

[DocV1.UsetheAdminconsole](#)

Use the Admin console

The admin console is used to monitor:

- the online user sessions and their browsing behavior,
- the previous user sessions and their browsing behavior,
- the portal response times
- the portlet container info such as the processAction() and render() response times
- the logs files and the error
- the cache hits, misses and states

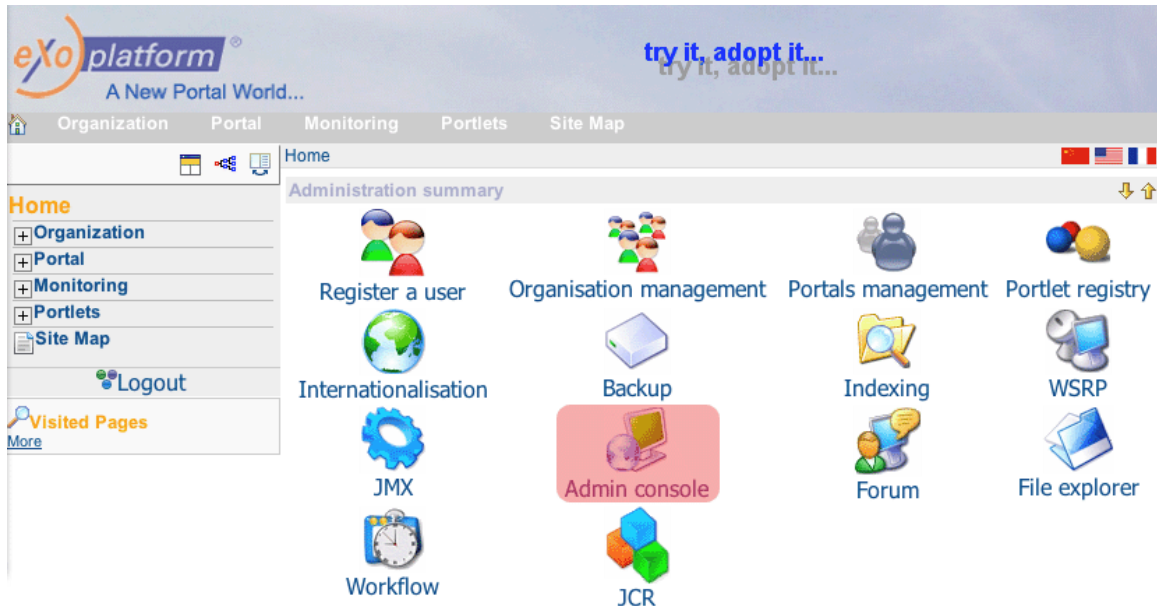
If eXo Platform is deployed on the new JDK 5.0 then it is also possible to monitor:

- the Operating Sytem information
- the JVM runtime information
- the processes information
- the classes information
- the memory information
- the memory manager information
- the memory pool information
- the garbage collectoir information

The admin console can also be used to:

- dynamically define the logs levels
- reset the caches

The portlet can be reached from the admin home page as shown in the next screenshot:



We will describe all the fonctionnalités by describing the three main monitor nodes:

- the basic monitors
- the log monitors
- the cache monitors
- the JVM monitors

Monitors node

There are 4 basic monitors:

- the live sessions
- the previous sessions
- the portal response times
- the portlet container monitor

The live sessions and previous sessions works almost the same way. The main difference is that one shows the live sessions of users that are still online while the session logs shows the sessions of past visits.

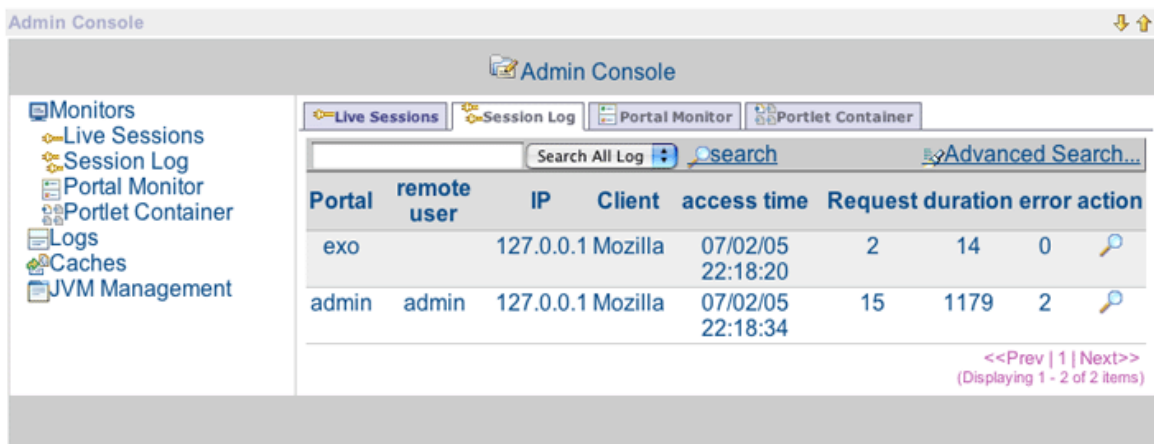
They both contain several fields such as:

- portal: the user context portal that was reached
- remote user: the user that was browsing the portal, that value is not null only

- when the user is authenticated
- the IP address of the remote user
 - the number of requests
 - the client browser type
 - the session duration
 - some information on the number of error that occurred during the session...

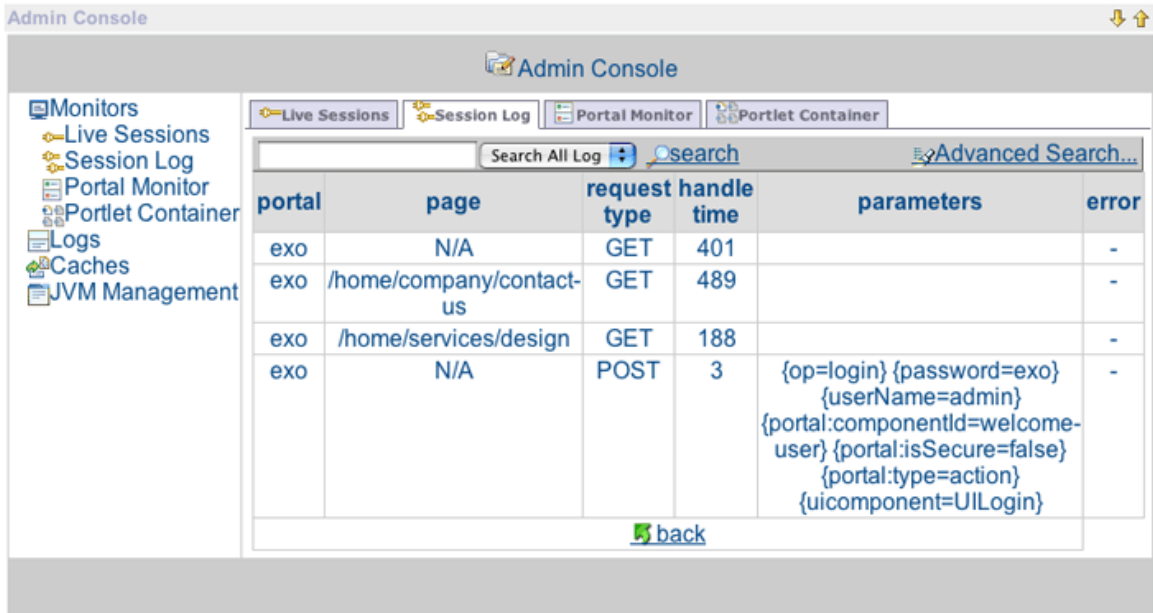


The session log of previous connection also contains a search bar as shown in the next screenshot. Indeed the number of visits can be important and an advanced search tool is convenient if not necessary.



You can get a more precise description of the session which can be useful if you want to analyse the user browsing behavior (marketing or sales side effects can be imagined here).

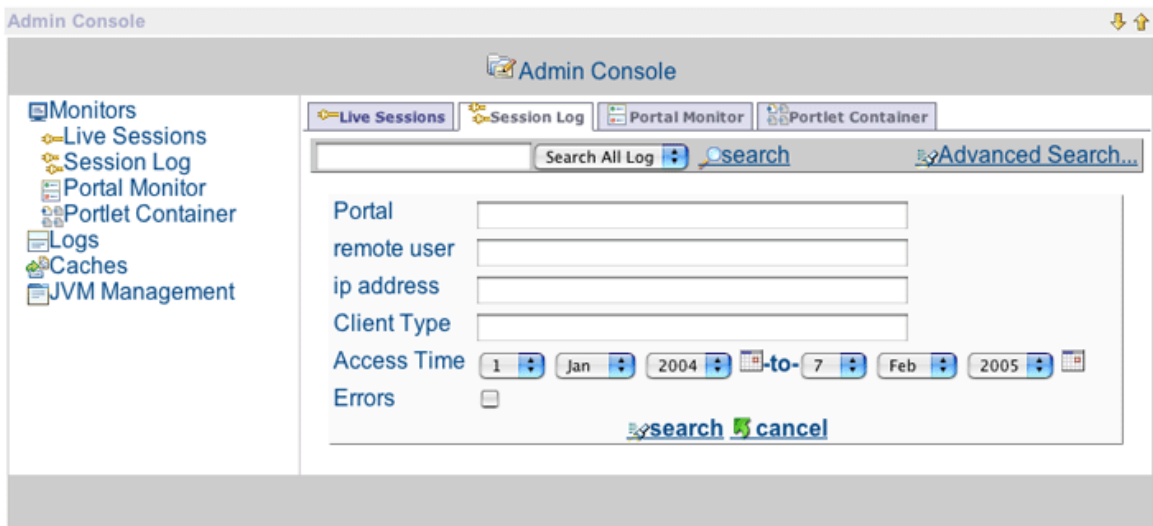
There, you can view the visited pages as well as the parameters used in the submitted form along with the response time.



The screenshot shows the 'Admin Console' window with the 'Portal Monitor' tab selected. A table displays log entries with columns: portal, page, request type, handle time, parameters, and error. The table contains four rows of data. A search bar and a 'back' link are also visible.

portal	page	request type	handle time	parameters	error
exo	N/A	GET	401		-
exo	/home/company/contact-us	GET	489		-
exo	/home/services/design	GET	188		-
exo	N/A	POST	3	{op=login} {password=exo} {userName=admin} {portal:componentId=welcome-user} {portal:isSecure=false} {portal:type=action} {uicomponent=UILogin}	-

The advanced search form contains most of the fields that can be seen in the table. You can also search for sessions that only contains errors and for some session that were done in a known time range.



The screenshot shows the 'Admin Console' window with the 'Portal Monitor' tab selected. The 'Advanced Search' form is displayed, containing fields for Portal, remote user, ip address, Client Type, Access Time, and Errors. The Access Time field is set to a range from January 1, 2004, to February 7, 2005. Search and cancel buttons are at the bottom.

The portal monitor tab of the monitors node displays several time ranges as rows. Each row contains several information such as the number of requests that occurred for that time range, the mini and max response time, as well as the average time. Note that the global average does not really reflect the truth and that some requests should be taken out of the calculus if we wanted to have a more accurate average. Indeed some long request may impact the entire average while those should not be taken into account.

Time Range	Request Counter	Min(ms)	Max(ms)	Avg(ms)
0-199	2	0	61	56
200-399	2	0	265	251
400-599	0	0	0	0
600-799	0	0	0	0
800-999	1	0	830	830
1000-1199	0	0	0	0
1200-1399	0	0	0	0
1400-1599	0	0	0	0
1600-1799	0	0	0	0
1800-1999	2	0	2925	2372
All	7	0	2925	884

The portlet container monitor displays two type of information:

- the portlet application info
- the portlet information

The portlet and portlet application can be browsed using the folder structure in the left column of the portlet. The main items are the portlet application name and the sub item are the portlet that application contains.

The portlet application monitor, as shown in the next screenshot prints global information about the portlet the application contains. It especially tells if the portlet was initialized, in other words if it were ever requested by a user. Indeed, the eXo Platform does portlet lazy loading which means the portlets are loaded in the portlet container only when they are called the first time.

Portlet Name	Initialized	Initialization Time	Last Access Time	Last Failure Access Time	Last Init Failure Access Time
RssPortlet	false	-	-	-	-
IFramePortlet	false	-	-	-	-

If you pick up a portlet from the left column, you should see the following screen. It displays the information on the response time for the two phases of the portlet request: processAction() and render() method calls. It is also possible to see, for the render phase, how many times the container managed cache has been reached.

Admin Console

Admin Console

Monitors

Live Sessions

Session Log

Portal Monitor

Portlet Container

Logs

Caches

JVM Management

Live Sessions

Session Log

Portal Monitor

Portlet Container

Web

RssPortlet

IframePortlet

Jwsrp

Jcommunications

Juser

Jexo-admin

Jexomvc

Jweather

Jcontent

Jnav

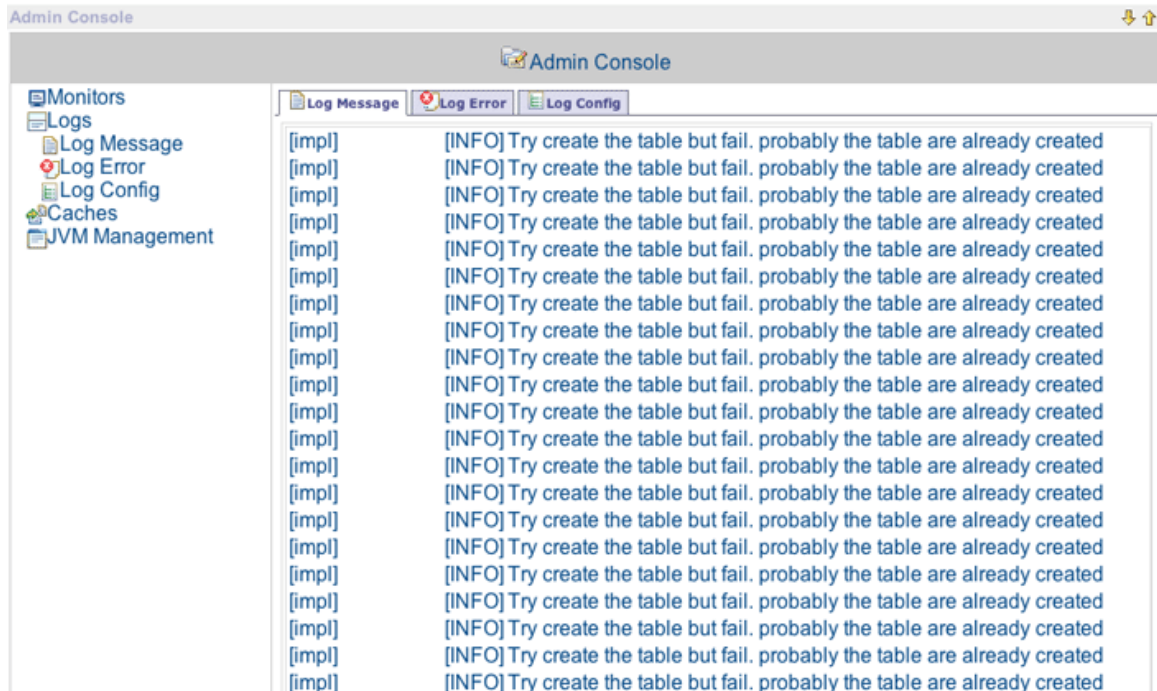
Jworkflow

Time Range	process action method				render method				
	Counter	Min(ms)	Max(ms)	Avg(ms)	Counter	Cache Hit	Min(ms)	Max(ms)	Avg(ms)
0 - 99	-5	0	0	0	-5	0	0	0	0
100 - 199	-5	0	0	0	-5	0	0	0	0
200 - 299	-5	0	0	0	-5	0	0	0	0
300 - 399	-5	0	0	0	-5	0	0	0	0
400 - 499	-5	0	0	0	-5	0	0	0	0
500 - 599	-5	0	0	0	-5	0	0	0	0
600 - 699	-5	0	0	0	-5	0	0	0	0
700 - 799	-5	0	0	0	-5	0	0	0	0
800 - 899	-5	0	0	0	-5	0	0	0	0
900 - 999	-5	0	0	0	-5	0	0	0	0

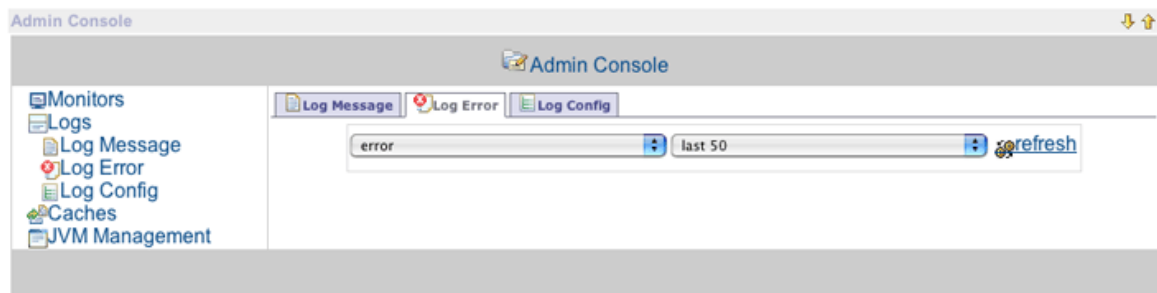
Logs node

The log node is quite convenient as it contains three tabs. The first two are used to view the log while the third one is used to change the log levels at run time.

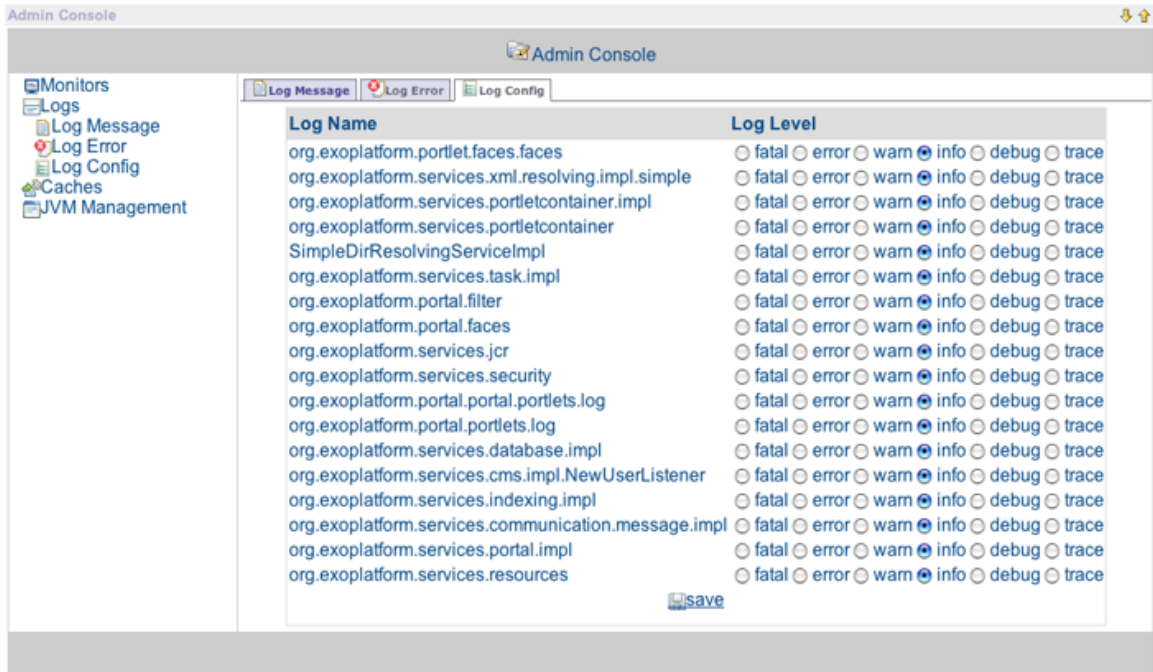
The Log message tab will simply print the log trace. You can define the size of the trace you want to see as well as the log levels (trace, debug, info, warn, error and fatal) you want to trace.



The Log error tab emphasis the error and fatal trace so that you can directly focus on those. Like for the Log Message tab you can refresh and tell the length of the trace you want to see.



The third tab allows you to change the log levels at run time for all the configure log regions as shown in the next screenshot.



Note that all this log monitoring is only possible in your own portlets if you use the eXo Platform log service.

Cache node

The cache monitors allows the admin to view all the objects that are stored in the eXo Platform Cache Service. For each cache region, it displays:

- the number of entries in the cache
- the maximum number of entries the region can have
- the number of time a cached object was retrieved from the cache
- the number of time a lookup in the cache was unable to returned a cached object. That for example occurs before the cached is filled on the first request when the object has just been created.

Admin Console						
Admin Console						
Monitors	Cache Name	Entries	Max	Hit	Miss	-
Logs	org.exoplatform.services.resources.impl.ResourceBundleDataImpl	1	1000	0	15	@clear
Caches	org.exoplatform.services.portal.log.impl.SessionLogDataImpl	1	1000	0	2	@clear
JVM Management	org.exoplatform.services.portletcontainer.impl.portletAPIImpl.bundle.ResourceBundleManager	0	100	0	101	@clear
	org.exoplatform.services.communication.message.impl.AccountImpl	0	1000	0	0	@clear
	org.exoplatform.services.communication.message.impl.MessageImpl	0	1000	0	0	@clear
	org.exoplatform.services.config.impl.ConfigurationDataImpl	0	1000	0	1	@clear
	org.exoplatform.services.portal.model.PortalConfig	2	1000	16	2	@clear
	org.exoplatform.services.resources.impl.ResourceBundleServiceImpl	12	100	111	12	@clear
	org.exoplatform.services.communication.forum.hibernate.ForumServiceContainerImpl	0	100	0	0	@clear
	org.exoplatform.portlets.content.display.component.UIStaticContentTab	4	100	2	4	@clear
	org.exoplatform.services.communication.message.impl.FolderImpl	0	1000	0	0	@clear
	org.exoplatform.services.portal.impl.NodeImpl	2	1000	0	2	@clear
	org.exoplatform.services.communication.message.impl.AttachmentImpl	0	1000	0	0	@clear
	org.exoplatform.services.organization.impl.UserImpl	1	1000	1	1	@clear
	org.exoplatform.services.organization.hibernate.UserProfileQueryHandler	2	1000	0	2	@clear
	org.exoplatform.services.portal.model.Page	3	1000	3	3	@clear
@refresh						

JVM monitor node

Important note, the following screens are only viewable if the eXo platform is running on a JDK 5.0 JVM.

The JVM monitor leverages the new JDK 5.0 management functionalities and displays in 8 subnodes:

- the Operating System information:

Admin Console		
Admin Console		
Monitors	Name	Windows XP
Logs	Version	5.1
Caches	Available Processors	1
JVM Management	CPU Achitecture	x86
Operating System		
JVM Runtime Info		
Process Info		
Classes Info		
Memory Info		
Memory Manager Info		
Memory Pool Info		
Garbage Collector Info		

- the JVM runtime information:

Admin Console		
<div>Monitors</div> <div>Logs</div> <div>Caches</div> <div>JVM Management</div> <div>Operating System</div> <div>JVM Runtime Info</div> <div>Process Info</div> <div>Classes Info</div> <div>Memory Info</div> <div>Memory Manager Info</div> <div>Memory Pool Info</div> <div>Garbage Collector Info</div>	Name	268@labtop
	Spec Name	Java Virtual Machine Specification
	Spec Vendor	Sun Microsystems Inc.
	Spec Version	1.0
	Management Spec Version	1.0
	Virtual Machine Name	Java HotSpot(TM) Client VM
	Virtual Machine Vendor	Sun Microsystems Inc.
	Virtual Machine Version	1.5.0_01-b08
	Boot Classpath Supported	true
	Boot Class Path	c:\jdk1.5.0\jre\lib\rt.jar;c:\jdk1.5.0\jre\lib\18.....
	Class Path	c:\jdk1.5.0\lib\tools.jar;f:\java\exo-tomcat\bin\lb.....
	Library Path	c:\jdk1.5.0\bin;;C:\WINDOWS\system32;C:\WINDOWS;c.....
	Start Time	1107796999593
	Uptime	278453
	Input Arguments	-Xshare:auto -Xms128m -Xmx256m -Djava.security.auth.login.config=f:\java\exo-tomcat\conf\jaas.conf -Dorg.apache.commons.logging.Log=org.apache.commons.logging.impl.SimpleLog -Djava.endorsed.dirs=/cygdrive/f/java/exo-tomcat/common/endorsed -Dcatalina.base=f:\java\exo-tomcat -Dcatalina.home=f:\java\exo-tomcat -Djava.io.tmpdir=f:\java\exo-tomcat\temp
	System Properties	sun.io.unicode.encoding=UnicodeLittle java.version=1.5.0_01

- the processes information:

Admin Console					
<div>Monitors</div> <div>Logs</div> <div>Caches</div> <div>JVM Management</div> <div>Operating System</div> <div>JVM Runtime Info</div> <div>Process Info</div> <div>Classes Info</div> <div>Memory Info</div> <div>Memory Manager Info</div> <div>Memory Pool Info</div> <div>Garbage Collector Info</div>	Thread Name	Thread ID	Thread State	Native	Suspended
	TP-Monitor	44	TIMED_WAITING	false	false
	TP-Processor4	43	RUNNABLE	true	false
	TP-Processor3	42	WAITING	false	false
	TP-Processor2	41	WAITING	false	false
	TP-Processor1	40	WAITING	false	false
	http-8080-Monitor	39	TIMED_WAITING	false	false
	http-8080-Processor25	38	WAITING	false	false
	http-8080-Processor24	37	RUNNABLE	true	false
	http-8080-Processor23	36	WAITING	false	false
	http-8080-Processor22	35	RUNNABLE	false	false
	http-8080-Processor21	34	WAITING	false	false
	http-8080-Processor20	33	WAITING	false	false
	http-8080-Processor19	32	WAITING	false	false
	http-8080-Processor18	31	WAITING	false	false
	http-8080-Processor17	30	WAITING	false	false
	http-8080-Processor16	29	WAITING	false	false
	http-8080-Processor15	28	WAITING	false	false
	http-8080-Processor14	27	WAITING	false	false

If you click on any process you will get a more detail information for that thread.

Admin Console		
Admin Console		
Monitors	Thread Name	TP-Monitor
Logs	Thread ID	44
Caches	Thread State	TIMED_WAITING
JVM Management	Native	false
Operating System	Suspended	false
JVM Runtime Info	Blocked Count	0
Process Info	Blocked Time	-1
Classes Info	Waited Count	8
Memory Info	Waited Time	-1
Memory Manager Info	Lock Name	org.apache.tomcat.util.threads.ThreadPool\$MonitorRunnable@16b69d7
Memory Pool Info	Lock Owner Id	-1
Garbage Collector Info	Lock Owner Name	
Cancel		

- the classes information:

Admin Console		
Admin Console		
Monitors	Compiler Info	
Logs	Compiler Name	HotSpot Client Compiler
Caches	Total Compilation Time	1119
JVM Management	Compilation Time Monitoring Supported	true
Operating System	Class Loading Info	
JVM Runtime Info	Loaded Class Count	4844
Process Info	Total Loaded Class Count	4844
Classes Info	Unloaded Class Count	0
Memory Info		
Memory Manager Info		
Memory Pool Info		
Garbage Collector Info		

- the memory information

Admin Console		
Admin Console		
<ul style="list-style-type: none"> Monitors Logs Caches JVM Management Operating System JVM Runtime Info Process Info Classes Info Memory Info Memory Manager Info Memory Pool Info Garbage Collector Info 	Memory Info	
	Heap Memory	init = 134217728(131072K) used = 26312128(25695K) committed = 133300224(130176K) max = 266403840(260160K)
	Non Heap Memory	init = 29556736(28864K) used = 33438392(32654K) committed = 43188224(42176K) max = 121634816(118784K)
	Object Pending Finalization Count	0
	Verbose	false

- the memory manager information

Admin Console		
Admin Console		
<ul style="list-style-type: none"> Monitors Logs Caches JVM Management Operating System JVM Runtime Info Process Info Classes Info Memory Info Memory Manager Info Memory Pool Info Garbage Collector Info 	Name	Is Valid
	CodeCacheManager	true
	Copy	true
	MarkSweepCompact	true
		Memory Pool Names
		Code Cache,
		Eden Space, Survivor Space,
		Eden Space, Survivor Space, Tenured Gen, Perm Gen, Perm Gen [shared-ro], Perm Gen [shared-rw],

- the memory pool information

Admin Console			
Monitors Logs Caches JVM Management Operating System JVM Runtime Info Process Info Classes Info Memory Info Memory Manager Info Memory Pool Info Garbage Collector Info	Name	Memory Type	Memory Usage
	Code Cache	Non-heap memory	init = 196608(192K) used = 3836992(3747K) committed = 3866624(3776K) max = 33554432(32768K)
	Eden Space	Heap memory	init = 8323072(8128K) used = 2547560(2487K) committed = 8388608(8192K) max = 16580608(16192K)
	Survivor Space	Heap memory	init = 983040(960K) used = 327072(319K) committed = 983040(960K) max = 2031616(1984K)
	Tenured Gen	Heap memory	init = 123928576(121024K) used = 18232536(17805K) committed = 123928576(121024K) max = 247791616(241984K)
	Perm Gen	Non-heap memory	init = 8388608(8192K) used = 18156840(17731K) committed = 18350080(17920K) max = 67108864(65536K)
	Perm Gen [shared-ro]	Non-heap memory	init = 8388608(8192K) used = 5604736(5473K) committed = 8388608(8192K) max = 8388608(8192K)
	Perm Gen [shared-rw]	Non-heap memory	init = 12582912(12288K) used = 5851816(5714K) committed = 12582912(12288K) max = 12582912(12288K)

If you want to see more detail information on any of the memory pool just click on the pool name and you should be able to see a screen similar as the next one:

Admin Console		
Monitors Logs Caches JVM Management Operating System JVM Runtime Info Process Info Classes Info Memory Info Memory Manager Info Memory Pool Info Garbage Collector Info	Memory Pool Name	Survivor Space
	Memory Pool Manager Names	MarkSweepCompact Copy
	Valid	true
	Memory Type	Heap memory
	Memory Usage	init = 983040(960K) used = 327072(319K) committed = 983040(960K) max = 2031616(1984K)
	Memory Peak Usage	init = 983040(960K) used = 983040(960K) committed = 983040(960K) max = 2031616(1984K)
	Usage Threshold	`\${usageThreshold}` has error: null
	Usage Threshold Count	`\${usageThresholdCount}` has error: null
	Usage Threshold Supported	false
	Usage Threshold Exceeded	`\${isUsageThresholdExceeded()}` has error: null
	Collection Usage Threshold	0
	Collection Usage Threshold Exceeded	true
	Collection Usage Threshold Count	0
	Collection Usage	init = 983040(960K) used = 327072(319K) committed = 983040(960K) max = 2031616(1984K)
	Collection Usage Threshold Supported	true
	Cancel	

- the garbage collector information

Admin Console					
Admin Console					
Monitors					
Logs					
Caches					
JVM Management					
Operating System					
JVM Runtime Info					
Process Info					
Classes Info					
Memory Info					
Memory Manager Info					
Memory Pool Info					
Garbage Collector Info					
	Name	Is Valid	Collection Count	Collection Time	Memory Pool Names
	Copy	true	76	391	Eden Space, Survivor Space,
	MarkSweepCompact	true	2	354	Eden Space, Survivor Space, Tenured Gen, Perm Gen, Perm Gen [shared-ro], Perm Gen [shared-rw],

[DocV1.UsetheAdminconsole](#) (en)

Cr  ateur: XWiki.benjamin.mestrallet Creation Date: 2005/02/07 21:39

Dernier Auteur: XWiki.benjamin.mestrallet Last Modification Date: 2005/02/15 22:48

Copyright 2004 (c) Auteurs des pages