

# System Monitoring

## Overview

This guides describes common Attivio platform monitoring tasks.



### Required Modules

These features require that the **memory** module be included when you run createproject to create the project directories.

[View incoming links.](#) >>

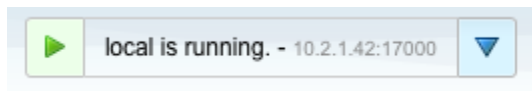
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## Determine Current Attivio System State (Started/Stopped)

### All Administration Pages

All pages in the [Use the Attivio Administrator](#) display a status at the top of the page.



### System Information Screen

Open the [Use the Attivio Administrator](#) and navigate to the **Monitors -> System Information -> System** page. Under the "Runtime Information" block the current status will be displayed with more details:

ATTIVIO/Administrator local is running. - 127.0.0.1:17000 Version 3.0.0

**System Information**

**System**  
Windows 7 6.1 (amd64)  
Sun Microsystems Inc. Java HotSpot(TM)  
64-Bit Server VM 20.1-b02  
2 Processor(s)  
Current Time: 2011-09-16T12:12:00

**Directories**  
Data Directory: c:\attivio-projects30\factbook\data-local  
Log Directory: c:\attivio-projects30\factbook/logs-local  
Attivio Home: C:\attivio30  
Attivio Project: C:\attivio-projects30\factbook

**Runtime Information**  
Virtual Machine name: 6956@blue2  
0 errors  
36 warnings  
Status: started  
System Start Time: 2011-09-16T10:57:42  
System Uptime: 1hr, 14min  
Fault Tolerant: false  
Ordered Messaging: false  
Application Name: factbook  
Default Ingest Instances: 2  
Default Query Instances: 2  
Default Message Queue Size: 3  
Thread Count: 536

**License**  
License URI: file:/C:/attivio30/conf/attivio.license  
Licensed to: Attivio  
Version: 3.X  
Expires: Never

Figure 2: System Information Page System Status

## Log Files

Attivio console output and `attivio.<node_name>.log` log files contain the following lines to indicate system status:

Status	Output
starting	Everything before the <b>started</b> line
started	<pre>INFO Attivio - System Ready (startupTime=28s)</pre>
shutting down	<pre>INFO Attivio - Shutting down Attivio server...</pre>
shut down	Process no longer running

## Determine if Attivio Query Capabilities are Online

If the following URI returns a valid XML QueryResponse then the system is capable of processing queries.

If load-balancers or other monitoring devices are configured to periodically test this URI, it is recommended that the `totalRows` attribute be checked for a non-zero value assuming that, for a particular Attivio application, content is persisted in the Attivio index.



If requesting this URI from another network location, `localhost` should be replaced with the URI for the target Attivio server. If running Attivio on a different port, change the port number to `attivio.baseport + 1`. If Attivio is configured to serve queries using a different query workflow, the `workflows` querystring parameter should be changed to reference the correct workflow.

```
http://localhost:17001/query?workflows=search&q=**
```

Sample Expected Response:

```
<queryResponse time="62" workflowTime="329" totalRows="260" clientId="" redelivered="false">
  <history>
    <string>10.2.1.42:17000/admin.queryReceiver-0</string>
    <string>10.2.1.42:17000/search.runSecureQuery-0</string>
    ....
  </history>
</queryResponse>
```

## Determine System Processing Status / Performance

Open the [Use the Attivio Administrator](#) and navigate to the **Monitors -> Diagnostics -> Component Statistics** page. The grid on the Component Statistics page displays the current and overall processing rates for every component in the system.

Statistic	Description
Msgs	Total number of messages seen by Attivio since system start.
Docs	Total number of documents seen by Attivio since system start.
Msgs/Sec	Messages per second in elapsed time processed while clients are active.
Docs/Sec	Documents processed per second elapsed time while clients are active.
% Processing	Percent of time component spent processing messages.
% Blocked Send	Percent of time component was blocked trying to send to follow-on components or other destinations.
% Blocked Input	Percent of time component was blocked waiting for input.

The statistics grid can be sorted by any of these columns by clicking on the column header.



When diagnosing performance issues, first sort by `Docs/Sec`. If the slowest active component (non-query) is spending most of its time processing, then it is the bottleneck. On multi-core systems, increasing the number of instances for that component can improve throughput.

If most components are blocked on input, sort by `% Processing` to find the one that is working the most, then focus on it for optimization.

## Component Statistics

Shows component activity from all nodes for the past 60 seconds. Last updated Fri Sep 11 09:55:05 PDT 2015

Name	Msgs	Docs	Msgs/Sec	Docs/Sec ▲	% Processing	% Blocked Send	% Blocked Input
admin.abc-index-local-stats	13	0	333	0	0	0	100
findCountries.findCountries	10,501	1,800	246,125	0	0	1.2	97.1
findCountries.pickCountry	10,501	1,800	282,571	0	0	1.5	96.7
admin.documentResultReceiver	23,333	0	6,895	0	1.1	0	99.1
admin.aieprincipals-local-stats	13	0	333	0	0	0	100
admin.index-stats	13	0	27	0	0	0	100
rssNews.fetchRss	30	21	35	27	0	0	100
rssNews.splitRss	30	21	84	65	0	0	100
countryXml.parseXml	789	780	178	175	1.8	0	88.9
rssNews.parseXml	30	21	257	200	0	0	100
countryXml.subflow-ingest	789	780	511	504	0.7	1	93.7
sink.contentStoreCleaner	10,501	10,444	554	552	6.1	0	74.6
indexer.index-content-dispatcher	10,501	10,444	687	685	4.8	2	68.2

Figure 3: Component Statistics Page

## Determine the Documents Currently Being Processed

Open the [Use the Attivio Administrator](#) and navigate to the **Monitors -> Diagnostics -> Document States** page. The Document States page displays a grid listing every document being processed by the system and the component or thread processing each document.



As many documents can be in process concurrently, this list may be truncated for performance reasons.

## Document State

In flight: 49 ; total size: 0.38 mb

MessageId ▲	State	Component	Uri	ThreadType	ThreadName	DocIds
560	Queuing	ingest.subflow-indexer	avm://indexer.index-content-dispatcher	Worker	ingest.subflow-indexer.2	CITY-Pakit Yar Khan
564	Queued		avm://sink			CITY-Unite Topeka
574	MessagesBeingProcessed	indexer.index-content-dispatcher	avm://indexer.index-content-dispatcher	Manager	indexer.index-content-dispatcher.1	CITY-Russ Kislodovsk
575	Queuing	indexer.index-content-dispatcher	avm://sink	Worker	indexer.index-content-dispatcher.6	CITY-Egypt
576	InitialState	indexer.index-content-dispatcher	avm://sink	Worker	indexer.index-content-dispatcher.3	CITY-Niger
577	Queued		avm://indexer.index-content-dispatcher			CITY-South Boksburg
578	InitialState	indexer.index-content-dispatcher	avm://sink	Worker	indexer.index-content-dispatcher.2,ingest.subflow-indexer.7	CITY-Italy-
580	Queued		avm://sink			CITY-China
582	MessagesBeingProcessed	sink.contentStoreCleaner	avm://sink	Receiver	avmMsgReceiver:avm://sink	CITY-Color
585	InitialState	ingest.subflow-indexer	avm://indexer.index-content-dispatcher	Worker	ingest.subflow-indexer.5	CITY-Turk
...	...	...	...	...	avmMsgReceiver:avm://indexer.index-content-dispatcher,ingest.subflow-	...

Figure 4: Document State Page

## Determine the current heap/memory usage



### Required Modules

These features require that the **memory** module be included when you run `createproject` to create the project directories.

Main Article: [Modules - Memory Statistics](#)

In addition to the Memory Statistics module, JConsole or other standard JMX tools can be used to view memory, thread, cpu usage and other low level process information.

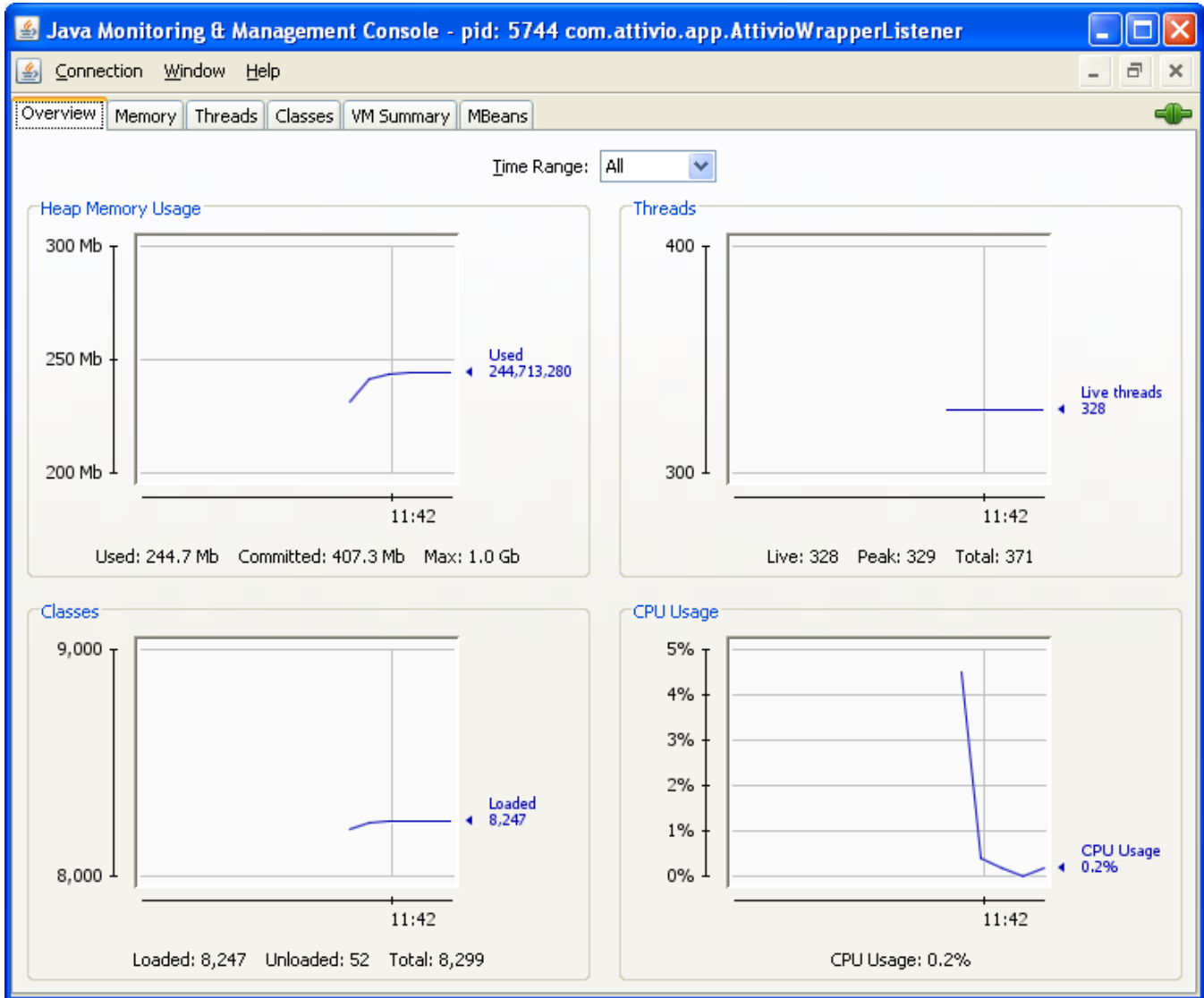


Figure 5: Using JConsole to View Attivio Memory Statistics