

Quick Start Guide for Enterprise Monitor - BWMON (version 2.1)

The following instructions will help you install and configure Enterprise Monitor Platform version 2.1 (EM) with BW Monitor Solution Package (BWMON) to monitor your BW Engines..

Prerequisites

TIBCO Hawk 4.8.x, 4.9.x, or 5.1.x and any dependencies including TIBCO Rendezvous and TIBCO EMS.

Java JDK 1.6 or 1.7 (required if using Hawk 5.1.x)

Application server (e.g., Tomcat 6.0+)

Instructions for UNIX/Linux

NOTE: The following steps assume you are using bash as the OS shell.

- 1) Download and unzip the following packages to your local UNIX/Linux server in this order:

```
unzip -a rtvapm_std_xxx.zip  
unzip -a rtvapm_bwmon_xxx.zip
```

If correctly installed, you should see a **rtvapm** directory with **bwmon** as a subdirectory.

- 2) In a terminal window, navigate to **rtvapm/common/bin** and move the **fixperms.sh** script to the **rtvapm** directory. Run the script from **rtvapm** directory as follows.

```
./fixperms.sh
```

Note that there are two periods with a space between them.

- 3) Set the environment variables to point to the appropriate installation directories, e.g.,

```
export JAVA_HOME=/opt/java/jdk1.7.0  
export RV_ROOT=/opt/tibco/tibrv/8.3  
export HAWK_ROOT=/opt/tibco/hawk/4.9  
export TIBJMS_ROOT=/opt/tibco/ems/6.1 (if using EMS as transport)
```

- 4) Update the PATH and LD_LIBRARY_PATH environment variables as follows.

```
export PATH=$JAVA_HOME/bin:$RV_ROOT/bin:$HAWK_ROOT/bin:$PATH  
export LD_LIBRARY_PATH= $RV_ROOT/lib
```

- 5) Create a new directory **my_rtvapm_projects** parallel to the **rtvapm** directory.

```
mkdir my_rtvapm_projects
```

- 6) Copy over the **emsample** directory from **rtvapm/projects** directory to the newly created **my_rtvapm_projects** directory.

```
cp -r $RTVAPM_HOME/projects/emsample my_rtvapm_projects
```

The new directory structure will look as follows:

```
rtvapm  
my_rtvapm_projects  
emsample
```

- 7) Navigate to **rtvapm** directory and run the following script.

```
./rtvapm_init.sh
```

This sets up **\$RTVAPM_HOME** environment variable.

- 8) Navigate to **my_rtvapm_projects/emsample** and run the following script.

```
./rtvapm_user_init.sh
```

This sets up **\$RTVAPM_USER_HOME** environment variable.

- 9) Navigate to **\$RTVAPM_USER_HOME/servers/bwmon**

- 10) Rename **sample.properties** file to **<customname>.properties**. e.g.,

```
mv sample.properties myproject.properties
```

- 11) Edit **myproject.properties** with a text editor (e.g., vi) to make the following changes.

- (a) If using RV as the BW transport, uncomment this line and replace with correct values.

```
collector.sl.rtvview.hawk.hawkconsole <connection_name>  
<transport> <domain_name> <service> <network> <daemon>
```

- (b) If using EMS as the transport, uncomment this property instead and replace with correct values:

```
collector.sl.rtvview.hawk.hawkconsole <connection_name>  
<transport> <domain_name> <url> <username> <password>
```

- (c) Specify which BW agents to monitor. Uncomment the following properties and replace with correct values. The **UNIX_AGENTS** property lists all BW agents

deployed on UNIX servers whereas the WIN_AGENTS property lists all BW agents deployed on Windows servers.

```
collector.sl.rtvview.hawk.agentGroup UNIX_AGENTS  
unixagentname1(domain_name) unixagentname2(domain_name) ...
```

```
collector.sl.rtvview.hawk.agentGroup WIN_AGENTS  
winagentname1(domain_name) winagentname2(domain_name) ...
```

Note the domain_name and agentnames are case sensitive. The agentname can be obtained from the associated hawkagent.cfg file for that agent. The domain_name should match the value specified in (a) or (b) and can be obtained from the hawkagent.cfg as well.

Example:

The following properties are configured for three BW domains: testdomain1 and testdomain2 are using RV transport whereas testdomain3 is using an EMS transport.

```
collector.sl.rtvview.hawk.hawkconsole testdomain1 rvd testdomain1  
7575 ; tcp:7474  
collector.sl.rtvview.hawk.hawkconsole testdomain2 rvd testdomain2  
7474 ; tcp:7474  
collector.sl.rtvview.hawk.hawkconsole testdomain3 ems testdomain3  
tcp://host:7222 username password
```

The three domains have a mixture of Windows and UNIX BW agents deployed so both UNIX_AGENTS and WIN_AGENTS properties are defined.

```
collector.sl.rtvview.hawk.agentGroup UNIX_AGENTS  
unixagentname1(testdomain1) unixagentname2(testdomain1)  
unixagentname3(testdomain3) unixagentname4(testdomain3)
```

```
collector.sl.rtvview.hawk.agentGroup WIN_AGENTS  
winagentname1(testdomain2) winagentname2(testdomain2)  
winagentname3(testdomain2)
```

Note that UNIX_AGENTS property should contain all the UNIX BW agents from all domains. Similarly, the WIN_AGENTS property should contain all the Windows BW agents from all domains.

12) Install BWAgent plug-in microagent for each BW agent in your Hawk domain.

Note: This custom microagent retrieves important metrics such as BW engine deployment status and max heap size allocated for each engine.

(a) Copy **BWAgentPlugin.hma** and **BWAgentPlugin.jar** from **\$RTVAPM_HOME/rtvapm/bwmon/lib** to TRA plugin directory for a BW agent in the domain to be monitored. e.g.,

`/opt/tibco/tra/domain/testdomain1/plugin`

(b) Restart HAWK agent.

(c) Repeat steps 12(a) and 12(b) for each agent in the domain.

13) From the servers directory, type the following commands

start_rtv.sh all central -properties:myproject

start_rtv.sh all bwmon -properties:myproject

where **-properties:myproject** refers to the **myproject.properties** file.

This will start up all the required components for EM and for BWMON.

Note that EM will automatically recognize this `start_rtv.sh` command.

14) Review the logs for errors

\$RTVAPM_USER_HOME/servers/bwmon/logs

\$RTVAPM_USER_HOME/servers/central/logs

15) Copy **emsample.war** located in **\$RTVAPM_HOME/bwmon/webapps** directory to Tomcat **webapps** directory.

16) Start Tomcat (`/apache-tomcat-6.0.18-sl/bin> startup.sh`).

17) Bring up a browser and view the monitor at <http://localhost:8068/emsample>
(login: admin/admin)

Instructions for Windows

- 1) Download and unzip the following packages to your local UNIX/Linux server in this order:

```
unzip -a rtvapm_std_xxx.zip  
unzip -a rtvapm_bwmon_xxx.zip
```

If correctly installed, you should see a **rtvapm** directory with **bwmon** as a subdirectory.

- 2) Set the environment variables to point to the appropriate installation directories, e.g.,

```
JAVA_HOME=/opt/java/jdk1.7.0  
RV_ROOT=/opt/tibco/tibrv/8.3  
HAWK_ROOT=/opt/tibco/hawk/4.9  
TIBJMS_ROOT=/opt/tibco/ems/6.1 (if using EMS as transport)
```

- 3) Update the PATH environment variable as follows.

```
PATH=JAVA_HOME/bin;$RV_ROOT\bin;$HAWK_ROOT\bin;$PATH
```

- 4) Create a new directory **my_rtvapm_projects** parallel to the **rtvapm** directory.
- 5) Copy over the **emsample** directory from **rtvapm\projects** directory to the newly created **my_rtvapm_projects** directory. The new directory structure will look as follows.

```
rtvapm  
my_rtvapm_projects  
emsample
```

- 6) Bring up a Windows Command Prompt and navigate to **rtvapm** directory. Run the following script

```
rtvapm_init.bat
```

This sets up **%RTVAPM_HOME%** environment variable.

- 7) Navigate to **my_rtvapm_projects\emsample** and run the following script.

```
rtvapm_user_init.bat
```

This sets up **%RTVAPM_USER_HOME%** environment variable.

- 8) Navigate to **%RTVAPM_USER_HOME%\servers\bwmon**.

- 9) Rename **sample.properties** file to **<customname>.properties**. e.g.,

```
rename sample.properties myproject.properties
```

10) Edit **myproject.properties** with a text editor to make the following changes.

(a) If using RV as the BW transport, uncomment this line and replace with correct values.

```
collector.sl.rtvview.hawk.hawkconsole <connection_name>  
<transport> <domain_name> <service> <network> <daemon>
```

(b) If using EMS as the transport, uncomment this property instead and replace with correct values:

```
collector.sl.rtvview.hawk.hawkconsole <connection_name>  
<transport> <domain_name> <url> <username> <password>
```

(c) Specify which BW agents to monitor. Uncomment the following properties and replace with correct values. The UNIX_AGENTS property lists all BW agents deployed on UNIX servers whereas the WIN_AGENTS property lists all BW agents deployed on Windows servers.

```
collector.sl.rtvview.hawk.agentGroup UNIX_AGENTS  
unixagentname1(domain_name) unixagentname2(domain_name) ...
```

```
collector.sl.rtvview.hawk.agentGroup WIN_AGENTS  
winagentname1(domain_name) winagentname2(domain_name) ...
```

Note the domain_name and agentnames are case sensitive. The agentname can be obtained from the associated hawkagent.cfg file for that agent. The domain_name should match the value specified in (a) or (b) and can be obtained from the hawkagent.cfg as well.

Example:

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collector.sl.rtvview.hawk.hawkconsole testdomain2 rvd testdomain2  
7474 ; tcp:7474  
collector.sl.rtvview.hawk.hawkconsole testdomain3 ems testdomain3  
tcp://host:7222 username password
```

The three domains have a mixture of Windows and UNIX BW agents deployed so both UNIX_AGENTS and WIN_AGENTS properties are defined.

```
collector.sl.rtvview.hawk.agentGroup UNIX_AGENTS  
unixagentname1(testdomain1) unixagentname2(testdomain1)  
unixagentname3(testdomain3) unixagentname4(testdomain3)
```

```
collector.sl.rtvview.hawk.agentGroup WIN_AGENTS
winagentname1(testdomain2) winagentname2(testdomain2)
winagentname3(testdomain2)
```

Note that UNIX_AGENTS property should contain all the UNIX BW agents from all domains. Similarly, the WIN_AGENTS property should contain all the Windows BW agents from all domains.

11) Install BWAgent plug-in microagent for each BW agent in your Hawk domain.

Note: This custom microagent retrieves important metrics such as BW engine deployment status and max heap size allocated for each engine.

(a) Copy **BWAgentPlugin.hma** and **BWAgentPlugin.jar** from **\$RTVAPM_HOME/rtvapm/bwmon/lib** to TRA plugin directory for a BW agent in the domain to be monitored. e.g.,

```
/opt/tibco/tra/domain/testdomain1/plugin
```

(b) Restart HAWK agent.

(c) Repeat steps 11(a) and 11(b) for each agent in the domain.

12) From the servers directory, type the following commands

```
start_rtv.bat all central -properties:myproject
```

```
start_rtv.bat all bwmon -properties:myproject
```

where **-properties:myproject** refers to the **myproject.properties** file.

This will start up all the required components for EM and for EMSMON.

Note that EM will automatically recognize this start_rtv.bat command.

13) Review the logs for errors

```
%RTVAPM_USER_HOME%\servers\bwmon\logs
```

```
%RTVAPM_USER_HOME%\servers\central\logs
```

14) Copy **emsample.war** located in **%RTVAPM_HOME%\bwmon\webapps** directory to Tomcat **webapps** directory.

15) Start Tomcat (C:\apache-tomcat-6.0.18-s\bin> **startup.bat**).

16) Bring up a browser and view the monitor at <http://localhost:8068/emsample> (login: admin/admin)