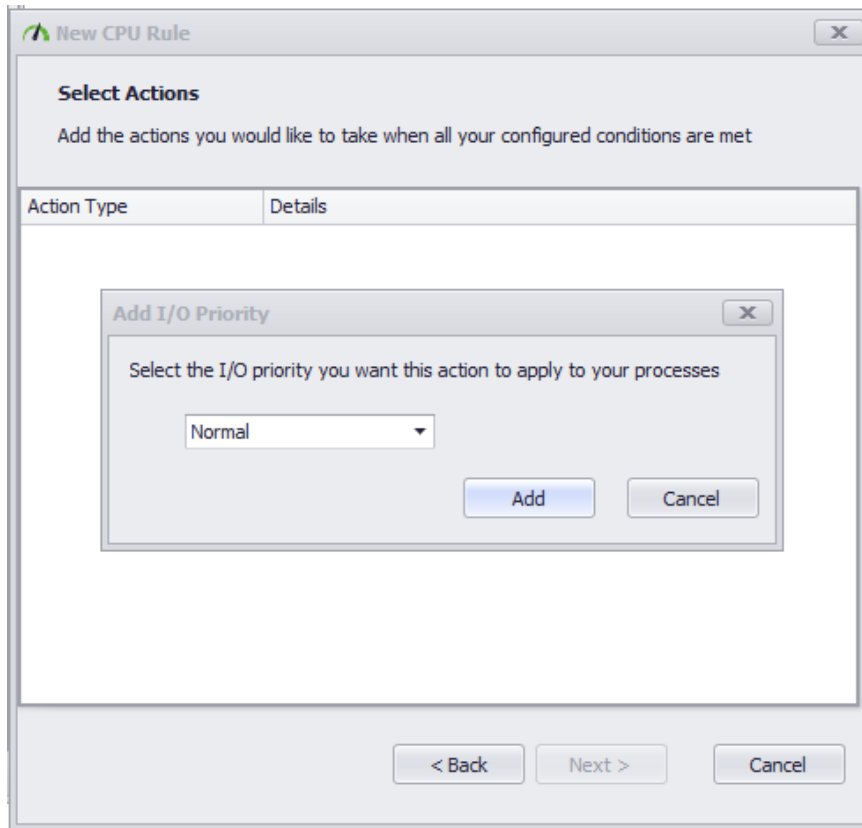
Send Notification will display a system tray notification message to the user who is running the process that has met all the conditions.

The message can be fully customized and different icon styles applied.



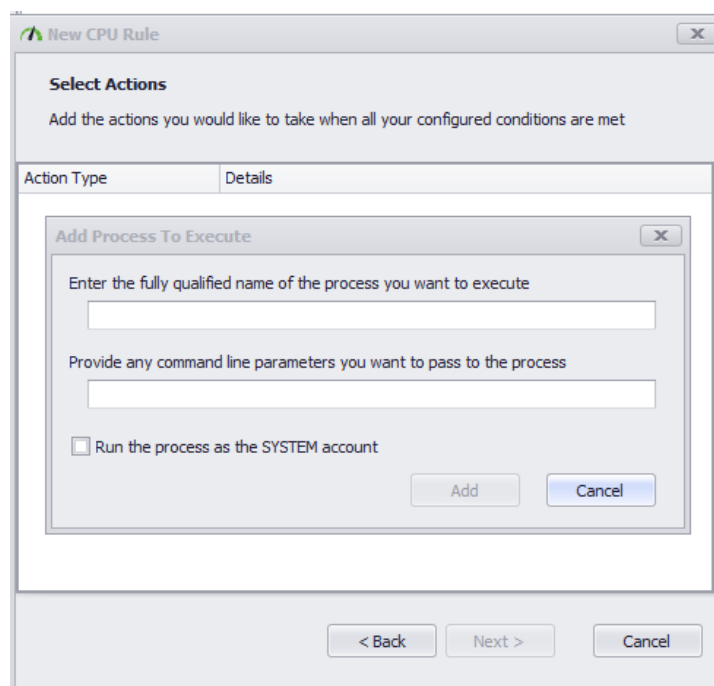
## Set I/O Priority

Set I/O Priority allows you to set the priority level of input and output for the specified process when the configured threshold is exceeded.



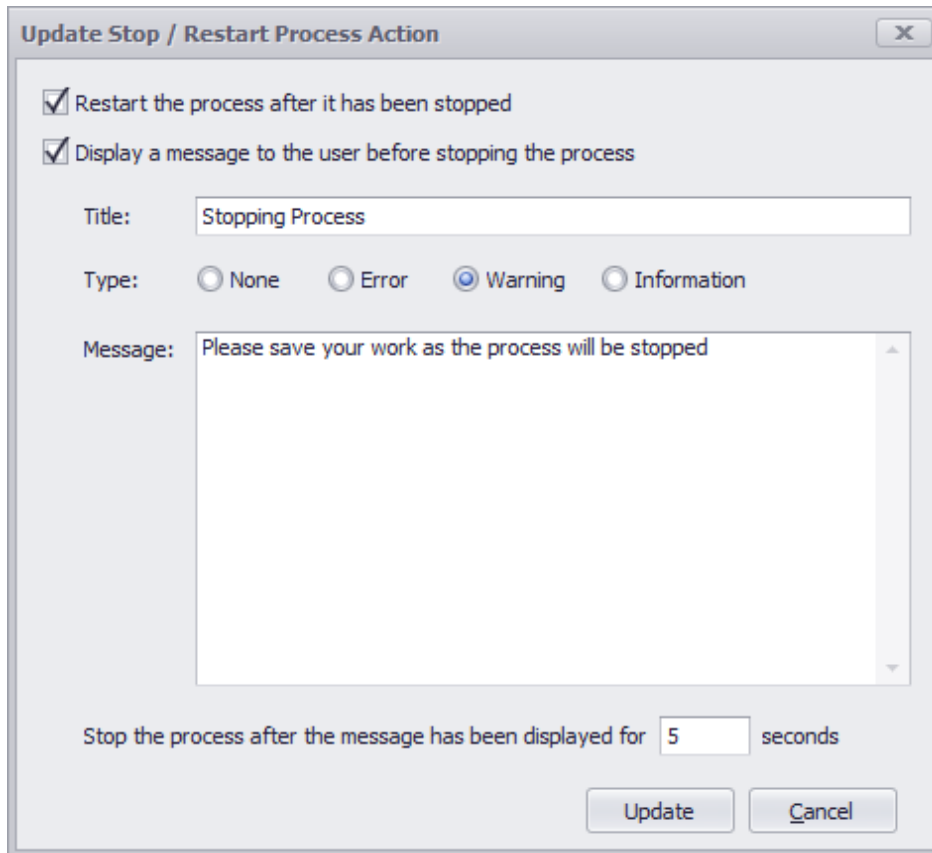
## Execute a Process

The Execute Process functionality allows you to specify a process to launch when the configured threshold is exceeded.



## Stop/ Restart the Process:

The Stop/ Restart the Process functionality allows you to stop/ restart process when the configured threshold is exceeded. Alternatively, you can also add a message to display to the users.



The screenshot shows a dialog box titled "Update Stop / Restart Process Action". It contains the following elements:

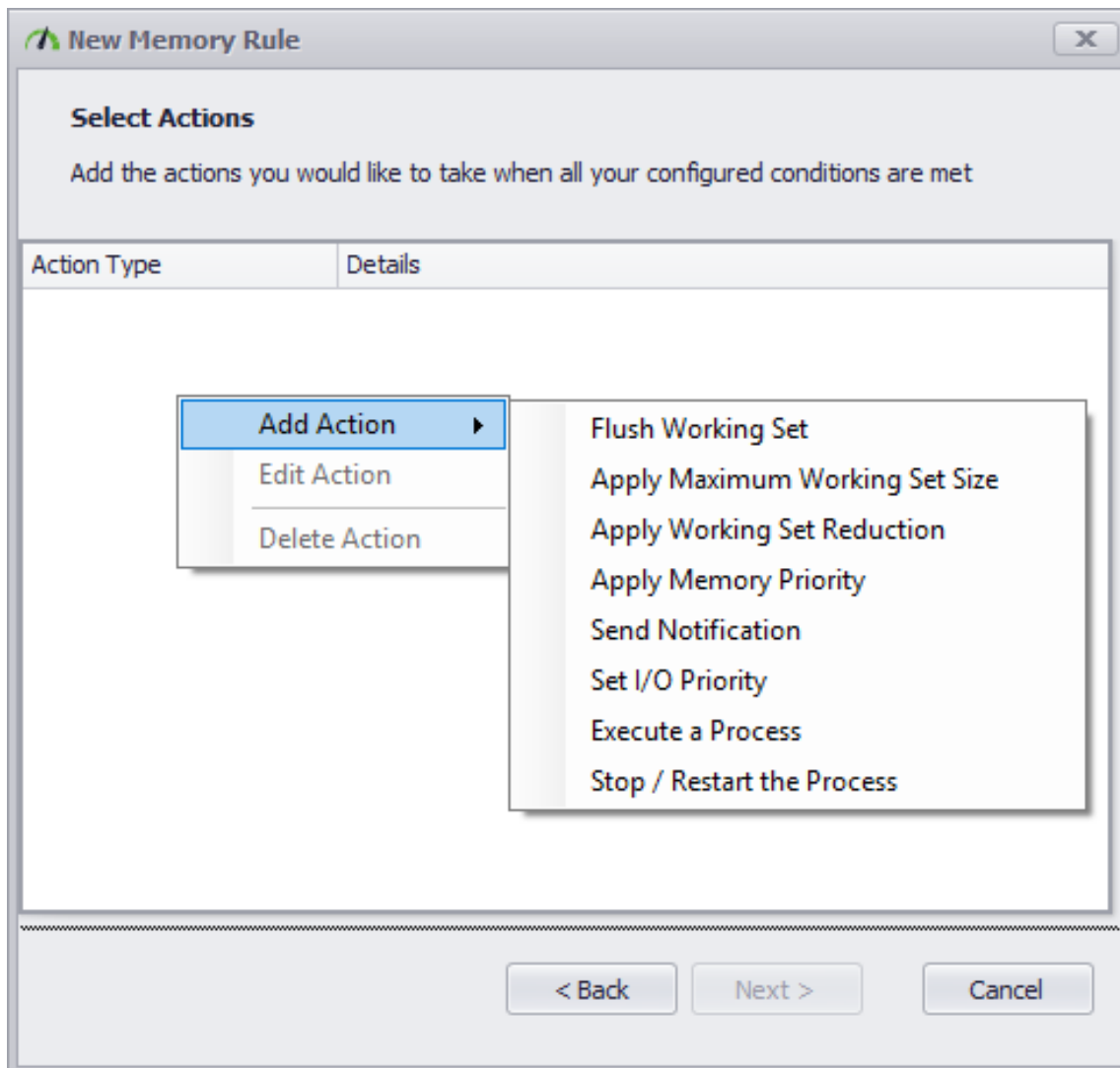
- Two checked checkboxes: "Restart the process after it has been stopped" and "Display a message to the user before stopping the process".
- A "Title:" text box containing the text "Stopping Process".
- A "Type:" section with four radio buttons: "None", "Error", "Warning" (which is selected), and "Information".
- A "Message:" text area containing the text "Please save your work as the process will be stopped".
- A field at the bottom indicating "Stop the process after the message has been displayed for 5 seconds".
- "Update" and "Cancel" buttons at the bottom right.

## Memory Actions

IntelliPerform has the following memory action types:

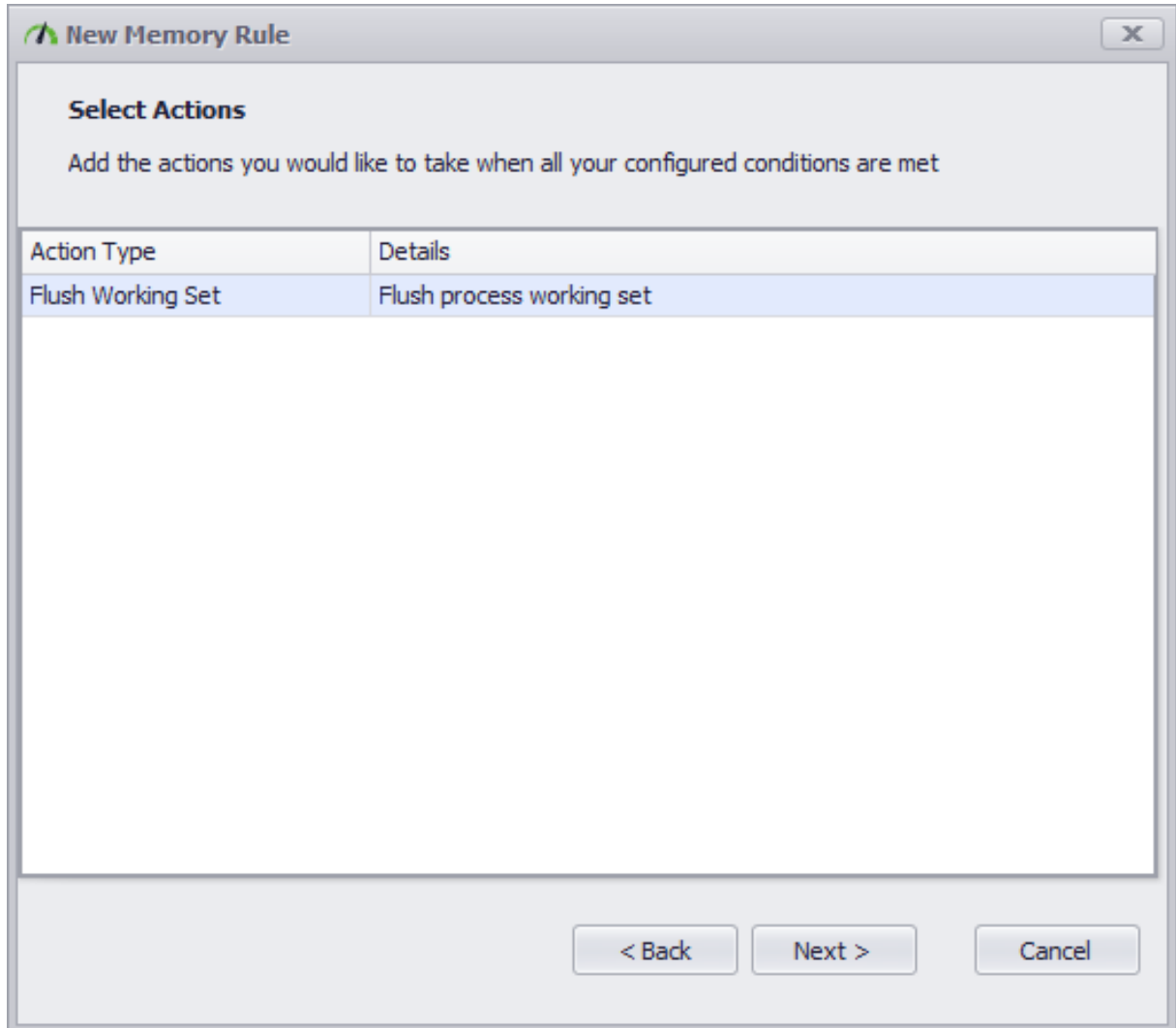
- Flush Working Set
- Apply Maximum Working Set Size
- Apply Working Set Reduction
- Apply Memory Priority
- Send Notification
- Set I/O Priority
- Execute a Process
- Stop / Restart the Process

To create an action just right click and click Add Action.



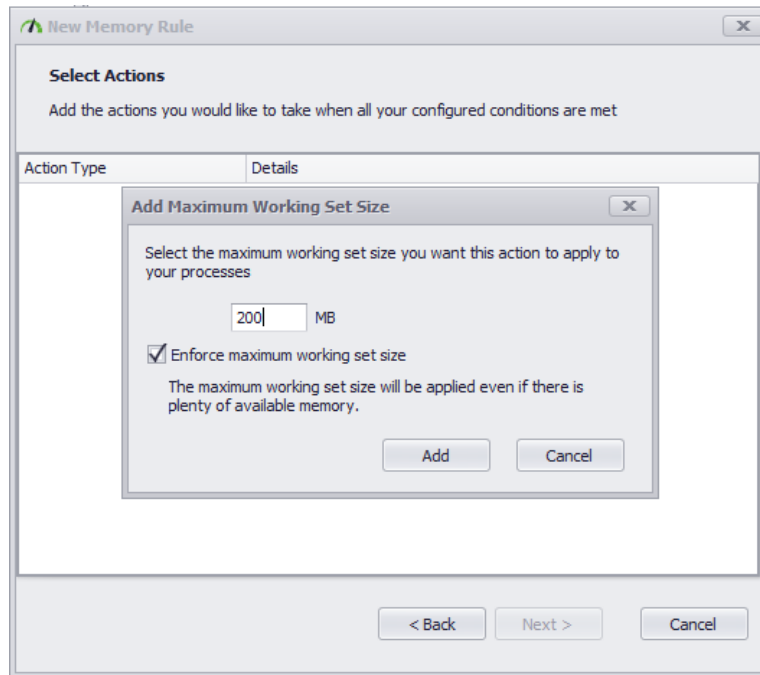
## Apply Flush Working Set:

Flushing a process's working set will force the operating system to remove as much physical memory as possible, from the process, freeing it up to be used by other processes in the system. This is particularly useful for applications that allocate a lot more memory than they will ever actually use. Flushing the working set ensures only the memory being used is in physical memory regardless of how much memory was allocated.



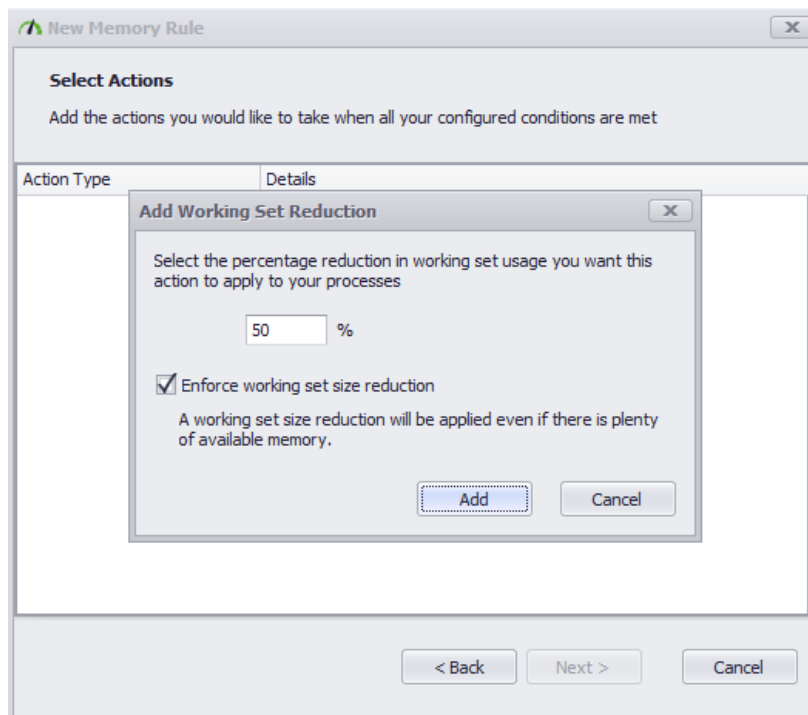
## Apply Maximum Working Set Size

Configure the maximum amount of memory that a process can have in physical RAM at any one time. This action can be enforced even when there is plenty of available memory in the system.



## Apply Working Set Reduction

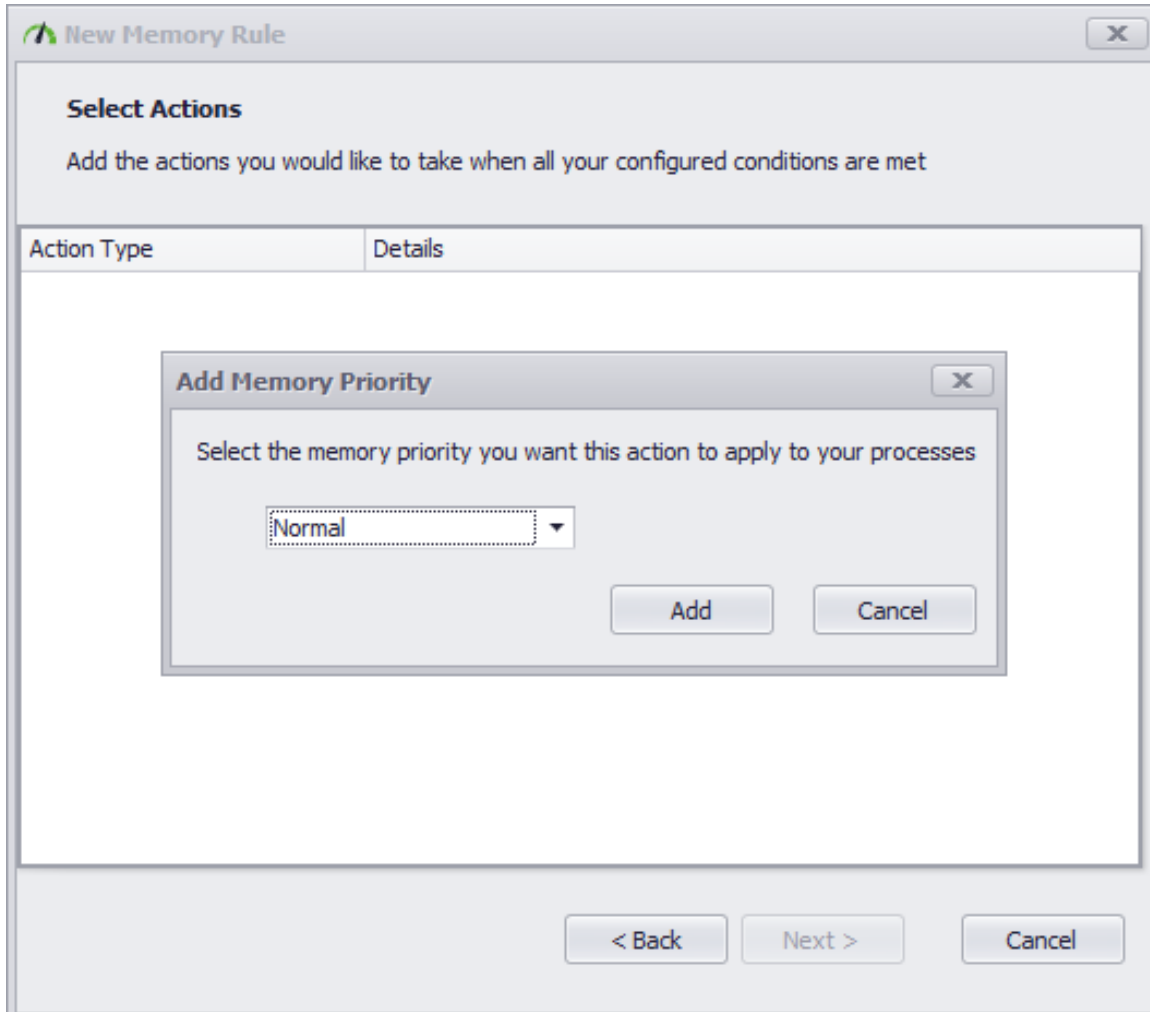
Applying a working set reduction gradually reduces the amount of memory a process can have in physical memory at any one time. If a process has more memory allocated than the configured threshold, IntelliPerform will reduce the amount by the configured percentage each second until the threshold is no longer exceeded.





## Apply Memory Priority

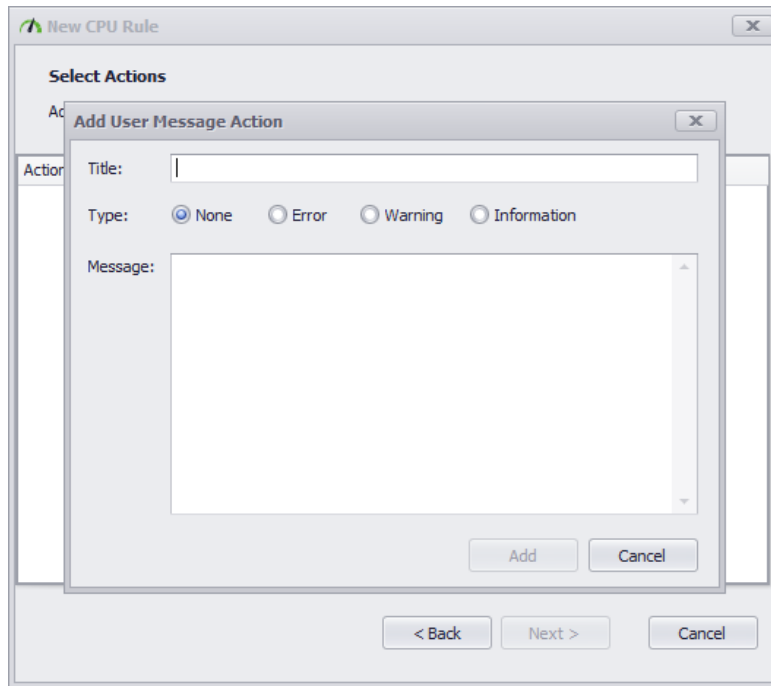
Process memory priorities help the operating system determine which physical memory pages to move to the paging file when memory resources are running low. Memory allocated by processes with a lower memory priority will be moved first. Assigning higher memory priorities to your business-critical applications ensures the memory they have allocated remains in physical memory longer.



## Send Notification

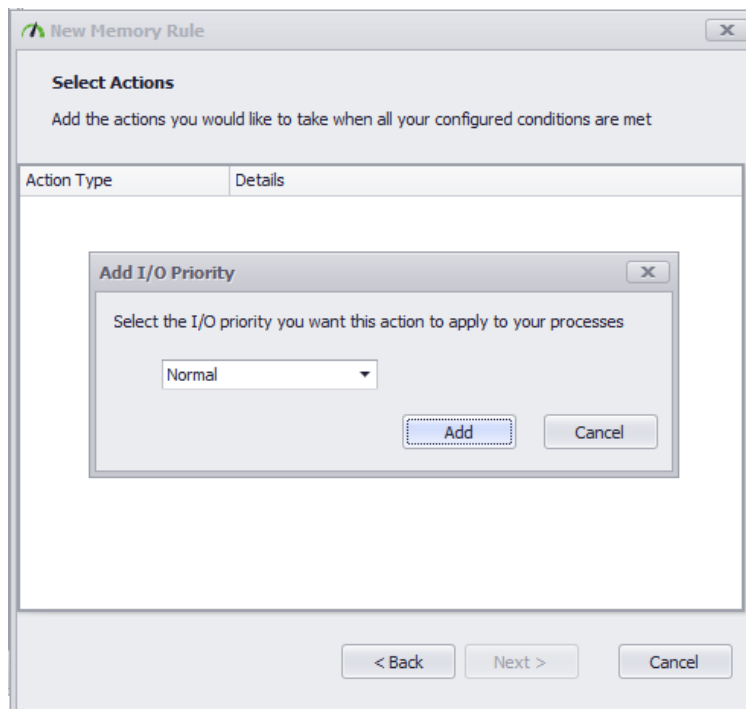
Send Notification will display a system tray notification message to the user who is running the process that has met all the conditions.

The message can be fully customized and different icon styles applied.



## Set I/O Priority

Set I/O Priority allows you to set the priority level of input and output for the specified process when the configured threshold is exceeded.



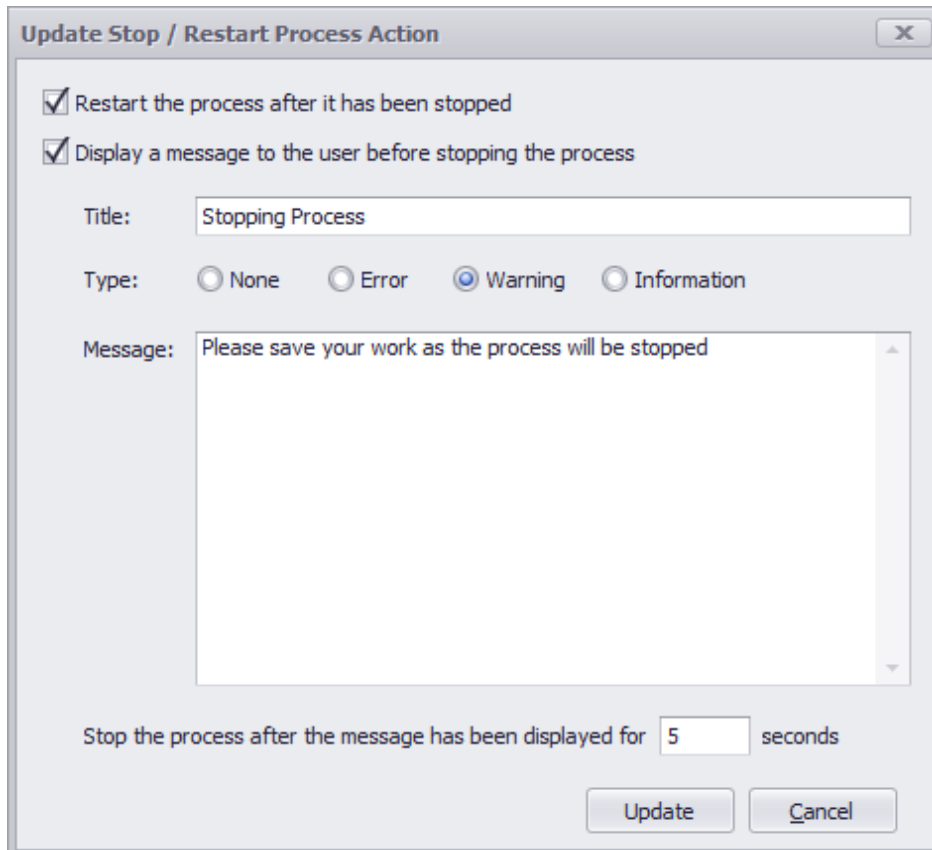
## Execute a Process

The Execute Process functionality allows you to specify a process to launch when the configured threshold is exceeded.

The screenshot shows a 'New Memory Rule' dialog box with a 'Select Actions' tab. The main dialog has a title bar with a green icon and the text 'New Memory Rule' and a close button. Below the title bar is the section 'Select Actions' with the instruction 'Add the actions you would like to take when all your configured conditions are met'. There are two tabs: 'Action Type' and 'Details'. The 'Details' tab is active. Inside the 'Details' tab, there is a sub-dialog box titled 'Add Process To Execute' with a close button. This sub-dialog contains two text input fields: the first is labeled 'Enter the fully qualified name of the process you want to execute' and the second is labeled 'Provide any command line parameters you want to pass to the process'. Below the second field is a checkbox labeled 'Run the process as the SYSTEM account'. At the bottom of the sub-dialog are 'Add' and 'Cancel' buttons. At the bottom of the main dialog are '< Back', 'Next >', and 'Cancel' buttons.

## Stop/ Restart the Process:

The Stop/ Restart the Process functionality allows you to stop/ restart process when the configured threshold is exceeded. Alternatively, you can also add a message to display to the users.



The screenshot shows a dialog box titled "Update Stop / Restart Process Action". It contains the following elements:

- Two checked checkboxes: "Restart the process after it has been stopped" and "Display a message to the user before stopping the process".
- A "Title:" text box containing the text "Stopping Process".
- A "Type:" section with four radio buttons: "None", "Error", "Warning" (which is selected), and "Information".
- A "Message:" text area containing the text "Please save your work as the process will be stopped".
- A field at the bottom indicating "Stop the process after the message has been displayed for 5 seconds".
- Two buttons at the bottom right: "Update" and "Cancel".

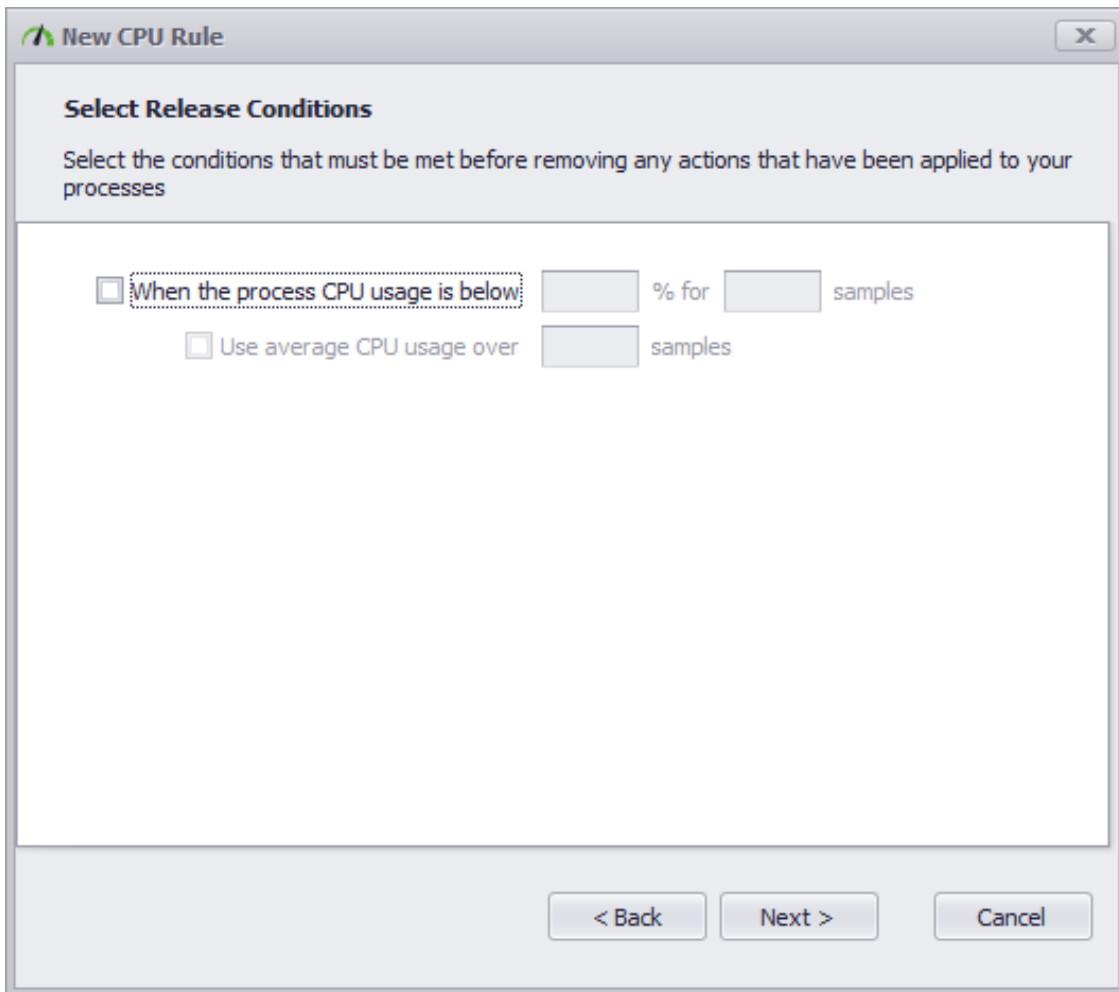
## Release Conditions

Release conditions are tests that are performed and when met any rule actions that are applied to processes in the system are removed.

If you don't enable any release conditions then the rule actions, once applied, will always be applied.

The release conditions that can be applied vary depending on the type of rule you are creating.

### Per Process CPU Release Conditions



There are two conditions that can be applied:

- When the process CPU usage is below the configured percentage for the number of samples, you specified.

Additionally, you can use an average CPU calculation, where process CPU usage are calculated using averages of their recent consumption.

**New CPU Rule**

**Select Release Conditions**

Select the conditions that must be met before removing any actions that have been applied to your sessions processes

When the session CPU usage is below  % for  samples

Use average CPU usage over  samples

When the session has been disconnected for  seconds

When the session has been idle for less than  seconds

When the session is active

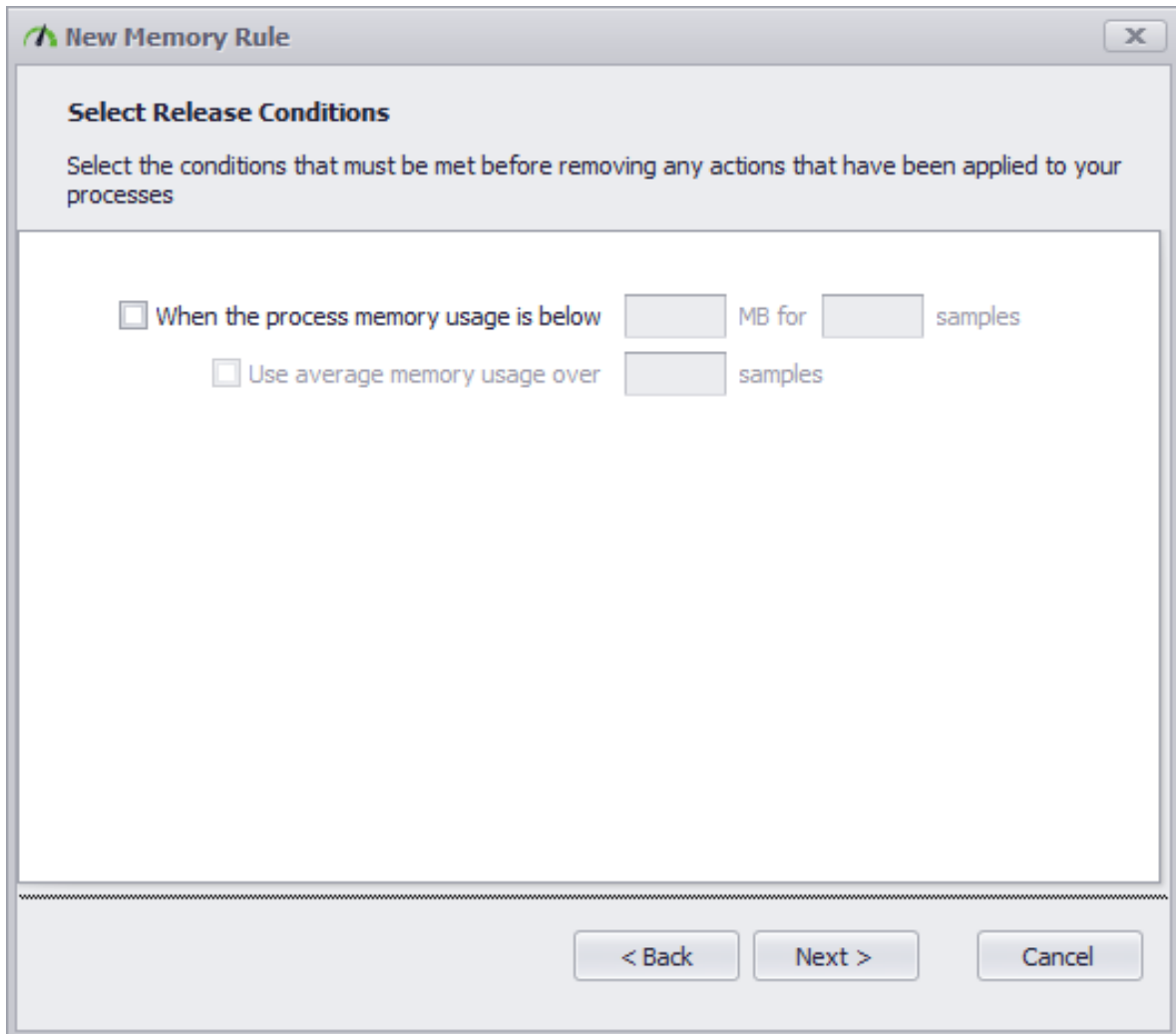
< Back    Next >    Cancel

The following conditions can be applied:

- When the session CPU usage is below the configured percentage for the number of samples, you specified.
- When the session enters a disconnected state for the configured time
- When the session has been idle for the configured time
- When the session enters an active state

Additionally, you can use an average CPU calculation, where session CPU usage are calculated using averages of their recent consumption.

If multiple conditions are enabled, then all must be met before the rule actions are applied.



There are two conditions that can be applied:

- When the process memory usage is below the configured memory limit for the number of samples, you specified.

Additionally, you can use an average memory calculation, where process memory usage is calculated using averages of their recent consumption.

The screenshot shows a dialog box titled "New Memory Rule" with a close button (X) in the top right corner. The main heading is "Select Release Conditions". Below the heading is a descriptive text: "Select the conditions that must be met before removing any actions that have been applied to your sessions processes". The dialog contains five checkbox options, each with a text label and a text input field for configuration:

- When the session memory usage is below [ ] % for [ ] samples
  - Use average memory usage over [ ] samples
- When the session has been disconnected for [ ] seconds
- When the session has been idle for less than [ ] seconds
- When the session is active

At the bottom of the dialog, there are three buttons: "< Back", "Next >", and "Cancel".

The following conditions can be applied:

- When the session memory usage is below the configured percentage for the number of samples, you specified.
- When the session enters a disconnected state for the configured time
- When the session has been idle for the configured time
- When the session enters an active state

Additionally, you can use an average memory calculation, where session memory usage is calculated using averages of their recent consumption.

If multiple conditions are enabled, then all must be met before the rule actions are applied.



## Release Actions

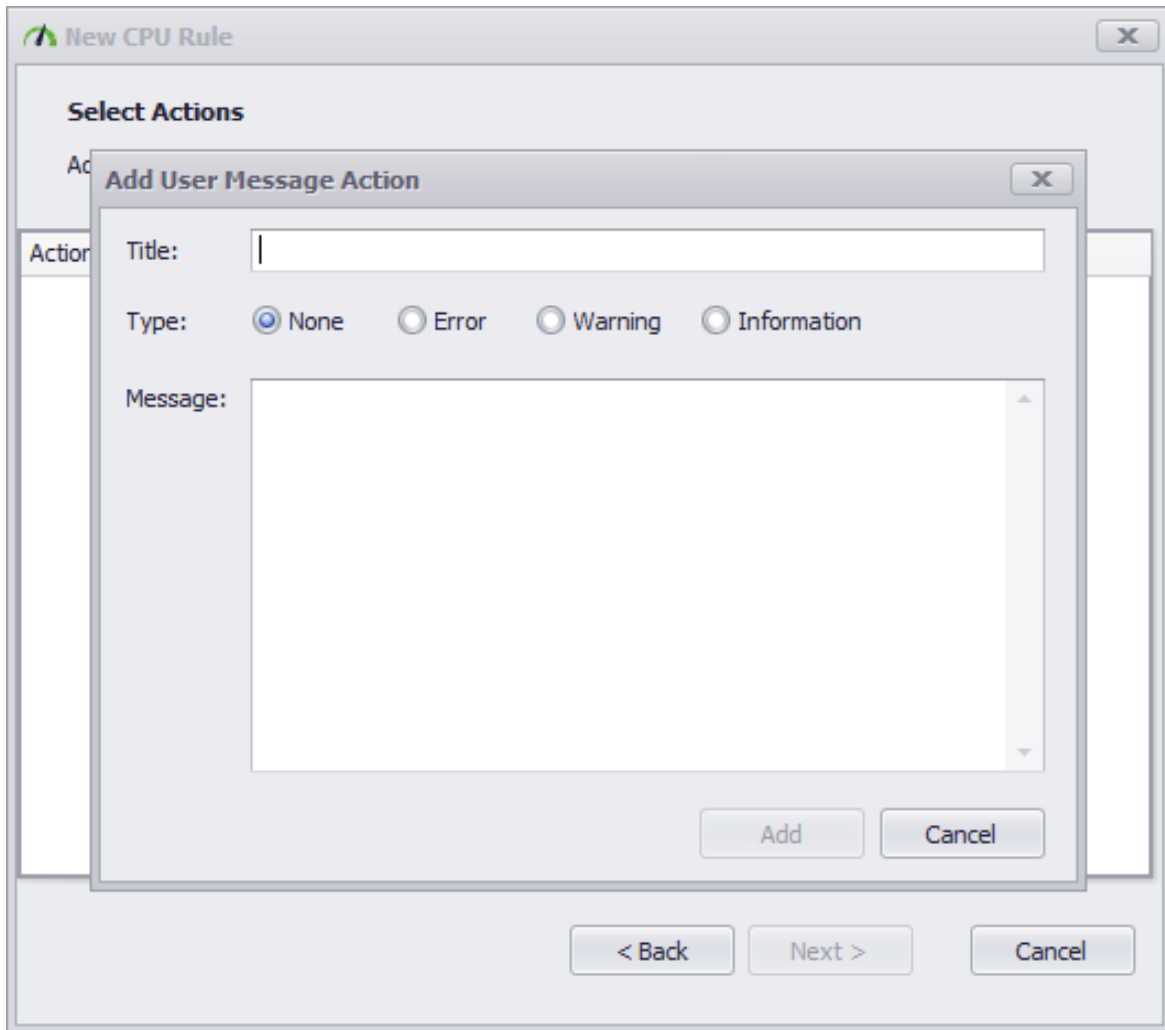
Release actions are additional actions that applied to a process / process when the configured rule release conditions have been met and all applied actions have been removed.

### CPU and Memory Release Actions

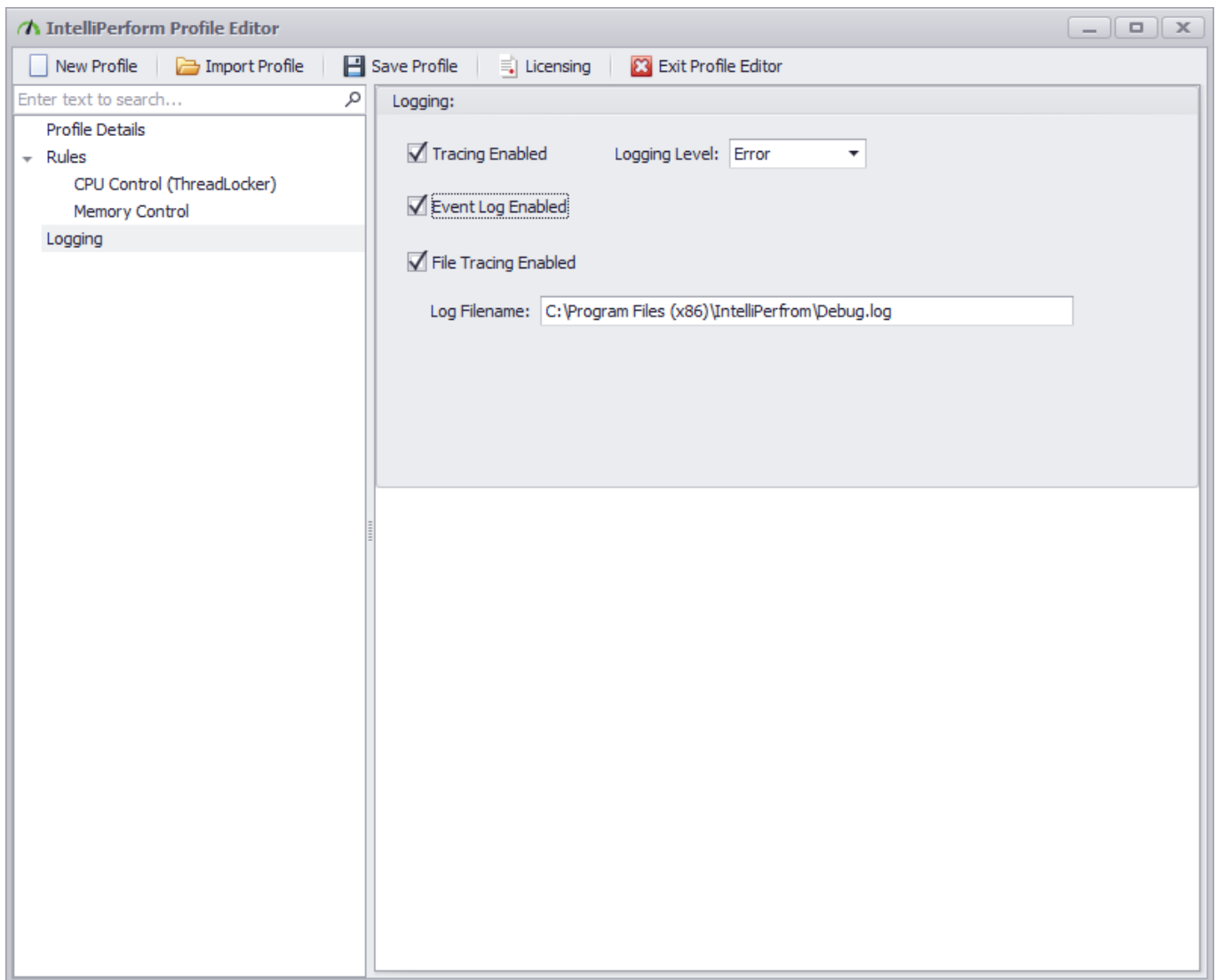
#### Send Notification

Send Notification will display a system tray notification message to the user who is running the process that has just been released and all applied actions have been removed.

The message can be fully customized and different icon styles applied.



## Logging:



## Logging Levels:

There are several levels of logging possible with IntelliPerform from diagnostic info to hard errors:

- Notifications
- Info
- Warning
- Error
- Fatal Error

**Note:** The “Info” logging level should only be used for troubleshooting and due to its verbosity, cannot be saved to the event logs.

### Event Log Levels:

If enabled, the events coming from IntelliPerform will be saved within Windows Event Viewer logs.

### File Tracing Enabled:

If enabled, the events coming from IntelliPerform will be saved into a file within your desired folder.

*Note: ThinScale support might request that file for troubleshooting purposes, so please when contacting us attach the file as well.*

For any queries in relation to IntelliPerform profile or settings feel free to contact us at

[support@thinscaletechnology.com](mailto:support@thinscaletechnology.com)

## Licensing

During installation, IntelliPerform will install a fully functional 30-day Enterprise Edition trial license.

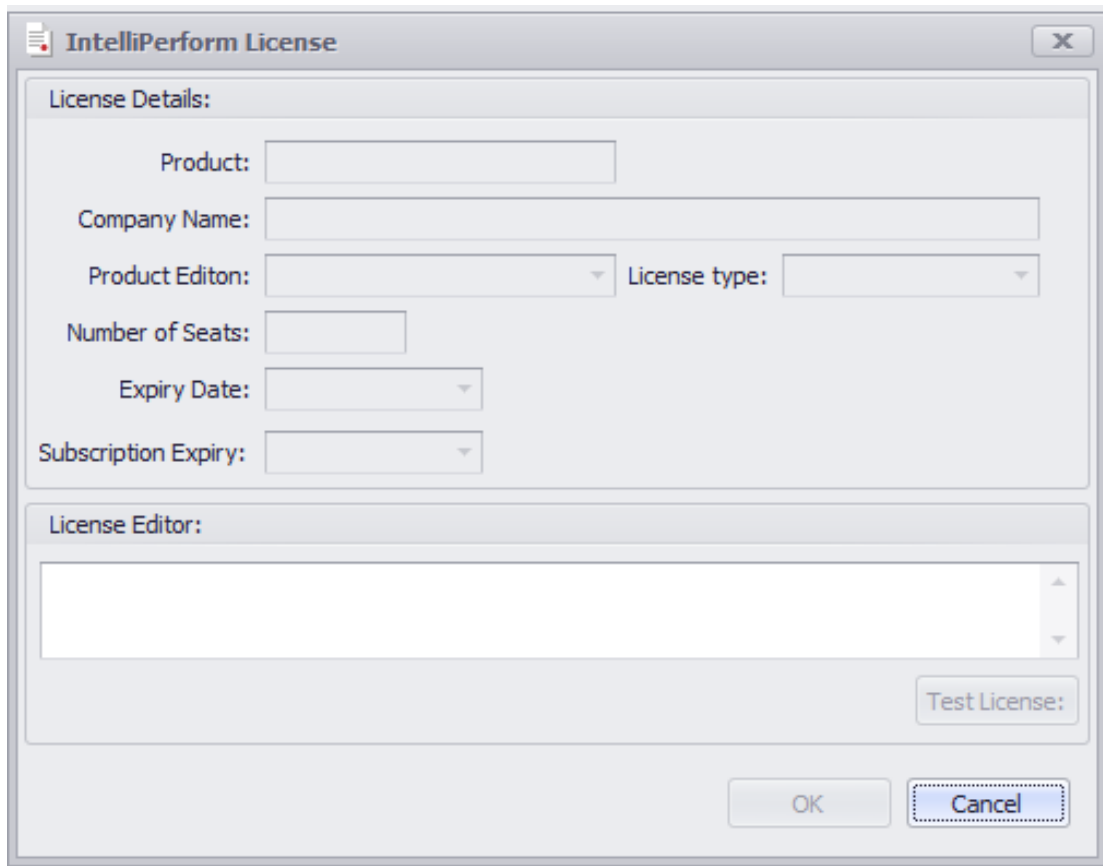
### Receiving a license:

Reach out to our sales team on [sales@thinscaletechnology.com](mailto:sales@thinscaletechnology.com) and mention you would like a quote for IntelliPerform.

### Installing a license on a standalone IntelliPerform:

Once you have received your license:

- Paste in your key into the license editor ensuring all text is without carriage returns or blank spaces and click 'Test License:'
- The License Details tab should update with the company information provided.



### Installing a license on IntelliPerform connected to the Management Console:

Please refer to the ThinScale Management Console Guide on how to install a license.

For any queries in relation to ThinScale products feel free to contact us at

[support@thinscaletechnology.com](mailto:support@thinscaletechnology.com)