



BMC® Performance Manager Monitoring Studio Reference Guide



Supporting

Monitoring Studio KM for PATROL® by Sentry Software™
Version 8.5.01

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Customer Support

You can obtain technical support by using the Support page on the Sentry Software Web site or by contacting Customer Support by telephone or e-mail. To expedite your inquiry, please see the section “[Before Contacting Sentry Software](#)” given below.

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Before Contacting Sentry Software

Before you contact Sentry Software, please ensure you have the following information available so that Customer Support can begin working on your problem immediately:

Product information

- product name
- product version (release number)
- license number and password (trial or permanent)

Operating system and environment information

- machine type
- operating system type, version, and service pack or other maintenance level such as PUT or PTF
- system hardware configuration
- serial numbers
- related software (database, application, and communication) including type, version, and service pack or maintenance level

Sequence of events leading to the problem

Commands and options that you used

Messages received (and the time and date that you received them)

- product error messages
- messages from the operating system, such as file system full
- messages from related software



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Overview

While out-of-the-box BMC Software monitoring solutions are available for the most common applications, most companies also need to use various custom or in-house applications.

Until recently, monitoring these custom applications, often critical as they are intrinsically linked to the business, was feasible only through a custom PATROL® Knowledge Module®. Developing a PATROL KM, although not an impossible task, inevitably involves a lot of programming, project management, release and maintenance management skills, all of which are time and resource-intensive.

BMC® Performance Manager Monitoring Studio is a KM for PATROL that allows you to set up the monitoring, without any coding, of almost any application, device or IT component for which there is no out-of-the-box monitoring solution available. It also enables you to consolidate diverse monitoring needs through a single solution.

In a few clicks, and thanks to intelligent wizards, you can cover up to 100% of your critical applications within your BMC Software monitoring environment.

This document describes the application classes of BMC® Performance Manager Monitoring Studio. It takes you through each of the 22 application classes and describes the parameters discovered and the menu commands available.

The documentation for BMC Performance Manager Monitoring Studio consists of:

1. Installation Guide – for information on how to install and run the product.
2. User Guide – for a detailed view on how to use the product.
3. Reference Guide – current document
4. Release Notes – for a summary of the key features and changes in the product.

For convenience, BMC Performance Manager Monitoring Studio will be referred to as: *Monitoring Studio* within the product documentation.

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1. List of application classes

There are 22 application classes in BMC Performance Manager Monitoring Studio. If the KM is properly loaded, the following 22 classes should be loaded on the monitored system and console:

Application Class	Description
SW_APPLICATIONS	Monitors application/container icons
SW_DB_QUERIES	Executes and monitors database queries
SW_FILES	Monitors files and file content
SW_FILE_SECURITY	Monitors file security
SW_FILESYSTEMS	Monitors file-systems
SW_FOLDERS	Monitors folders
SW_HTTP_REQUESTS	Monitors web-based applications, executes HTTP requests
SW_HTTP_WEBFARM	Monitors web farms
SW_JMX	Polls and monitors JMX-enabled application servers
SW_KMWATCH	Monitors parameters of other KMs
SW_NTEVENTS	Monitors Windows Event Logs
SW_NTPERFORMANCE	Monitors Windows Performance
SW_NTSERVICES	Monitors Windows Services
SW_NT_WMI	Executes and monitors WMI queries
SW_NUMBERS	Enables extracting numeric values
SW_OSCOMMANDS	Executes, monitors and parses command lines and scripts
SW_PROCESSES	Monitors Processes
SW_SENTRY	Main application class
SW_SNMP_POLLING	Polls and monitors SNMP agents
SW_SNMP_TRAPS	Monitors and listens for SNMP traps
SW_STRINGS	Executes string searches
SW_TRANSFORM	Transforms complex (multi-line, HTML, XML) text to enable string/numeric value searches

The Application Classes

This section lists the 22 application classes of BMC Performance Manager Monitoring Studio with details on the parameters discovered and the menu commands available for each application class.

1. SW_APPLICATIONS

You can create SW_APPLICATIONS instances (application/container icons) through the *Monitoring Studio* icon by clicking on **New > Application icon** (container). SW_APPLICATIONS instances are used to group different monitoring tools configured to monitor a given application, device, or any other IT component. SW_APPLICATIONS instances could contain other SW_APPLICATIONS instances (containers and sub-containers).

Parameters

None

InfoBox

Name	Description
ID	PATROL internal identifier of the application/container icon.
Parent ID	PATROL internal identifier of the parent icon.
Application ID	PATROL internal identifier of the root parent icon.
First required file	File whose presence is required to activate the monitoring of this application/container.
Second required file	File whose presence is required to activate the monitoring of this application/container.
Third required file	File whose presence is required to activate the monitoring of this application/container.
Fourth required file	File whose presence is required to activate the monitoring of this application/container.
Constant 1	Name of the first application constant
Constant 2	Name of the second application constant
Constant 3	Name of the third application constant
Constant 4	Name of the fourth application constant
Constant 5	Name of the fifth application constant
Contact	Name or contact information of the person in charge of the application.
Description	Description of the application.
Start command line	Displays the command line that will be used to start the application by the "Manage > Start the application" Menu Command
Stop command line	Displays the command line that will be used to stop the application by the Menu Command: "Manage > Stop the application"

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Menu Command	Description
New > Process monitoring...	Starts the process monitoring wizard
New > Windows service monitoring...	Starts the Windows service monitoring wizard (only on Windows servers)
New > File monitoring and analysis...	Starts the file monitoring and analysis wizard
New > Folder monitoring...	Starts the folder monitoring wizard
New > File system monitoring...	Starts the file system monitoring wizard
New > Command line analysis...	Starts the command line execution and analysis wizard
New > Database query analysis...	Starts the database query analysis wizard
New > Java MBean Polling...	Starts the JMX Polling wizard.
New > WMI Query analysis...	Starts the WMI Query analysis wizard.
New > Web request analysis...	Starts the Web request analysis wizard
New > Web-farm monitoring...	Starts the Web-farm monitoring wizard
New > SNMP polling...	Starts the SNMP polling wizard
New > SNMP Trap listening...	Starts the SNMP trap listening wizard
New > Windows Event monitoring...	Starts the Windows Event monitoring wizard (On Windows Agents only)
New > Windows Performance monitoring...	Starts the Windows Performance counter monitoring wizard. (On Windows Agents only)
New > KM Watch...	Starts the KM Watch wizard
New > Sub-container...	Starts the new sub-container icon wizard
Edit...	Opens the application/container wizard for this application/container
Modify Application constants	Modifies the application constants
Set Polling Interval	Sets the polling interval
Set global Alert Actions	Opens the Alert Actions wizard for the whole application/container, including all of its children monitoring objects. Only for root application/containers
Cut	Cuts this application/container object
Copy	Copies this application/container object
Paste	Pastes a previously copied or cut object into this application/container
Delete	Delete this application/container object as well as all of its children
Rename	Enables renaming the monitored object
Manage > Start the application	Execute the command line to start the monitored application (the command line has been specified in the application/container icon wizard)
Manage > Stop the application	Execute the command line to stop the monitored application (the command line has been specified in the application/container icon wizard)
Export configuration	Allows exporting the configuration of this application/container along with all of its dependent objects.
Pause monitoring	Suspend the monitoring of this application/container, including all of its children.
Resume monitoring	Resume the monitoring of this application/container, including all of its children.

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2. SW_DB_QUERIES

Parameters

Name	Description	Polling interval
ConnectionStatus	State of the server connection. Unit: 0 = Ok, 1 = Alarm	DbQueryColl every 2 minutes
DbQueryColl	Database Request collector.	Default: 2 minutes
ExecutionTime	SQL query execution time. Unit: second(s)	DbQueryColl every 2 minutes
QueryStatus	SQL query execution status. Unit:0= OK, 1= ALARM	DbQueryColl every 2 minutes
ReturnOutput	Output of the Database query execution that will be parsed for String and Numeric value extractions. Unit: N/A	DbQueryColl every 2 minutes

InfoBox

Name	Description
ID	PATROL internal identifier of the Database query analysis.
Parent ID	PATROL internal identifier of the parent application/container.
Application ID	PATROL internal identifier of the Database query's root application.
Database Type	Database type (Oracle or SQL Server).
Instance/service name	Displays the name of the instance.
Database name	Displays the database name.
Connect as	Login used to connect to the database server.
SQL Query	Displays the SQL Query that will be run.

Menu Commands

Menu Command	Description
New > Numeric value extraction	Creates a new Numeric value extraction for this Database Query analysis.
New > String search	Creates a new String search for this Database Query analysis.
New > Text Pre-processing	Starts the Text pre-processing wizard for this Database Query analysis.
Edit	Edits the Database Query analysis settings.
Set Thresholds	Sets Thresholds for the parameters of this Database Query analysis.
Set Polling interval	Sets the Polling interval for the instance
Set Alert Actions	Adds specific Alert Actions to the Database Query analysis.

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Menu Command	Description
Cut	Cuts this Database Query object.
Copy	Copies this Database Query object.
Paste	Pastes a previously copied or cut String search or Numeric value extraction object.
Delete	Deletes the Database Query analysis and all its dependent objects.
Rename	Enables renaming this monitored object.
Pause monitoring	Pauses the Database Query analysis as well as all its dependent objects.
Resume monitoring	Resumes the Database Query analysis monitoring as well as that of all its dependent objects.
Refresh parameters	Refreshes all instance parameters of the SW_DB_REQUEST class.

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3. SW_FILES

Parameters

Name	Description	Value set by
Exists	Determines whether the file exists or not Unit: 0 = Exists, 1 = Does not exist	fileColl
FileColl	Collects information about the file Default polling interval: 2 minutes	
GrowthPercentage	File growth percentage Unit: Percent per minute (%/min)	fileColl
GrowthSpeed	File growth speed Unit: Kilobytes per minute (KB/min)	fileColl
LastChanged	Elapsed time since the File was modified Unit: Minutes	fileColl
Size	File size Unit: Kilobytes (KB)	fileColl

InfoBox

Name	Description
ID	PATROL internal identifier of the File monitoring.
Parent ID	PATROL internal identifier of the File's parent.
Application ID	PATROL internal identifier of the File's root application.
File name & path	File name and path (with wildcards).
Monitored parameters	List of parameters that are currently being used for the File monitoring.
Scan mode	File scan mode (either "From start" or "From last position").
Monitored file	File name path of the file currently being monitored.

Menu Commands

Menu Command	Description
New > File security check	Creates a new File security monitoring for the current File.
New > Numeric value extraction	Creates a new Numeric value extraction for the current File.
New > String Search	Creates a new String search for the current File.
New > Text Pre-processing	Creates a new Text preprocessing object for the current File.
Edit	Edits the File monitoring settings.
Set Thresholds	Sets Thresholds for the parameters of this instance
Set Polling Interval	Sets the Polling interval for the instance

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Menu Command	Description
Set Alert Actions	Adds specific Alert Actions to the File monitoring.
Cut	Cuts this File monitoring object.
Copy	Copies this File monitoring object.
Paste	Pastes a previously copied or cut String search or Numeric value extraction.
Delete	Deletes the File monitoring and all its dependent objects.
Rename	Enables renaming this monitored object.
View file content	Displays the File content.
Restart Scan from start of file	If a String or Numeric value extraction is performed for this File, restart the File scan from the start of the File (only relevant to "LOG" Files).
Pause monitoring	Pauses the File monitoring as well as all its dependent objects.
Resume monitoring	Resumes the File monitoring as well as all its dependent objects.
Refresh parameters	Refreshes all instance parameters of the SW_FILES class.

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4. SW_FILE_SECURITY

Parameters

Name	Description	Value set by
AccessRightsCheck	File's access right status. Unit: 0 = Ok, 1 = File's access rights have changed	fileSecurityColl
GroupCheck	File's group status. Unit: 0 = Ok, 1 = File's group has changed	fileSecurityColl
Integrity	File's integrity status (i.e. no changes made to the content) Unit: 0 = Ok, 1 = File content has changed	fileSecurityColl
OwnerCheck	File's owner status. Unit: 0 = Ok, 1 = File's owner has changed	fileSecurityColl
fileSecurityColl	Collects the security information about the monitored file. Default polling: 2 minutes	

InfoBox

Name	Description
ID	PATROL internal identifier of the File security check.
Parent ID	PATROL internal identifier of the File security check's parent.
Application ID	PATROL internal identifier of the File security check's root application.

Menu Commands

Menu Command	Description
Edit	Edits the File security monitoring settings.
Set Polling Interval	Sets the Polling interval for the instance
Set Alert Action	Adds specific Alert Actions to the File security monitoring.
Cut	Cuts this File security monitoring object.
Copy	Copies this File security monitoring object.
Delete	Deletes the File security monitoring and all its dependent objects.
Rename	Enables renaming this monitored object.
Acknowledge and Update	Acknowledges all the alerts on this File security object and updates its settings to reflect any security changes made
Pause monitoring	Pauses the File security monitoring.
Resume monitoring	Resumes the File security monitoring.
Refresh parameters	Refreshes all instance parameters of the SW_FILE_SECURITY application class.

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5. SW_FILESYSTEMS

Parameters

Name	Description	Value set by
FreeMegabytes	File system free space. Unit: Megabytes (MB)	SW_SENTRY/FileSystemColl every 2 minutes
FreeSpacePercent	File system free space. Unit: Percent (%)	SW_SENTRY/FileSystemColl every 2 minutes
UsedSpaceGrowthSpeed	File system used space growth speed Unit: Megabytes per hour (MB/h)	SW_SENTRY/FileSystemColl every 2 minutes
UsedSpaceGrowthPercentage	File system used space growth percentage. Unit: Percentage per hour (%/h)	SW_SENTRY/FileSystemColl every 2 minutes

InfoBox

Name	Description
ID	PATROL internal identifier of the File systems monitoring.
Parent ID	PATROL internal identifier of the File systems' parent.
Application ID	PATROL internal identifier of the file systems' root application.
File System object	File System object monitored.

Menu Commands

Menu Command	Description
Edit	Edits the File system monitoring settings.
Set Thresholds	Sets Thresholds for the parameters of this instance
Set Polling Interval	Sets the Polling interval for the instance
Set Alert Action	Adds specific Alert Actions to the File systems monitoring.
Cut	Cuts this File system monitoring object.
Copy	Copies this File system monitoring object.
Delete	Deletes the File systems monitoring and all its dependent objects.
Rename	Allows you to rename this File systems monitoring
Pause monitoring	Pauses the File systems monitoring.
Resume monitoring	Resumes the File systems monitoring.
Refresh parameters	Refreshes all instance parameters of the SW_FILESYSTEMS application class.

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6. SW_FOLDERS

Parameters

Name	Description	Value set by
DeletedFileCount	Number of deleted files per minute. Unit: File(s) per minute (File(s)/min)	FolderColl
FileCount	Number of files in the folder and subfolders if specified. Unit: file(s)	FolderColl
FolderColl	Folder collector. Default polling interval: 2 minutes	
FolderSize	Folder size (include subfolders if specified) in MB. Unit: Megabyte(s) (MB)	FolderColl
GrowthPercentage	Percentage of the folder size growth per minute. Unit: Percent per minute (%/min)	FolderColl
GrowthSpeed	Folder size growth per minute. Unit: Kilobyte(s) per minute (KB/min)	FolderColl
LastModifiedFileElapsedTime	Elapsed time since the last modification of any file in this folder. Unit: Minute(s) (min)	FolderColl
ModifiedFileCount	Number of modified files per minute. Unit: File(s) per minute (File(s)/min)	FolderColl
NewFileCount	Number of new files per minute. Unit: Displays the number of new files per minute	FolderColl
OldestModifiedFileElapsedTime	Elapsed time since the oldest modification of any file in this folder or sub-folder. Unit: Minute(s) (min)	FolderColl

InfoBox

Name	Description
ID	PATROL internal identifier of the Folder monitoring.
Parent ID	PATROL internal identifier of the Folder's parent.
Application ID	PATROL internal identifier of the Folder's root application.
Folder	Path of the monitored folder.
Include subfolder	Displays whether subfolders are monitored or not.

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Menu Commands

Menu Command	Description
Edit	Edits the Folder monitoring settings
Set Thresholds	Sets Thresholds for the parameters of this instance
Set Polling Interval	Sets the Polling interval for the instance
Set Alert Actions	Adds specific Alert Actions to the Folder monitoring
Cut	Cuts this folder monitoring object
Copy	Copies this folder monitoring object
Delete	Pauses the Folder monitoring
Rename	Renames the Folder monitoring
Pause monitoring	Pauses the Folder monitoring
Resume monitoring	Resumes the Folder monitoring
Refresh monitoring	Refreshes all instance parameters of the SW_FOLDERS class

7. SW_HTTP_REQUESTS

Parameters

Name	Description	Value set by
ExecutionTime	Time taken by the Web request to execute. Unit: Second (s)	httpRequestColl
httpRequestColl	Web Request collector. Default polling interval: 2 minutes	
HTTPStatusCode	HTTP Response Status code Unit: 200 = OK, 404 = error,...	httpRequestColl
ReturnOutput	HTTP Response (including or not headers and HTML tags, depending on the selected options)	httpRequestColl
ServerConnectionState	Server connection status Unit: 0 = Ok, 1 = Alarm	httpRequestColl
Status	Web Request status. Unit: 0 = Ok, 1 = Warning, 2 = Alarm	httpRequestColl

InfoBox

Name	Description
ID	PATROL internal identifier of the HTTP Request analysis.
Parent ID	PATROL internal identifier of the HTTP Request's parent.
Application ID	PATROL internal identifier of the HTTP Request's root application.
Used HTTP method	HTTP method that is used for this HTTP Request analysis.

Menu Commands

Menu Command	Description
New > Numeric value extraction	Creates a new Numeric value extraction for this HTTP Request.
New > String search	Creates a new String search for this HTTP Request.
New > Text Pre-Processing	Creates a new Text pre-processing for this HTTP Request
Edit	Edits the HTTP Request monitoring settings.
Set Thresholds	Sets Thresholds for the parameters of this instance
Set Polling Interval	Sets the Polling interval for the instance
Set Alert Actions	Adds specific Alert Actions to the HTTP Request analysis.
Cut	Cuts this HTTP Request object.
Copy	Copies this HTTP Request object.
Paste	Pastes a previously copied or cut String search or Numeric value extraction.
Delete	Deletes the HTTP Request analysis and all its dependent objects.

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Menu Command	Description
Rename	Renames the Web Request monitoring object
Pause monitoring	Pauses the HTTP Request analysis as well as all its dependent objects.
Resume monitoring	Resumes the HTTP Request monitoring as well as all its dependent objects.
Refresh parameters	Refreshes all instance parameters of the SW_HTTP_REQUESTS class.

8. SW_HTTP_WEBFARM

Parameters

Name	Description	Value set by
OperationalServerPercent	Number of servers that are operational. Unit: Server (s)	httpWebFarmColl
OperationalServerCount	Percentage of operational servers. Unit: Percent	httpWebFarmColl
httpWebFarmColl	HTTP Web-farm collector Default polling interval: 1 minute	

InfoBox

Name	Description
ID	PATROL internal identifier of the Web-farm monitoring.
Parent ID	PATROL internal identifier of the Web-farm monitorings' parent.
Application ID	PATROL internal identifier of the Web-farm monitoring's root application.

Menu Commands

Menu Command	Description
New > String search	Creates a new String search for this Web-farm monitoring.
New > Numeric value extraction	Creates a new Numeric value extraction for this Web-farm monitoring.
New > Text Pre-processing	Creates a new Text pre-processing for this Web-farm monitoring.
Edit	Edits the Web-farm monitoring settings.
Add hosts	Adds new hosts to the Web-farm monitoring. A new Web Request monitoring will be created for each host added.
Set Thresholds	Sets Thresholds for the parameters of this instance
Set Polling Interval	Sets the Polling interval for the instance
Set Alert Actions	Adds specific Alert Actions to the Web-farm monitoring.
Cut	Cuts this Web-farm monitoring object.
Copy	Copies this Web-farm monitoring object.
Paste	Pastes a previously copied or cut String search or Numeric value extraction.
Delete	Deletes the Web-farm monitoring and all its dependent objects.
Rename	Renames the Web-farm monitoring object
Pause monitoring	Pauses the Web-farm monitoring as well as all its dependent objects.
Resume monitoring	Resumes the Web-farm monitoring as well as all its dependent objects.
Refresh parameters	Refreshes all instance parameters of the Web-farm monitoring.

9. SW_JMX

Parameters

Name	Description	Value set by
JMXColl	JMX collector. Executes the JMX polling query Default polling interval: 2 minutes	
ExecutionStatus	Displays the output of the JMX poll execution Unit: 0 =OK; 1= ALARM Default polling interval: 2 minutes	JMXColl
Value	Displays the value of an attribute in integers Default polling interval: 2 minutes	JMXColl
Text	Displays the value of an attribute in text Default polling interval: 2 minutes	JMXColl

InfoBox

Name	Description
ID	PATROL internal identifier of the JMX polling object
Parent ID	PATROL internal identifier of the JMX polling object's parent
Application ID	PATROL internal identifier of the JMX polling object's root application
Server type	Type of JMX server (JBoss/WebLogic/generic etc.)
Host	Displays name of host machine
Port	Displays port number of JMX server
JMX Query	Displays the query to be executed
User Name	Displays the user name
Path to java	Displays the path of the java virtual machine on the local server (e.g.%JAVA_HOME%\bin)
Timeout	Displays the execution timeout
Domain	Displays the domain monitored
Key property	Displays the key property monitored
Attribute	Displays the attribute monitored

Menu Commands

Menu Command	Description
New > String search	Creates a new String search for this JMX polling object
New > Numeric value extraction	Creates a new Numeric value extraction for this JMX polling object
New > Text Pre-Processing	Creates a new Text pre-processing for this JMX polling object
Edit	Edits the JMX polling object's monitoring settings
Set Thresholds	Allows you to set or edit the thresholds
Set Polling interval	Sets the polling interval for this JMX polling object monitoring
Set Alert actions	Adds specific Alert Actions to the JMX polling monitoring
Cut	Cuts this object
Copy	Copies this object
Paste	Pastes a previously copied or cut JMX polling object
Delete	Deletes the JMX polling and all its dependent objects
Rename	Allows you to rename this JMX polling object monitoring
Pause monitoring	Pauses the monitoring of this JMX polling object
Resume monitoring	Resumes the monitoring of this JMX polling object
Refresh parameters	Refreshes all instance parameters of the JMX polling object

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10. SW_KMWATCH

Parameters

Name	Description	Value set by
KMWatchColl	Collects values by getting the information from the monitored parameter and setting the KM Watch value parameter with this value Default polling interval: 1 minute	
Value	Value of the parameter that is being monitored. Unit: Depends on the parameter.	KMWatchColl

InfoBox

Name	Description
ID	PATROL internal identifier of the KM Watch monitoring.
Parent ID	PATROL internal identifier of the KM Watch's parent.
Application ID	PATROL internal identifier of the KM Watch's root application.
Class	Class of the parameter that is being monitored.
Instance	Instance of the parameter that is being monitored.
Parameter	Name of the parameter that is being monitored.
Scale	Scale used for the parameter's value.

Menu Commands

Menu Command	Description
Edit	Edits the KM Watch monitoring settings.
Set Thresholds	Sets Thresholds for the parameters of this instance
Set Polling Interval	Sets the Polling interval for the instance
Set Alert Actions	Adds specific Alert Actions to the KM Watch monitoring.
Cut	Cuts this KM Watch object.
Copy	Copies this KM Watch object.
Delete	Deletes the KM Watch monitoring.
Rename	Renames the KM Watch monitoring object.
Pause monitoring	Pauses the KM Watch monitoring.
Resume monitoring	Resumes the KM Watch monitoring.
Refresh parameters	Refreshes all instance parameters of the SW_KMWATCH class.

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11. SW_NTEVENTS

Parameters

Name	Description	Value Set By
MatchingEventCount	Number of matching Windows events. Unit: Event	SW_SENTRY/NTEventColl every 2 minutes
MatchingEventRate	Rate of matching Windows events. Unit: Event/minute	SW_SENTRY/NTEventColl every 2 minutes

InfoBox

Name	Description
ID	PATROL internal identifier of the Windows Event monitoring.
Parent ID	PATROL internal identifier of the Windows Event's parent.
Application ID	PATROL internal identifier of the Windows Event's root application.
Event Log	Indicates which EventLog is searched.
Event source	Source of the event to be searched for.
Event ID	ID of the event to be searched for.
Acknowledging NT Event	Is the auto-acknowledgment activated?
Acknowledge	What has to be acknowledged: one event or all events?
Timeout	Time after which a matching Windows event is acknowledged.
Run Alert Actions	Whether Alert Actions are executed for each match.

Menu Commands

Menu Command	Description
Edit	Edits the Windows Event monitoring settings.
Set Thresholds	Sets Thresholds for the parameters of this instance
Set Polling Interval	Sets the Polling interval for the instance
Set Alert Actions	Adds specific Alert Actions to the Windows Event monitoring.
Cut	Cuts this Windows Event monitoring object.
Copy	Copies this Windows Event monitoring object.
Delete	Deletes the Windows Event monitoring.
Rename	Renames the Windows Event monitoring.
Acknowledge all and reset	Acknowledges all alerts and resets the <i>MatchingEventCount</i> parameter to '0'
Pause monitoring	Pauses the Windows Event monitoring.
Resume monitoring	Resumes the Windows Event monitoring.
Refresh parameters	Refreshes all instance parameters of the SW_NTEVENTS class.

12. SW_NTPERFORMANCE

Parameters

Name	Description	Value set by
NTPerformanceColl	Collects Windows Performance counter values. Default Polling Interval: 2 minutes	
Value	Value of the monitored Windows Performance counter. Unit: Depends on the parameter	NTPerformanceColl

InfoBox

Name	Description
ID	PATROL internal identifier of the Windows Performance monitoring.
Parent ID	PATROL internal identifier of the Windows Performance's parent.
Application ID	PATROL internal identifier of the Windows Performance's root application.
Performance object	Name of the Windows Performance object that is read.
Counter	Name of the Windows Performance counter that is read.
Instances	Selected Windows Performance instances.
Value Type	How the value is calculated (average, maximum, etc.) when more than one instance was selected.
Scale	Scale used (the original performance value is divided by this number).

Menu Commands

Menu Command	Description
Edit	Edits the Windows Performance monitoring settings.
Set Thresholds	Sets Thresholds for the parameters of this instance
Set Polling Interval	Sets the Polling interval for the instance
Set Alert Actions	Adds specific Alert Actions to the Windows Performance monitoring.
Cut	Cuts this Windows Performance monitoring object.
Copy	Copies this Windows Performance monitoring object.
Delete	Deletes the Windows Performance monitoring.
Rename	Renames the Windows Performance monitoring.
Pause monitoring	Pauses the Windows Performance monitoring.
Resume monitoring	Resumes the Windows Performance monitoring.
Refresh parameters	Refreshes all instance parameters of the SW_NTPERFORMANCE class.

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13. SW_NT SERVICES

Parameters

Name	Description	Value set by
Status	Status of the Windows Service. Unit: 0 = Started, 1 = Intermediate state, 2 = Stopped.	SW_SENTRY/NTServiceColl every 2 minutes.

InfoBox

Name	Description
ID	PATROL internal identifier of the Windows Service monitoring.
Application ID	PATROL internal identifier of the Windows Service's parent.
Parent ID	PATROL internal identifier of the Windows Service's root application.
Service name	Name of the service that is monitored.

Menu Commands

Menu Command	Description
Edit	Edits the Windows Service monitoring settings.
Set Thresholds	Sets Thresholds for the parameters of this instance
Set Polling Interval	Sets the Polling interval for the instance
Set Alert Actions	Adds specific Alert Actions to the Windows Service monitoring.
Cut	Cuts this Windows Service monitoring object.
Copy	Copies this Windows Service monitoring object.
Delete	Deletes this Windows Service monitoring object.
Rename	Renames the Windows Service monitoring.
Pause monitoring	Pauses this Windows Service monitoring.
Resume monitoring	Resumes this Windows Service monitoring.
Refresh parameters	Refreshes all instance parameters of the SW_NT SERVICES class.

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14. SW_NT_WMI

Parameters

Name	Description	Value set by
WMIQueryColl	WMI Request collector. Executes the WMI query Default polling interval: 2 minutes	
ReturnOutput	Displays the output of the WMI query execution Unit: N/A . Default polling interval: 2 minutes	WMIQueryColl
QueryStatus	Displays whether or not the query was successfully executed Unit: 0= OK, 1= ALARM Default polling interval: 2 minutes	WMIQueryColl

InfoBox

Name	Description
ID	PATROL internal identifier of the WMI query object
Parent ID	PATROL internal identifier of the WMI query object's parent
Application ID	PATROL internal identifier of the T WMI query object's root application
Parent type	Type of the parent (File, OS Command, etc.)
Host	Displays name of host machine
Name Space	Displays WMI namespace (e.g.: root\cimv2)
WMI Query	Displays the query to be executed
User Name	Displays the user name

Menu Commands

Menu Command	Description
New > String search	Creates a new String search for this WMI query
New > Numeric value extraction	Creates a new Numeric value extraction for this WMI query
New > Tex Pre-processing	Creates a new Text pre-processing for this WMI query
Edit	Edits the Text-preprocessing monitoring settings
Set Thresholds	Allows you to set or edit the thresholds
Set Polling	Sets the polling interval for this WMI query monitoring
Set Alert actions	Adds specific Alert Actions to the WMI query monitoring
Cut	Cuts this object
Copy	Copies this object
Paste	Pastes a previously copied or cut WMI query object
Delete	Deletes the WMI query monitoring and all its dependent objects

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Menu Command	Description
Rename	Allows you to rename this WMI query monitoring
Pause monitoring	Pauses the monitoring of this WMI query object
Resume monitoring	Resumes the monitoring of this WMI query object
Refresh parameters	Refreshes all instance parameters of the WMI query monitoring

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15. SW_NUMBERS

Parameters

Name	Description	Value set by
Value	Value of the Numeric value extracted (no value will be given if no number is found).	The collector of the parent's object. Example: The collect for an instance of SW_NUMBERS attached to a file is performed by the fileColl collector.

InfoBox

Name	Description
ID	PATROL internal identifier of the Numeric value extraction.
Parent ID	PATROL internal identifier of the Numeric value extraction's parent.
Application ID	PATROL internal identifier of the Numeric value extraction's root application.
Parent Type	Type of the parent (File, OS Command, etc.).
Line Mode	Method used to select lines to search for the numeric value.
Column Mode	Method chosen to search for the numeric value in the line.
Parameter Type	Value taken into account if several values are found (last one, average, total, minimum/maximum).
Line Numbers	Line numeric value in which the Numeric Value will be searched.
Regular Expression	Regular expression used to select the lines where the Numeric Value will be searched
Skip blank Lines	Indicates whether or not blank lines are skipped when searching for the Numeric Value.
After/Before	Searches for the Numeric Value either after or before the specified string.
Specified String	Searches for the Numeric Value before or after this specified string.
Character Offset	Character offset where the Numeric Value is searched for.
Field Number	Number of the field in which the Numeric Value will be searched for.
Field Separators	Characters that separates the fields in a text line.
Unique Separator	Considers consecutives separators as a unique separator.

Menu Commands

Menu Command	Description
Edit	Edits the Numeric value extraction settings.
Set Thresholds	Sets Thresholds for the parameters of this instance
Set Polling Interval	Sets the Polling interval for the instance
Set Alert Actions	Adds specific Alert Actions to the Numeric value extraction.
Cut	Cuts this Numeric value extraction object.
Copy	Copies this Numeric value extraction object.
Delete	Deletes the Numeric value extraction object.

SENTRY SOFTWARE

Menu Command	Description
Rename	Renames the Numeric value extraction object.
Pause monitoring	Pauses the Numeric value extraction.
Resume monitoring	Resumes the Numeric value extraction.

SENTRY SOFTWARE

16. SW_OSCOMMANDS

Parameters

Name	Description	Value set By
ExecutionStatus	Status of the command line execution Unit: 0 = executed successfully, 1 = error while executing the OS command	OSCommandColl
ExecutionTime	Time taken by the command line to run. Unit: Seconds	OSCommandColl
OSCommandColl	Executes the Command Line and analyze its output.	
ReturnOutput	Displays the returned output of the Command Line Unit: N/A	OSCommandColl

InfoBox

Name	Description
ID	PATROL internal identifier of the Command Line execution.
Parent ID	PATROL internal identifier of the Command Line's parent.
Application ID	PATROL internal identifier of the Command Line's root application.
OS command	Command line that is given to the OS to execute.
Timeout	Maximum execution time before timeout.
Username	The command line is executed with this username.

Menu Commands

Menu Command	Description
New > Numeric value extraction	Creates a new Numeric value extraction for this Command Line.
New > String search	Creates a new String search for this Command Line.
New > Text Pre-processing	Creates a new Text pre-processing for this Command Line.
Edit	Edits the Command Line analysis settings.
Set Thresholds	Sets Thresholds for the parameters of this instance
Set Polling Interval	Sets the Polling interval for the instance
Set Alert Actions	Adds specific Alert Actions to the Command Line analysis.
Cut	Cuts this Command Line analysis object.
Copy	Copies this Command Line analysis object.
Paste	Pastes a previously copied or cut String search or Numeric value extraction.
Delete	Deletes the Command Line analysis and all its dependent objects.
Rename	Renames the command line execution monitoring object
Pause monitoring	Pauses the Command Line analysis as well as all its dependent objects.

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Menu Command	Description
Resume monitoring	Resumes the Command Line analysis as well as all its dependent objects.
Refresh parameters	Re-execute the Command Line (if needed) and refresh all parameters. All dependent objects will be refreshed as well (SW_STRINGS and SW_NUMBERS instances)

SENTRY SOFTWARE

17. SW_PROCESSES

Parameters

Name	Description	Value Set By
ChildCount	Displays the number of children of the matching process(es). Unit: Processes	SW_SENTRY/proColl
Count	Displays the number of processes that match the criteria. Unit: Processes	SW_SENTRY/proColl
HandleCount (NT only)	Displays the number of handles opened by the matching process(es). Unit: Handle	SW_SENTRY/proColl
PageFaultsPerSec (NT only)	Displays the number of page faults per second caused by the matching process(es). Unit: Page faults/sec	SW_SENTRY/proColl
PageFileBytes (NT only)	Displays the page file used by the matching process(es). Unit: Megabytes	SW_SENTRY/proColl
PrivateBytes (NT only)	Displays the private bytes of the matching process(es). Unit: Megabytes	SW_SENTRY/proColl
ProcessorTime	Displays the processor time percent used by the matching process(es). Unit: Percentage (%)	SW_SENTRY/proColl
ThreadCount (NT only)	Displays the number of threads of the matching process(es). Unit: Threads	SW_SENTRY/proColl
VirtualBytes	Displays the virtual memory used by the matching process(es). Unit: Megabytes.	SW_SENTRY/proColl
WorkingSet (NT only)	Displays the working set size of the matching process(es). Unit: Megabytes	SW_SENTRY/proColl

InfoBox

Name	Description
Object ID	PATROL internal identifier of the Process monitoring.
Object Type	Type of the object (Process).
Object Class	Class of the object (SW_PROCESSES).
Parent ID	PATROL internal identifier of the Process' parent.
Application ID	PATROL internal identifier of the Process' root application.

SENTRY SOFTWARE**Menu Commands**

Menu Command	Description
Edit	Edits the Process monitoring settings.
Set Thresholds	Sets Thresholds for the parameters of this instance
Set Polling Interval	Sets the Polling interval for the instance
Set Alert Actions	Adds specific Alert Actions to the Process monitoring.
Cut	Cuts this Process monitoring object.
Copy	Copies this Process monitoring object.
Delete	Deletes the Process monitoring.
Rename	Renames the Process monitoring object.
Pause monitoring	Pauses the Process monitoring.
Resume monitoring	Resumes the Process monitoring.
Refresh parameters	Refreshes all instance parameters of the SW_PROCESSES class.

SENTRY SOFTWARE

18. SW_SENTRY

A single instance of the SW_SENTRY class is created and labeled *Monitoring Studio*. Once installed, it is the only visible icon under the host icon in the PATROL Console. This icon gives you access to various monitoring tools available in Monitoring Studio. Monitored objects will be placed under the *Monitoring Studio* icon by default. You can also use this icon to create new application/container icons in the PATROL Console tree.

Parameters

Name	Description	Polling Interval
ApplicationColl	Collector that checks whether the application signature files are present, thereby indicating that the application is present and should be monitored. Signature files are specified when setting up a new application monitoring.	every 2 minutes
ExtraFileList	Non-visible	every 2 minutes
FileSystemColl	File system collector	every 2 minutes
NTEventColl	Windows Event collector	every 2 minutes
NTServiceColl	Windows Service collector	every 2 minutes
ProColl	Process Collector. Finds the processes that match the criteria and collects the performance information about the matching processes.	every 2 minutes

InfoBox

Name	Description
Contact	Contact information
Copyright	Copyright information
Product	Product name
Release	Release date of this version of Monitoring Studio
Support	Support information
Version	Monitoring Studio version number

Menu Commands

Menu Command	Description
New > Process monitoring...	Starts the process monitoring wizard.
New > Windows service monitoring...	Starts the Windows service monitoring wizard.
New > File monitoring and analysis...	Starts the file monitoring and analysis wizard.
New > Folder monitoring...	Starts the folder monitoring wizard.
New > File system monitoring...	Starts the file system monitoring wizard.
New > Command line analysis...	Starts the command line execution and analysis wizard.
New > Database query analysis...	Starts the database query analysis wizard.

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Menu Command	Description
New > Java MBean Polling...	Starts the JMX Polling wizard.
New > WMI Query analysis...	Starts the WMI Query analysis wizard.
New > Web request analysis...	Starts the Web request analysis wizard.
New > Web-farm monitoring...	Starts the Web-farm monitoring wizard.
New > SNMP polling...	Starts the SNMP polling wizard.
New > SNMP Trap listening...	Starts the SNMP trap listening wizard.
New > Windows Event monitoring...	Starts the Windows EventLog monitoring wizard. (On Windows Agents only)
New > Windows Performance monitoring...	Starts the Windows Performance counter monitoring wizard. (On Windows Agents only)
New > KM Watch...	Starts the KM Watch wizard.
New > Application icon (container)...	Starts the new application/container icon wizard.
Paste	Pastes the previously copied object under the Monitoring Studio icon.
Delete all	Deletes all items created under the Monitoring Studio icon.
Tools > Process Viewer	Starts the process viewer tool.
Tools > File Viewer	Starts the file viewer tool
Tools > Windows EventLog Reader	Starts the Windows EventLog Reader tool. (On Windows Agents only)
Tools > SNMP Browser	Starts the SNMP browser tool.
Tools > Real-time SNMP Trap listener	Starts the real-time SNMP trap listener.
Import and Export > Export configuration	Starts the Export configuration wizard.
Import and Export > Import configuration	Starts the Import configuration wizard.
Options > Thresholds management...	Shows the thresholds management options.
Option > Debug	Shows the debug options.
License...	Shows the currently registered license keys and registers new license keys.
About...	Shows the version and general information about Monitoring Studio.

SENTRY SOFTWARE

19. SW_SNMP_POLLING

Parameters

Name	Description	Value set by
Content	Content of the polled SNMP variable. Note: Only applicable to variables of string type. Unit: N/A	SNMPPollingColl
SNMPPollingColl	Polls the SNMP variable and collects the information received.	
Status	Status of the SNMP Polling. Unit: 0 = working, 1 = a problem occurred	SNMPPollingColl
Value	Value of the SNMP variable. Note: Only applicable to variables of numeric type Unit: Varies	SNMPPollingColl

InfoBox

Name	Description
ID	PATROL internal identifier of the SNMP Polling.
Parent ID	PATROL internal identifier of the SNMP Polling's parent.
Application ID	PATROL internal identifier of the SNMP Polling's root application.
OID	OID that is polled.
OID type	Type of the value of the selected OID (numeric or string).
Host	Host name where the SNMP agent is running.
Port	Port used to connect to the SNMP agent.
Community	Community used to connect to the SNMP agent.

Menu Commands

Menu Command	Description
New > Numeric value extraction	Creates a new Numeric value extraction for this SNMP Polling.
New > String search	Creates a new String search for this SNMP Polling.
Edit	Edits the SNMP Polling settings.
Set Thresholds	Sets Thresholds for the parameters of this instance
Set Polling Interval	Sets the Polling interval for the instance
Set Alert Actions	Adds specific Alert Actions to the SNMP Polling.
Cut	Cut this SNMP Polling object.
Copy	Copies this SNMP Polling object.
Paste	Pastes a previously copied or cut String search or Numeric value extraction.

SENTRY SOFTWARE

Menu Command	Description
Delete	Deletes the SNMP Polling and all its dependent objects.
Rename	Renames the SNMP Polling object
Pause monitoring	Pauses the SNMP Polling as well as all its dependent objects.
Resume monitoring	Resumes the SNMP Polling as well as all its dependent objects.
Refresh parameters	Re-poll the OID and refresh all parameters. All dependent objects will be refreshed as well (SW_STRINGS and SW_NUMBERS instances)

SENTRY SOFTWARE

20. SW_SNMP_TRAPS

Parameters

Name	Description	Value set by
MatchingTrapRate	Number of SNMP traps matching the search. Unit: Trap	SNMPtrapColl
MatchingTrapCount	Number of matching SNMP traps per minute. Unit: Trap	SNMPtrapColl and a detached PSL process when a trap is received.
SNMPTrapColl	The SNMP trap collector is a detached PSL process launched at the start of BMC® Performance Manager Monitoring Studio. This process waits for SNMP Traps and analyzes traps as it receives them. Default polling interval: 2 minutes	

InfoBox

Name	Description
ID	PATROL internal identifier of the SNMP Trap listening.
Parent ID	PATROL internal identifier of the SNMP Trap listening's parent.
Application ID	PATROL internal identifier of the SNMP Trap listening's root application.
Source IP	IP address of the SNMP agent that raises the traps.
Community	Community used to listen to traps.
Enterprise ID	Enterprise ID of the SNMP agent that raises the traps.
Trap Number	Number of the searched trap.
OID 1	OID of the first varBind of the searched traps.
String 1	Searched string in the first varBind.
OID 2	OID of the second varBind of the searched traps.
String 2	Searched string in the second varBind.
Acknowledging Trap Number	Number of the trap that will acknowledge this trap search.
Acknowledging OID 1	OID of the first varBind of the trap that will acknowledge this trap search.
Acknowledging String 1	Searched string in the first varBind of the acknowledging trap.
Acknowledging OID 2	OID of the second varBind of the trap that will acknowledge this trap search.
Acknowledging String 2	Searched string in the second varBind of the acknowledging trap.
Timeout	Timeout for auto-acknowledgment.
Run Alert Actions	Indicates when Alert Actions should be executed.

Menu Commands

Menu Command	Description
Edit	Edits the SNMP Trap listening settings.
Set Thresholds	Sets Thresholds for the parameters of this instance
Set Polling Interval	Sets the Polling interval for the instance
Set Alert Actions	Adds specific Alert Actions to the SNMP Trap listening.
Cut	Cuts this SNMP Trap listening object.
Copy	Copies this SNMP Trap listening object.
Delete	Deletes the SNMP Trap listening object.
Rename	Renames the SNMP Trap listening object
Acknowledge all and reset	Acknowledges all alerts on the SNMP Trap object and resets the <i>MatchingTrapCount</i> parameter to '0'
Pause monitoring	Pauses the SNMP Trap listening object.
Resume monitoring	Resumes the SNMP Trap listening.
Refresh monitoring	Refreshes all parameters of the SW_SNMP_TRAP class

21. SW_STRINGS

Parameters

Name	Description	Value set by
LastMatchingLines	<p>Lines matching the String search.</p> <p>Unit: N/A</p> <p>Note: The number of lines displayed can be changed to a custom value by adding the variable "/MASAI/SENTRY8/LastMachingLinesNumber" with the proper line number in the PATROL Agent configuration.</p> <p>Default: the 10 last matching lines are displayed</p>	The collector of the parent object (SW_FILES, SW_OSCOMMANDS, etc.)
MatchingLineCount	<p>Number of lines matching the String search</p> <p>Unit: Line</p>	The collector of the parent object (SW_FILES, SW_OSCOMMANDS, etc.)
MatchingLineRate	<p>Number of lines matching the String search per minute</p> <p>Unit: Line/minute</p> <p>The MatchingLineRate parameter is only activated for String searches in LOG files and in "never-ending" command lines.</p>	The collector of the parent object (SW_FILES, SW_OSCOMMANDS, etc.)

InfoBox

Name	Description
ID	PATROL internal identifier of the String search.
Parent ID	PATROL internal identifier of the String search's parent.
Application ID	PATROL internal identifier of the String search's root application.
Parent type	Type of the parent (File, OSCCommand, etc.).
Search	Search mode.
Lines	Lines that are searched.
Acknowledge String	String that auto-acknowledges this string search.
Acknowledge	Is the auto-acknowledgment enabled.
Timeout	Timeout for the auto-acknowledgment.
Run Alert Actions	When Alert Actions have to be executed.

Menu Commands

Menu Command	Description
Edit	Edits the String search settings.
Set Thresholds	Sets Thresholds for the parameters of this instance
Set Polling Interval	Sets the Polling interval for the instance
Set Alert Actions	Adds specific Alert Actions to the String search.
Cut	Cuts this String search object.
Copy	Copies this String search object.
Delete	Deletes the String search.
Rename	Renames the String search object
Acknowledge all and reset	Acknowledge all alerts for this object. The <i>MatchingLineCount</i> parameter is set to zero.
Pause monitoring	Pauses the String search.
Resume monitoring	Resumes the String search.

22. SW_TRANSFORM

Parameters

Name	Description
TransformResult	Lines matching the Text pr-processing. Unit: N/A

InfoBox

Name	Description
ID	PATROL internal identifier of the Text Pre-processing object
Parent ID	PATROL internal identifier of the Text Pre-processing object's parent
Application ID	PATROL internal identifier of the Text Pre-processing object's root application
Parent type	Type of the parent (File, OSCCommand, etc.)

Menu Commands

Menu Command	Description
New > String search	Creates a new String search for this Text- pre-processing object
New > Numeric value extraction	Creates a new Numeric value extraction for this Text- pre-processing object
Edit	Edits the Text-preprocessing monitoring settings
Cut	Cuts this object
Copy	Copies this object
Paste	Pastes a previously copied or cut Text pre-processing object
Delete	Deletes the Text-preprocessing monitoring and all its dependent objects
Rename	Allows you to rename this Text- pre-processing object
Pause monitoring	Pauses the monitoring of this Text- pre-processing object
Resume monitoring	Resumes the monitoring of this Text- pre-processing object

About BMC® Software

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