

TIBCO Hawk[®]

Release Notes

Software Release 4.9.0
November 2010

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Contents

Release Notes

1

New Features

2

Release 4.9

2

Release 4.8.1

4

Release 4.8.0

4

Release 4.7.0

4

Release 4.6.0

5

Release 4.5.1

6

Release 4.5.0

6

Release 4.2.1

7

Release 4.2.0

7

Release 4.1.1

8

Release 4.1.0

8

Release 4.0.5

10

Release 4.0.4

11

Release 4.0.3

12

Release 4.0.2

12

Release 4.0.1

12

Release 4.0.0

12

Changes in Functionality

13

Release 4.9

13

Release 4.8.1

13

Release 4.8.0

13

Release 4.7.0

13

Release 4.6.1

14

Release 4.6.0

14

Release 4.5.1

14

Release 4.5.0

15

Release 4.2.1

15

Release 4.2.0

15

Release 4.1.1

15

Release 4.1.0

16

Release 4.0.5

17

Release 4.0.4

17

Release 4.0.3

17

Release 4.0.2

17

Release 4.0.1

18

Release 4.0.0

18

- Deprecated Features 20
 - Release 4.9 20
 - Release 4.8.1 20
 - Release 4.8.0 20
 - Release 4.7.0 20
 - Release 4.6.1 20
 - Release 4.6.0 20
 - Release 4.5.1 21
 - Release 4.5.0 21
 - Release 4.2.1 21
 - Release 4.2.0 21
 - Release 4.1.1 21
- Migration and Compatibility 22
 - Release 4.9 22
 - Release 4.8.1 23
 - Release 4.8.0 23
 - Release 4.7.0 23
 - Release 4.6.1 23
 - Release 4.6.0 23
 - Release 4.5.1 23
 - Release 4.5.0 24
 - Release 4.2.1 24
 - Release 4.2.0 24
 - Release 4.1.1 25
 - Release 4.1.0 25
 - Release 4.0.5 26
 - Release 4.0.4 26
 - Release 4.0.3 26
 - Release 4.0.2 26
 - Release 4.0.1 26
 - Release 4.0.0 27
- Closed Issues 29
 - Critical Security Upgrade 29
 - Issues Closed in this Release 30
 - Release 4.0.x 43
- Known Issues 48

Release Notes

This document contains the release notes for TIBCO Hawk[®] software release 4.9.0.

Check the TIBCO Product Support web site at <http://support.tibco.com> for product information that was not available at release time. Entry to this site requires a username and password. If you do not have a username, you can request one. You must have a valid maintenance or support contract to use this site.

Topics

- [New Features, page 2](#)
- [Changes in Functionality, page 13](#)
- [Deprecated Features, page 20](#)
- [Migration and Compatibility, page 22](#)
- [Closed Issues, page 29](#)
- [Known Issues, page 48](#)

New Features

This section lists features added since the last major release of this product.

Release 4.9

- **New Microagents**

Java Virtual Machine Microagent - Monitoring of the Java Virtual Machine(s) processes started by the same user on a local machine using Java Attach API through Hawk.

ActiveMatrix Host Microagent - Allows monitoring and managing of TIBCO ActiveMatrix host and nodes running on the local machine.

Common Logging Event Publisher Microagent - Publish events from TIBCO Hawk using the TIBCO Common Logging in the Base Event Format (BEF)/Common Base Event (CBE).

- **Additional Methods to Existing Microagents**

Logfile:onXMLElement

System:getSwapInfo Method and System:getSystemInfo methods on AIX.

- **Additional Return Values to Existing Methods**

System:getSwapInfo method on Solaris now return values for Up Time, Real Memory, Free Memory, and % Free Real Memory.

System:getSystemInfo method on Solaris and HP-UX platforms now return values for Up Time, Real Memory, Free Memory, and % Free Real Memory.

- **Additional Platform Support**

Windows Vista x86 (32-bit, 64-bit)

Windows 2008 Server R2 x86 (64-bit)

Windows 7 x86 (32-bit, 64-bit)

SUSE Enterprise Linux 10, 11 x86 (32-bit, 64-bit)

IBM i5 OS V5R4, V6R1

- **TIBCO Software Supported Versions**

TIBCO Rendezvous 8.1.1 and above. (Note that Rendezvous 8.2 is required for use on the IBM i5/OS iSeries Platform.)

TIBCO Runtime Agent 5.6.x

TIBCO Administrator 5.6.x

- **Third Party Software Support**

JRE 1.6

- TIBCO Hawk installer now uses universal installer that supports:

- Multiple *TIBCO_HOME*
- Concurrent installation of multiple versions in single *TIBCO_HOME*
- Silent and Command line installation
- Separate configuration home (*CONFIG_FOLDER*) from the TIBCO installation folder

- **TIBCO Hawk Configuration Utility** provides a new option **Advanced > Custom Microagent** that allows you to load the microagents selectively.

- The custom microagent configuration module deals with the `-timeout` command line option which relates to the timeout value.

- New rulebase that allows you to monitor and manage ActiveMatrix 3.0 host microagent.

- The method subscription interval in microagent methods can now be set to a minimum of one second (down from 5 seconds in the previous release). This includes method subscriptions using console API and subscription interval use in rulebases. The Hawk HMA such as Process microagent are updated to enable data refresh in one second.

When subscribed with lower subscription interval, Hawk Agent and HMA consume more CPU resource as overhead of increase in processing.

- The Hawk components HTTP Adapter and EMS Admin plug-in were separate installers prior to 4.9. These components are now merged into Hawk 4.9 installer.

- TIBCO Hawk HTTP Adapter makes the TIBCO Hawk environment web-enabled. TIBCO Hawk HTTP Adapter is based upon the TIBCO Hawk Console API and provides all the facilities required to perform agent discovery, monitoring of agent status, monitoring of agent alerts, method

invocation, and method subscription. Multiple TIBCO Hawk domains can be monitored at the same time.

- TIBCO Hawk Enterprise Message Service Microagent software enables TIBCO Hawk to monitor and manage TIBCO Enterprise Message Service servers.

- **New Enhancements in HTTP Adapter**

- Timeout option to control the expired Hawk Agent : The following parameter can be specified in web.xml as:

```
<init-param><param-name>AgentExpiredRetentionPeriod</param-name><param-value>15</param-value> </init-param>
```

- Supports HTTPS transport if the web server is configured to accept requests over HTTPS transport. No specific configuration is required on the HTTP Adapter side.
- Allows multiple domain configuration.

Release 4.8.1

There are no new features for this release.

Release 4.8.0

- **Additional Platform Support** TIBCO Hawk now supports the following platforms:
 - Microsoft Windows Vista Business Edition
 - Microsoft Windows 2003 Server (64-bit).
- **Additional Methods**
 - Registry:setQWORD: This method (on Microsoft Windows platforms) creates or overwrites a QWORD entry in the Registry.
 - Registry:getQWORD: This method (on Microsoft Windows platforms) returns a QWORD entry from the Registry.
- Both 32-bit and 64-bit installation packages are available on the AIX, Linux, Solaris, HP-UX, and Microsoft Windows platforms.

Release 4.7.0

- **New Plug-in for TIBCO Administrator** TIBCO Hawk now provides a new plug-in Hawk Console. This plug-in provides functionality to view and manage Hawk agents within the configured Hawk domains.

The Hawk Console from previous Hawk releases is now renamed All Alerts Console.

- **Additional Methods**
 - `Rendezvous.onRvdRetransmissionSuppressed` - This method (on all platforms) provides notifications for advisory messages generated when the Rendezvous daemon rejects retransmission requests.
 - `RuleBaseEngine.updateExternalVariables` This method (on all platforms) reads the variables file and re-loads all rulebases that use the variables listed in the variable file.
- **Additional Platform Support** TIBCO Hawk now supports Mac OS X 10.4 on x86.

Release 4.6.0

- **Internal variable for Rulebase actions (Hawk Domain)** Added a new Internal Variable, Hawk Domain.
- **New Platform Support** TIBCO Hawk now supports Mac OS X 10.3, Solaris 2.10 (x86/x86-64), and AIX 5.3.
- The **Help** menu on the TIBCO Hawk Display toolbar has an additional option: Runtime information. This option lists the following information:
 - Domain: The TIBCO Hawk Domain being used.
 - Root: The TIBCO Hawk installation directory.
 - Transport: The transport parameters being used.
 - JVM: The JVM version being used.
 - Class Path: The current class path.
- **Messaging Support** You can now connect to the TIBCO Enterprise Message Service server using SSL. See *TIBCO Hawk Installation and Configuration Guide* for details.
- **New microagent** A new built-in microagent **Messaging** is available. This microagent provides methods to send and receive messages using the primary transport parameters of TIBCO Hawk agent.
- **New Plug-ins for TIBCO Administrator** TIBCO Hawk now provides the following two plug-in
 - **Hawk Console** This plug-in provides the All Alerts console which allows you to see all TIBCO Hawk alerts generated in your domain. This plug-in will add an *Agent* tab to the View Machine dialog. The Agent tab provides

functionality to invoke and subscribe to TIBCO Hawk methods on the machines in your domain

- **Monitoring Management** This plug-in provides functionality to deploy and undeploy monitoring archive files (MAR) to the machines in your domain. A command-line utility is also provided to add, delete, deploy, and undeploy MAR files.

- **Utility to create MAR files** This version of TIBCO Hawk provides a standalone utility to create MAR files using rulebases created using TIBCO Hawk Display.

- **Additional Method**

- `FileSystem:getByFileSystem` - This method (on UNIX platforms) returns information about all file system mounted on a machine.

Release 4.5.1

New Platform Support TIBCO Hawk now supports Solaris 2.10.

Release 4.5.0

- **Messaging Support** TIBCO Hawk now supports TIBCO Enterprise Message Service as the primary message transport.

For details on configuring TIBCO Hawk using TIBCO Enterprise Message Service, see *TIBCO Hawk Installation and Configuration Guide*.

- **Additional Methods**

- `Self:doAMIDiscovery`: This method (on all platforms) re-discovers all AMI instrumented applications.
- `Self:onMicroAgentEvent`: This method (on all platforms) reports changes in the status of the microagent.

See *TIBCO Hawk Methods Reference* for details on these microagent methods.

- **AMI API support for TIBCO Rendezvous Disconnect/Reconnect** When an application using TIBCO Hawk AMI API is disconnected from the agent, it will try to reconnect to the agent.
- **Fault Tolerant Session Option for Event Service** A dedicated fault tolerant TIBCO Rendezvous session is used if the option is specified for TIBCO Hawk Event Service.
- **Additional Return Parameters for Methods** `System:getTunableInfo` and `TibRendezvous:onRvDaemonStatus`.

On the Linux platform, the `System:getTunableInfo` method now returns the following additional parameters:

- Inodes Allocated
- Inodes Free

The method `TibRendezvous:onRvDaemonStatus` (on all platforms) now returns the following additional parameters:

- Messages Sent/Per Second
- Messages Received/Per Second
- Bytes Sent/Per Second
- Bytes Received/Per Second
- Packets Sent/Per Second
- Packets Received/Per Second
- **New Platform Support** TIBCO Hawk now supports the following platform:
 - Linux 2.4 on x86_64

Release 4.2.1

- **New Platform Support** TIBCO Hawk now supports the following platforms:
 - AS/400 systems running OS/400 version V5R1M0
 - HP-UX 11.2 IA64 (Itanium)
- **TIBCO Hawk Display** The TIBCO Hawk Display has the following enhancements:
 - In the canvas view, users have an option to hide the cluster icon. This option is available in both the menu and the properties dialog.
 - The Advanced Action Editor screen can now be resized.

Release 4.2.0

- **HMA Duplicate Checking** The TIBCO Hawk HMA now detects duplicate instances and automatically shuts down the duplicates. This ensures that a given TIBCO Rendezvous session has only one running HMA instance.
- **TIBCO Hawk Event Service Alert Properties** The TIBCO Hawk Event Service persists alert action property fields as separate columns in the `HawkAlertClearInfo` table. See the *TIBCO Hawk Administrator's Guide* for more details.

- **Supported Locales** TIBCO Hawk supports Japanese and Latin-1 locales on Windows platforms.
- **New Installer** TIBCO Hawk now uses the standard TIBCO installer.

Release 4.1.1

No new features were introduced in Release 4.1.1.

TIBCO Hawk Event Service is now certified for IBM DB2-UDB.

Release 4.1.0

The following features were introduced in Release 4.1.0.

- **Configuration Object API** The TIBCO Hawk Configuration Object API is a Java language interface for writing programs that can build and update configuration objects used by TIBCO Hawk Agents. Three types of configuration objects are included in Configuration Object API: rulebase, schedule, and rulebase map.

The TIBCO Hawk Rulebase API Reference in TIBCO Hawk 4.0.5 is now part of the TIBCO Hawk Configuration Object API Reference. To reflect these changes, the title of the *TIBCO Hawk Rulebase API Reference* has been changed to *TIBCO Hawk Configuration Object API Reference*.

- **Enhanced Event Service** The Event Service has the following new features:
 - AMI instrumentation, allowing users to be asynchronously notified on instances of agent activation, expiration, alerts generated and alerts cleared by Hawk Agents. See the *TIBCO Hawk Administrator's Guide* and the *TIBCO Hawk Methods Reference*.
 - Persistence of TIBCO Hawk Events using JDBC. See the *TIBCO Hawk Administrator's Guide*.
 - Fault Tolerance of Event Service using Rendezvous Fault Tolerance. See the *TIBCO Hawk Administrator's Guide* for more information.
- **Microagent Plugin Loader Directory** Added the ability in the Agent to configure and load Microagent Plugins via a file directory. This precludes having to modify the Agent configuration file and CLASSPATH for each new plugin.
- **Enhanced Console API getMicroAgentIDs()** Retrieval of MicroAgent IDs is now faster if the target Agent is now passed to the method as an additional argument.

- **Additional Methods in RBE, onAlertRate() and SuspendAllAlerts()** Two new methods can be used in a rulebase to construct an Alert rate safety valve that will shut off an Agent sending too many Alerts on the network.
- **Added Process Parent ID parameter to all Unix Process:getProcess() method returns.**
- **Enhanced TIBCO Rendezvous .onRvDaemonStatus method** This method now returns the time at which the last status message was generated. This method is only provided by TIBCO Rendezvous 7.x. See the *TIBCO Hawk Methods Reference*.
- **TrustedWithDomain security model** Added a new security implementation for Console applications running on Windows machines. This implementation uses the Windows Domain in conjunction with the Windows User Name as the authorization identifier. TrustedWithDomain can be used in a mixed environment with the Trusted security implementation.
- **Logging Trusted Requests** Both the Trusted and TrustedWithDomain security models can now log all the requests to a log file. Entries in the log file include the node, user, microagent, and method of the request. The directory, size, and number of rolling logs can be specified for the log file.
- **Internal variable for Rulebase actions (ConditionTrueTime)** Added a new Internal Variable, ConditionTrueTime. This variable reflects the time that an Action is first invoked within the current True period.
- **Internal variables for Agent Command on TIBCO Hawk Display** The TIBCO Hawk Display's Agent Command Editor now supports internal variables. The following internal variables are available for the Agent command on the Agent menu on the Display:
 - Agent Name
 - Agent OS
 - Agent IP Address
 - Agent Cluster
 - Agent Dns
 - Agent State
- **Enhanced Schedules Editor** Rulebase scheduling in the Schedule Editor in TIBCO Hawk Display has been enhanced:
 - The time interval in the schedule is reduced from a 15 minute interval to a one minute interval.
 - Timezone can now be specified for a schedule.
 - The concept of *period groups* is introduced.

- **Lightweight Console feature** Enhanced the Console API to allow instantiation for discovery of a single named Agent
- **Ability to set default Alert Suspend Time** Users now have the option to modify the default Alert Suspend Time for their instance of the TIBCO Hawk Display.
- **Set String Encoding Value** The Agent, Display and Event Service now support the new command line argument `-character_encoding <string val>`. A Character field has been added in the Advanced tab of the TIBCO Hawk configuration utility in which a string encoding value (such as UTF-8) can be selected. See the *TIBCO Hawk Configuration Object API Reference*.

The Console API class `TIBHawkConsole` now supports a new method, `setCharacterEncoding (String)`. This method must be called before accessing either `AgentMonitor` or `AgentManager`. If it is not set, the value will default to the TIBCO Rendezvous default value. See the *TIBCO Hawk Console API Reference*.

- **Dynamic Microagent Plugin** Enhanced the MicroAgent Plugin protocol to allow microagents to field their own method invocation requests.
- **Properties in an Action of a Rulebase** Two methods, `setProperties()` and `getProperties()`, were added to Action in the Configuration Object API to allow setting and retrieving properties corresponding to an Action. The Advanced Action Editor in TIBCO Hawk Display is also enhanced to allowing editing of the action's properties and storing the properties in templates. The Rulebase Editor can edit rulebases generated by TIBCO BusinessWorks.
- **FAQ and Troubleshooting in Documentation** The FAQ and Troubleshooting sections have been expanded and reorganized.
 - General troubleshooting questions are in Appendix A of the *TIBCO Hawk Administrator's Guide*.
 - Frequently Asked Questions are listed in Appendix B of the *TIBCO Hawk Administrator's Guide*.
 - Questions related specifically to installation are in Appendix B of *TIBCO Hawk Installation and Configuration*.

Release 4.0.5

The following features were introduced in Release 4.0.5.

- **MicroAgent plug-in API added** The plug-in API allows you to write TIBCO Hawk microagents that run inside the agent. Samples are included in the `sample/ma_plugin` directory. See the *TIBCO Hawk Console API Reference* for details.

- **Internationalization for Windows Platforms** The TIBCO Hawk product has been certified for use on machines running the Japanese SHIFT-JIS version of Windows 2000. The codepage identifier for the locale of the machine can now be specified in the new `Codepage` field of the TIBCO Hawk configuration utility. See *TIBCO Hawk Installation and Configuration* for details.
- **Configuration File Option for Windows Platforms** The TIBCO Hawk configuration utility now allows you to specify a configuration file to be used for the TIBCO Hawk Display, Agent, HMA and/or Event components. If specified, the component's configuration is solely based on the specified configuration file. See *TIBCO Hawk Installation and Configuration* for details.
- **Alert ID Field Now Available in Alert Detail** The alert detail now includes the alert ID. The alert ID is required when suspending alerts via the `RuleBaseEngine:suspendAlert` method.
- **Methods added to the RuleBaseEngine:**
 - `RuleBaseEngine:getExternalVariables` – Returns the currently loaded external variables as tabular data.
 - `RuleBaseEngine:updateRuleBase` – Updates a rulebase in the engine if a rulebase of the same name is already loaded. If a rulebase is updated and the agent is in autoconfig mode, then this method will also save the updated version into the `autoconfig` directory. This method is only available via the Console API and Configuration Object API.
 - `RuleBaseEngine:addRuleBase` – Adds the rulebase onto the target agent. If a rulebase is updated and the agent is in autoconfig mode, then this method will also save the updated version into the `autoconfig` directory. This method is only available via the Console API and Configuration Object API.
 - `RuleBaseEngine:getRuleBases` – Retrieves the rulebase object. This method is only available via the Console API and Configuration Object API.

See *TIBCO Hawk Methods Reference* for details.
- **New datatype support in AMI API** Unsigned 64-bit integer values (and larger unsigned integer values) can now be used in AMI as method arguments and return parameters. Because the TIBCO Hawk Agent is implemented in Java and there is no U64 support in Java, the `java.math.BigInteger` class is used to represent these values. See the *TIBCO Hawk Programmer's Guide* and *AMI API Reference manuals* for details.
- **Support for HP-UX 11i**

Release 4.0.4

No new features were introduced in Release 4.0.4.

Release 4.0.3

No new features were introduced in Release 4.0.3.

Release 4.0.2

The following features were introduced in Release 4.0.2.

- **-timeout** A new command line option, `-timeout`, has been added to the HMA to specify the amount of time the Hawk Agent should wait for HMA method invocations to complete before timing them out. The default is 10000 milliseconds. Normally there is no need to change this value, however, on machines under extreme stress where method invocations are timing out, this new option allows the timeout value to be increased.
- **-log_format** A new command line option, `-log_format`, has been added to the Agent, Event Service, and HMA to select the format of log file entries. Either the existing Hawk format or the TIBCO ActiveEnterprise™ format can be specified.
- **-ignore_sigint, -ignore_sigterm, -ignore_sigabrt** These options are available on Unix systems and specify that the TIBCO Hawk HMA should ignore the SIGINT, SIGTERM, and SIGABRT signals, respectively.

Release 4.0.1

The following features were introduced in Release 4.0.1.

- **New Performance method** A new method causes the Performance microagent to restart in order to pick up Windows performance objects that were added after the Performance microagent was originally started.
- **New platform support** The adapter can now operate in Microsoft Windows XP (build 2600). It also supports Compaq TRU64 UNIX 5.0 or higher.

Release 4.0.0

The following features were introduced in Release 4.0.0.

- **Increased security** TIBCO Hawk Security now supports RVDS 2.0 (TIBCO Rendezvous™ Data Security).
- **Enhanced wildcard use** The `trusted.txt` file for TIBCO Hawk security now allows the use of wildcards for user names.

Changes in Functionality

This section lists changes in functionality since the TIBCO Hawk 4.0.0 release.

Release 4.9

Release 4.8.1

Tibhawkhma is now dynamically-linked with TIBCO Rendezvous on all platforms in Release 4.8.1.

For details refer to the section Post Installation Tasks in Chapter 4 of *TIBCO Hawk Installation and Configuration*.

Release 4.8.0

The following changes in functionality are new in Release 4.8.0

- TIBCO Hawk no longer supports the following platforms:
 - Mac OS X 10.3 on POWER
 - TRU64 UNIX 5.1 on HP Alpha
- The method `Process:getProcess` (on HP-UX) now returns the `CPU time` which is the CPU usage (user time + system time) in milliseconds.
- The method `Process:getProcess` (on Linux, Solaris, and Microsoft Windows) now returns the `Start Time` which is the number of seconds since the process started.

Release 4.7.0

The following changes in functionality are new in Release 4.7.0

- The method `Rendezvous:onRvDaemonStatus` returns the following additional fields:
 - `Inbound Data Loss`
 - `Outbound Data Loss`
 - `OS Type`
- The methods `Logfile:onNewLine` and `Logfile:onNewLineWithPatternfile` return an additional field, `previousLine`. This field is the previous line in the log file.

- On the Mac OS X platform, you can use the apple key+click combination keys on the Apple mouse to replace the right-click.
- TIBCO Hawk no longer supports Solaris 7 on SPARC.
- On Linux systems, the method `System.getCpuInfo` now returns CPU utilization for individual processors on multi-processor machines.
- If you have multiple Hawk agents running on a machine and these Hawk agents, in turn, belong to different Hawk domains, you can specify separate access control files for each domain.
- The Monitoring Console and All Alerts Console adds support for any additional Hawk domains that you have configured.
- RulebaseMaps and Schedules can now be deployed along with rulebases using the Monitoring Console and the `ConfigureMonitoring` command-line utility.

Release 4.6.1

There is no change in functionality in this release.

Release 4.6.0

The following changes in functionality are new in Release 4.6.0

- TIBCO Hawk no longer supports Solaris 2.6 on SPARC.
- Multiple TIBCO Hawk Event Service processes (using different values for the `-datadir` option) can now be run on a same machine for the same TIBCO Hawk domain.
- The length of the `clear_reason` column in the `HawkAlertClearInfo` table has been increased from `varchar(256)` to `varchar(512)`.
- On Solaris, AIX, Linux and HP-Itanium platforms, the `Process:getProcess` method returns the entire command line that was used to start a process. This method used to return only the first 80 characters of the command line for any process.

Release 4.5.1

The following changes in functionality are new in Release 4.5.1

- When using the `-file` option along with other command line options for starting the TIBCO Hawk HMA, you cannot have any command line option duplicated in the configuration file (which is specified by the `-file` option).

Release 4.5.0

The following changes in functionality are new in Release 4.5.0

- The method `System:getTunableInfo` on the Linux platform no longer returns the parameter `inode-max`.

Release 4.2.1

The following changes in functionality are new in Release 4.2.1.

- The cluster in the canvas view now has an option to hide the icon. This option is available in both the menu and the properties dialog.

Release 4.2.0

The following changes in functionality are new in Release 4.2.0.

- **JRE No Longer Included** JRE is no longer bundled with TIBCO Hawk.
- **UNIX TAR Installation File** A TAR file package is included as an alternate UNIX installation format.
- **Method Returns Additional Information** `SysInfo:getHostName()` now returns "Agent Domain" in addition to "Host Name".
- **Additional Event Service Argument** The Event Service takes a new optional command line argument, `JDBCAlertTableFields`.

Release 4.1.1

The following changes in TIBCO Hawk Event Service tables are new in Release 4.1.1. As a result, the TIBCO Hawk 4.1.1 Event Service is not backwards compatible with previous TIBCO Hawk Event Service tables.

After installing TIBCO Hawk 4.1.1, you must recreate the tables by manually dropping the 4.1.0 Event Service tables and then starting the 4.1.1 Event Service. This recreates the tables, but you will need to define indexes as appropriate for your application.

New JDBC Fields

The Hawk 4.1.1 Event Service takes an additional command line argument, `JDBCdbType`. The following excerpt from the new `hawkevent.cfg` file describes this argument:

```
# Database vendor, valid/supported values are SQLSERVER, ORACLE,
DB2, or SYBASE
```

-JDBCdbType *db_vendor*

The JDBCdbType value can also be selected from a new dropdown menu in the Database Configuration section on the Event Service tab of the Configuration Utility. The tab is documented in *TIBCO Hawk Installation and Configuration*.

New Database-specific Data Types

The following three fields have a new database-specific data type:

- Event_Time field in the HawkAlertClearInfo table
- Event_Time and Agent_StartTime fields in the HawkAgentInfo table

In previous TIBCO Hawk versions, these fields were all of type VARCHAR(128). In TIBCO Hawk 4.1.1, the data type depends on the database used, as shown in the following table:

Database Vendor	Data Type
SQLServer	DATETIME
Oracle	DATE
DB2	TIMESTAMP
Sybase	DATETIME

Release 4.1.0

The following changes in functionality were made in Release 4.1.0.

- **Support for New Versions** The following new versions are supported:
 - Solaris 2.9
 - Red Hat LINUX Advanced Server 2.1
 - JRE 1.4.1
 - TIBCO Rendezvous 7.x
- **AMI Libraries** The AMI C and C++ libraries were renamed to eliminate a naming conflict with OS libraries. AMI applications using the C or C++ AMI API will need to be re-linked due to library name changes.
- **SHIFT-JIS Support** This release of TIBCO Hawk does not support Japanese Windows. Support will be re-instated in a future release.

- **Default Character Encoding** The default character encoding for all TIBCO Hawk components has been changed to UTF-8. This setting will work for all locales.
- **Linux Process Microagent** This now lists a single entry for each process and no longer lists an entry for each thread within a process.
- **Logical Interfaces** `Network.getConfig()` now supports logical interfaces.
- **Agent Expiration** Control has been improved in how the console computes agent expiration. Previously, the grace period was fixed at 3 seconds. The grace period is now 10% of the agent's configured heartbeat interval.
- **NoDataSourceError Functionality** This functionality in Hawk Display was expanded to account for microagent method removal within a rule. Previously, this was only logged by the Agent.

Release 4.0.5

The following changes in functionality were made in Release 4.0.5.

- **FileStat microagent on Windows** On Windows platforms, the `FileStat` microagent has changed. The `getFileStatus` and `getFileCount` methods now take two separate parameters for the directory path and the file name — `Directory` and `Filename` respectively. Also, the return values for the `getFileStatus` method are now specific to Windows platforms. See the [Migration and Compatibility on page 22](#) for additional information.
- **JRE 1.3.1_02 is now bundled** with the Windows installer (JRE 1.1.8 was previously bundled).

Release 4.0.4

There is no change in functionality in this release.

Release 4.0.3

There is no change in functionality in this release.

Release 4.0.2

The following changes in functionality were made in Release 4.0.2.

- On Windows Platforms:
 - The Registry Microagent now returns Win32 error codes and their corresponding descriptive text upon failures.
 - The `getMultiString` method in the Registry Microagent now returns an additional `Index` column, which is the ordinal position of the individual strings in the multistring(1-n). This guarantees unique indexes in cases where the string values of the multistring are not unique.
 - The `getString` and `EnumerateKey` methods in the Registry Microagent now process `REG_EXPAND_SZ` strings by expanding any environment variable substitutions.
- Platform Support:
 - AIX 4.2 is no longer supported.
 - AIX 5.1 is now a supported platform.
 - TRU64 5.0 and 5.1A are now supported. You must use the Compaq TRU64 C++ Version 6.3A runtime libraries for proper functioning of TIBCO Hawk.
 - Redhat Linux 6.0 is no longer supported.
 - Redhat Linux 7.2 (Kernel 2.4.7) is now supported.

Release 4.0.1

The following changes in functionality were made in Release 4.0.1.

- **Compaq support** Compaq TRU64 UNIX 4.0 is no longer supported.
- **Rulebase name changes** These rulebases have been renamed:
 - HawkServices-WinNT.hrb *changed to* HawkWindowsEventlog.hrb.
 - DigitalUnix4x.hrb *changed to* Tru64UNIX.hrb.

Release 4.0.0

The following changes in functionality were made in Release 4.0.0.

- **Compatibility restriction** TIBCO Hawk 4.0 works with TIBCO Rendezvous 6 only.
- **Embedded license** TIBCO Rendezvous software is licensed using license tickets, which are character strings that encode licensing information. License tickets are stored in files such as `tibrv.tkt` (for the TIBCO Rendezvous daemon and routing daemon). TIBCO Hawk employs an embedded TIBCO Rendezvous license that allows the TIBCO Hawk software to use the TIBCO

Rendezvous solely in support of the TIBCO Hawk product. A TIBCO Rendezvous license ticket is not required to run the TIBCO Hawk product with the TIBCO Rendezvous daemon (rvd). The use of TIBCO Hawk with the TIBCO Rendezvous routing daemon (rvrd), however, still requires a valid TIBCO Rendezvous license ticket.

- **Enhanced AMI use** The AMI APIs allow applications to be AMI instrumented so that they use the same embedded TIBCO Rendezvous license as the TIBCO Hawk product. This license only allows the AMI instrumented application to use TIBCO Rendezvous in support of the AMI communication with the TIBCO Hawk agent. Any other use of TIBCO Rendezvous by the AMI application would require a valid TIBCO Rendezvous license ticket.

Deprecated Features

This section describes deprecated features and lists equivalent features that accomplish the same result, if relevant. Any use of a deprecated feature should be discontinued as it may be removed in a future release. You should avoid becoming dependent on deprecated features and become familiar with the equivalent feature.

Release 4.9

- Platform support for the following has been deprecated in this release:
 - AIX 5.2
 - Solaris 8 (Sparc 32 and 64-bit)
 - HP PA-RISC (32 and 64-bit)
 - Mac OS X PowerPC

Release 4.8.1

There are no deprecated features in this release.

Release 4.8.0

There are no deprecated features in this release.

Release 4.7.0

There are no deprecated features in this release.

Release 4.6.1

There are no deprecated features in this release.

Release 4.6.0

TIBCO Hawk Rendezvous Messaging Adapter is no longer available. Instead, this version of TIBCO Hawk includes a new microagent **Messaging**. Configuration files of the TIBCO Hawk Rendezvous Messaging Adapter can be used as-is. See *TIBCO Hawk Installation and Configuration Guide* for details.

Release 4.5.1

There are no deprecated features in this release.

Release 4.5.0

There are no deprecated features in this release.

Release 4.2.1

There are no deprecated features in this release.

Release 4.2.0

There are no deprecated features in this release.

Release 4.1.1

There are no deprecated features in this release.

Migration and Compatibility

This section explains how to migrate from previous releases.

Release 4.9

- **Leveraging the Security TrustModel to Disable Custom Microagent**

The Custom microagent can now be disabled by leveraging the Security TrustModel supported by TIBCO Hawk. Users are explicitly granted or denied access through the access control file.

To grant or deny access through the access control file:

1. Create a directory called *HAWK_HOME*/security/.

If you have multiple Hawk agents running on a machine and these Hawk agents, in turn, belong to different Hawk domains, you can specify separate access control files for each domain.

For each TIBCO Hawk domain create a directory

HAWK_HOME/domain/<domain-name>/security where <domain-name> is the name of the TIBCO Hawk domain.

2. According to the requirements of your system copy the *HAWK_HOME*/samples/secuirty/Trusted.txt or *HAWK_HOME*/samples/secuirty/TrustedWithDomain.txt to *HAWK_HOME*/security/.

3. Modify the file.

Add the line below to deny access to user2 to execute the Custom Microagent Methods

```
!user2 * COM.TIBCO.hawk.microagent.Custom +
```

4. Start the TIBCO Hawk agent and Display as follows:

— On UNIX, specify the following in the agent configuration file:

```
COM.TIBCO.hawk.security.trusted.Trusted
```

— On Microsoft Windows, enter one of the following in the Security Policy Class dialog of the Microsoft Windows Configuration Utility:

```
COM.TIBCO.hawk.security.trusted.Trusted
```

or

```
COM.TIBCO.hawk.security.trusted.TrustedWithDomain
```

- **Compatibility**

The TIBCO Hawk agent will be able to discover the 4.7 or above agents and 4.7 or above agents will be able to discover the 4.9 TIBCO Hawk agent.

Release 4.8.1

There are no migration path issues.

Release 4.8.0

When upgrading from earlier versions of TIBCO Hawk, remove the HawkConsole and Monitoring Console plug-ins using TIBCO Administrator before installing Hawk 4.8.0.

Release 4.7.0

When upgrading from earlier 4.6.x versions of TIBCO Hawk, remove the HawkConsole and Monitoring Console plug-ins using TIBCO Administrator before installing Hawk 4.7.0.

If using TIBCO Enterprise Management Advisor (EMA) 2.0, you have to upgrade to TIBCO EMA 2.1 for use with Hawk 4.7.0. Before starting the Hawk 4.7.0 installation, use TIBCO Administrator to remove the plug-ins installed by TIBCO EMA. After installing TIBCO Hawk 4.7.0, upload the EMAadmin and EMAConsole plug-ins manually.

Release 4.6.1

There are no migration path issues.

Release 4.6.0

There are no migration path issues.

Release 4.5.1

When using TIBCO Hawk 4.5.1 with TIBCO Runtime Agent 5.1.3, manually update the `$HAWK_HOME\bin\hawkhma.cfg` file and comment out references to the `-logdir` and `-rwd_session` options. See [Changes in Functionality on page 13](#) for more information.

Release 4.5.0

The method `System:getTunableInfo` on the Linux platform no longer returns the parameter `inode-max`. You need to update any rulebases that use this parameter.

Release 4.2.1

There are no migration path issues.

Release 4.2.0

The following notes apply when migrating to TIBCO Hawk 4.2.0.

Upgrading on UNIX

When upgrading from TIBCO Hawk 4.1.1 to TIBCO Hawk 4.2.0 on UNIX, a folder named `java` is left in the `HAWK_HOME` directory after installation. The `java` folder and its contents are not needed and you can delete them after installing TIBCO Hawk.

Compatibility with TIBCO Hawk 4.0.5 (Japanese Windows Platforms Only)

A TIBCO Hawk 4.0.5 installation configured to use the Shift-JIS (932) code page will not be compatible with TIBCO Hawk 4.2.0, unless you also configure TIBCO Hawk 4.2.0 to use Shift-JIS. (TIBCO Hawk 4.2.0 uses UTF-8 encoding by default.) This should only be done when a mixed environment of TIBCO Hawk 4.0.5 and 4.2.0 must be supported.

To configure TIBCO Hawk 4.2.0 to use Shift-JIS, start the Configuration Utility and set the Codepage value to `932` and the Character Encoding value to `"Shift_JIS"` (without quotes).

However, it is recommended that rather than configuring TIBCO Hawk 4.2.0 to use Shift-JIS, you instead upgrade all existing TIBCO Hawk 4.0.5 versions to TIBCO Hawk 4.2.0 and use UTF-8 encoding.

Please refer to the *TIBCO Hawk Installation and Configuration* manual for complete information about the Codepage and Character Encoding configuration options.



If you upgrade a TIBCO Hawk 4.0.5 installation that is configured to use the Shift-JIS (932) code page to TIBCO Hawk 4.2.0, the old Codepage configuration value of `932` will be preserved. You must change this value to `65001` (UTF-8) to use UTF-8 encoding.

Release 4.1.1

After installing TIBCO Hawk 4.1.1, you must recreate the tables by manually dropping the 4.1.0 Event Service tables and then starting the 4.1.1 Event Service. This recreates the tables, but you will need to define indexes as appropriate for your application.

Release 4.1.0

The following considerations apply when migrating from a previous version of TIBCO Hawk.

Re-Linking C and C++ Applications to Libraries

The AMI C and C++ libraries were renamed to eliminate a naming conflict with OS libraries. After installing TIBCO Hawk, all AMI C or C++ applications must be re-linked against the renamed libraries.

Using 3.x and 4.x Agents Together

You can include TIBCO Hawk 4.x and 3.x Agents in the same environment. However, if you load the same rulebase on each agent, TIBCO Hawk Display will show the rulebases as being different versions.

Migrating Rulebase Map from Previous JRE Environments

The OS name returned by `SysInfo:getOperatingSystem()` depends on the version of JRE being used. When using JRE 1.1, the OS name returned is 'Solaris' and is 'SunOS' when using JRE 1.2.2. This can become a problem when using rulebase maps in a mixed environment of both JRE 1.1 and 1.2.

Therefore, any rulebase intended for all Solaris machines should be added to both the ++Solaris group and the ++SunOS group in the map.

Using the Scheduler

The Scheduler in TIBCO Hawk 4.1 uses 1-minute intervals instead of 15-minute intervals, as were used in 4.0.x. TIBCO Hawk 4.0.x agents using schedules that are sent to 4.1 will be converted to minutes instead of the 15-minute interval. Likewise, TIBCO Hawk 4.1 schedules that are sent to a 4.0.x agent will have the minute converted to the nearest 15-minute interval.

Converting Commands from Previous Releases

Commands created prior to the TIBCO Hawk 4.1.0 will automatically be converted when executed using the current release.

- If an agent command in a previous release has **Append Agent Name** checked, the variable `${Internal.Agent Name}` will be appended to the command.
- If an agent command in a previous release has **Append Agent IP Address** checked, the variable `${Internal.Agent IP Address}` will be appended to the command.

Release 4.0.5

The `Filestat` microagent methods, `getFileStatus` and `getFileCount`, have been changed for Windows platforms. Both methods now take the directory path and filename as separate parameters as opposed to one in previous releases. Rulebases using either or both of these two methods will be affected. You need to edit the rulebases to separate the directory path and filename into the `Directory` and `Filename` parameters respectively.

The return values for the `getFileStatus` method are now Windows-specific. You need to modify your rulebase test expressions accordingly.

Release 4.0.4

There are no migration path issues.

Release 4.0.3

There are no migration path issues.

Release 4.0.2

There are no migration path issues.

Release 4.0.1

There are no migration path issues.

Release 4.0.0

- TIBCO Hawk 4.x is backward compatible with TIB/Hawk 3.1.2 or higher. Any previous version must be run through the TIBCO Hawk 3.1.4 `convert30` utility prior to being loaded in TIBCO Hawk 4.x Agents or Display. The `convert30` utility, in spite of its name will take a 2.1.2 or a 3.0.x rulebase and convert it into a 3.1.4 format.
- The TIBCO Hawk 4.x AMI API dynamic link libraries are not backward compatible with TIB/Hawk 3.x AMI applications. TIB/Hawk 3.x AMI API applications must run with the 3.x AMI API dynamic link libraries.
- A TIBCO Hawk 4.x console (that is, Display, Event Service or other Console API application) must be used in an environment of mixed 4.x and 3.1.x.
- To make TIB/Hawk 2.1.2 rulebases compatible with TIBCO Hawk 4.0, follow the instructions given in the next section.

TIB/Hawk 2.1.2 to 3.0 Conversion Procedures

The rulebase format has significantly changed between TIB/Hawk release 2.1.2 to TIB/Hawk release 3.0 and again from TIB/Hawk release 3.0 to TIB/Hawk release 3.1. Additionally, most of the microagent names have changed, both in the TIBCO Hawk agent and in the HMA. Automatic configuration and `config_path` modes can no longer be used together, because of the new agent rulebase configuration architecture. Thus, `self::loadRuleBase` (or the new `RuleBaseEngine::loadRuleBase` method) will not work in autoconfig agents. Accordingly, rulebases that loaded other rulebases as Test Actions are now also affected. However, utilities are provided to migrate all rulebases to the new formats with little or no user effort.

Two possible methods of upgrading rulebases are available:

- **Automatic Conversion** should be used if the rulebases being upgraded do not contain the `self::loadRuleBase` method as an Action or Clear Action, or if the release 3.0 agents will be immediately migrated to use the `repository_path` mode instead of automatic configuration mode (even if `self::loadRuleBase` is used).
- **The `convert30` utility** is only for those who wish to continue to operate in automatic configuration mode using TIB/Hawk Release 3.0 and have TIB/Hawk Release 2.1.2 rulebases that use the old `self::loadRuleBase` method. If either of these conditions do not apply, you can use the automatic conversion facility.

Note: There is no direct way of migrating from the TIB/Hawk 1.x release to the TIB/Hawk 3.0 release.

Automatic Conversion

This conversion technique uses conversion routines built into the TIBCO Hawk agent and Display. For example, if you start a TIB/Hawk Release 3.1 agent in automatic configuration (or manual) mode, if the `auto_config_dir` (or `repository_dir`) contains TIB/Hawk Release 2.1.2 rulebases or TIB/Hawk Release 3.0 rulebases, the agent saves the original rulebases as `.bak` files. It then converts the rulebase files to 3.1 format and saves them as `.hrb` files. It then loads all the converted `.hrb` files. From the TIBCO Hawk Display, execute **Get RuleBases, File >Load from File><TIBCO HawkRelease 2.1.2 rulebase>**. The Display automatically converts the rulebase to 3.1 format before loading it into its editor. Save the file by either performing **File>Save to File, Apply Changes**, or a related action. No additional user action is required.

Conversion Using the convert30 Standalone Utility

The `convert30` program is a standalone utility to convert TIB/Hawk Release 2.1.2 rulebases to TIB/Hawk Release 3.0 rulebase format. Release 2.1.2 rulebases having actions that use the method `self::loadRuleBase <rname>` will be converted to the TIB/Hawk Release 3.0 equivalent

`RuleBaseEngine::loadRuleBaseFromFile <directory>\rname>`.

1. Go to the `convert30` utility: `$HAWK_ROOT/bin/convert30` on UNIX platforms, `<TIBCO Hawk install directory>\bin\convert30.bat` on Windows NT.
2. Enter the command:

```
convert30 <rulebasename path | -config_path "d1:d2:d3"> ( for UNIX ) .
```

or

```
convert30.bat <rulebasename path | -config_path "d1;d2;d3" > (for Windows NT).
```

Where the entries `d1`, `d2`, and `d3` represent directories that contain the TIB/Hawk 2.1.2 rulebase files and `path` is the directory to be added to the rulebase name.

3. Choose either the `rulebasename path` or `-config_path` option.

The entries in `config_path` must be separated by the host system path separating character (':' on UNIX and ';' on NT). Be sure to set off the directories with the double quotes, as shown before `d1` and after `d3`. If the directory name prefix is not specified, the default is current working directory.

Closed Issues

Critical Security Upgrade

TIBCO Hawk release 4.6.1 provides critical security upgrades. We strongly recommend that all customers upgrade to TIBCO Hawk release 4.6.1 and during the installation process upgrade to TIBCO Rendezvous 7.5.1 as well.

- TIBCO Rendezvous release 7.5.1 addresses a critical security vulnerability in the HTTP administrative interface of the following components:
 - TIBCO Rendezvous Routing Daemon (rvrd)
 - TIBCO Rendezvous Secure Routing Daemon (rvsrd)
 - TIBCO Rendezvous Secure Daemon (rvsd)
 - TIBCO Rendezvous Cache (rvcache)
 - TIBCO Rendezvous Agent (rva)

Impact of that vulnerability could include remote execution of arbitrary code, information disclosure, and denial of service.

- TIBCO Hawk release 4.6.1 addresses a critical security vulnerability in the following component:
 - TIBCO Hawk Monitoring Agent (tibhawkhma)

The impact of this vulnerability may allow a local attacker to execute arbitrary code with system privileges.

Issues Closed in this Release

The tables in this section lists issues that were closed in the named releases.

Closed in Release	Defect #	Description
4.9.0	HK-2739 1-YO2XX	<p>In a situation where agents were running on machines that used different character encodings, you may have encountered errors when sending or copying a rulebase from one machine to another if the rulebase contained characters (in the rulebase or in the name) that were not in the target machine's encoding.</p> <p>For example, if you send or copy a rulebase with Japanese characters in its name from a Japanese machine to an English machine, the send operation may fail or the agent on the English machine may not be able to load the rulebase.</p>
4.9.0	HK-2735 1-YG5EV	The HMA trace log file name and directory name did not contain only ASCII characters. This was valid even if the names were specified using <code>-logdir</code> or <code>setTraceParameter</code> .
4.9.0	HK-2725 1-WRRMX	(Microsoft Windows only) The rulebases shipped with TIBCO Hawk that use the Performance microagent generate "No Data Source" alerts when used in a Latin-1 locale. The Microsoft Windows Performance Monitor object and counter names were localized for some locales. Rulebases using the Performance microagent must refer to the correct names for the locale. The rulebases shipped with TIBCO Hawk used the U.S. English locale names and failed for other locales with "No data source errors".
4.9.0	HK-1064 1-7BXHEY	When using EMS transport in the fault tolerant mode, if the EMS servers WERE started simultaneously, clients WERE not able to connect to the servers.
4.9.0	HK-1012 1-79BJFF	If you had configured an additional Hawk domain that used EMS transport and if the EMS server was not running, the Hawk Console and the Monitoring Management Console did not display details for this domain.
4.9.0	HK-572 1-2FRTH1	(HP-UX and Linux) The method <code>Custom:execute</code> returned 'Invocation Succeeded' even though the specified command was not executed.

Closed in Release	Defect # (Cont'd)	Description (Cont'd)
4.9.0	HK-11 1-94IZA6	(UNIX only) When TIBCO Rendezvous 8.1.x was installed on a clean system and then TIBCO Hawk 4.8.x was installed, the TIBCO Hawk installer did not detect the existing installation of TIBCO Rendezvous 8.1.x and installed a copy of TIBCO Rendezvous packaged with TIBCO Hawk in the same installation location as TIBCO Hawk.
4.9.0	HKHA-72 1-XVG92	TIBCO Hawk agent informational messages were not available for viewing in TIBCO Hawk HTTP Adapter. This has been fixed. (Also logged as SR 1-XFNOQ)
4.9.0	HKHA-38 1-39ZO4L	Invoking or subscribing to microagent methods whose names contains a colon (:) resulted in errors.
4.9.0	HKHA-37 1-32G249	The invocation of method <code>TIBCO_Rendezvous:onRvDaemonStatus</code> gave errors even when the interval parameter is specified.
4.9.0	HKHA-32 1-2SRF6C	If the Alert or Rule elements contain special characters like "<", ">", "%", or ",", a CDATA tag is inserted to avoid parsing errors.
4.9.0	HKHA-30 1-1T6WRW	Fixed xml content generation error.
4.9.0	1-98LZ7P	When the active TIBCO Enterprise Message Service (EMS) server in a fault tolerant pair of servers failed, the TIBCO Hawk console APIs did not reconnect to the standby EMS server.
4.9.0	1-9M4GVO	Sending an email failed if an invalid recipient existed in the To or CC mailing list.
4.9.0	1-7YL63R	When stopping a subscription on a TIBCO Hawk microagent for a non-asynchronous method, it logged an error.
4.9.0	1-9KF4XA	In a certain condition, TIBCO Hawk treated two identical subscriptions as separate subscriptions when received at the same time.
4.9.0	1-83ZKPM	In the Eventlog microagent, the logging events in the eventlog.out file kept growing and could not be turned off.
4.9.0	1-9CDFC5	(AIX only) The <code>Process:getProcess()</code> method hanged on some AIX 5.3 64-bit machines.

Closed in Release	Defect # (Cont'd)	Description (Cont'd)
4.9.0	1-996HJ1	(AIX only) The File System microagent failed to start due to a parsing error of /etc/filesystems.
4.8.1	1-8U30W0	A MAR file containing only a TIBCO BusinessWorks engine rulebase did not get deployed when the Apache Tomcat server bundled with TIBCO BusinessWorks Collaborator was deployed in the same environment.
4.8.1	1-93A4X7	On Solaris 10 64-bit platform, in the tibrv/lib directory the starthma failed and threw 'File not found' exception error.
4.8.1	1-91U0M2	The Hawk agent created multiple connections to the EMS Broker, when an EMS client received a Java UI exception error.
4.8.1	1-8SH21K	When the EMS server had dynamic topic disabled, the Hawk Agent failed to send replies to a data subscriber and incorrectly tried to reconnect to the EMS server. This led to memory leaks.
4.8.1	1-8SF85T	The password of the database connection URL in the Hawk Event Service was not encrypted.
4.8.1	1-8OV9QC 1-885TER 1-7X0T75 1-846IH6	Separate 64-bit installers did not exist for all platforms on which Hawk 64-bit supported. This has been fixed as a separate installation package for 64-bit and 32-bit is now available.
4.8.1	1-8D9V4G	(Linux only) The Process:getProcess method returned wrong values for the CPU% parameter.
4.8.1	1-8CTIR9	The <code>TrustedWithDomain</code> security model for TIBCO Runtime Agent 5.5.0 was unable to pick up its ACL (Access Control List) file (<code>TrustedWithDomain.txt</code> file) and resulted in <code>java.io.FileNotFoundException</code> error.
4.8.1	1-93ACNJ	On Microsoft Windows, the Job Object Details method of the Performance microagent did not return any values. This was caused when the PDH counter detected negative or invalid values when querying Job Object Details counter.

Closed in Release	Defect # (Cont'd)	Description (Cont'd)
4.8.1	1-820VO1	When TRA 5.5 was installed on AIX, some installation variables like <code>TRA_HOME</code> in <code>TIBCO_HOME/hawk/bin/ConfigureMonitoring.tra</code> file were not substituted for the <code>tibco.env.PATH</code> . Also, when standalone Hawk 4.7 was installed, the parameters in the <code>ConfigureMonitoring.tra</code> file under <code><hawk>/bin</code> folder were not replaced.
4.8.1	1-7XOKMV	The Hawk Event Service failed to connect when the Oracle or MS SQL database was restarted.
4.8.1	1-7X9SAL	Errors were generated if input files were not specified for the MAR utility.
4.8.1	1-8O9D3T	When there was a change in the agent alert status in the Hawk display, the current status of the network could not be viewed without a mouse over action.
4.8.1	1-8KLJLW	When the Logfile microagent saved a partial line to the read buffer from the log file, it did not clear the buffer after it was used when the remaining line was read. In some instances, the partial line was appended to the next line being read.
4.8.1	1-8J1T5T	On Solaris 10 x86 machine with e1000 GB interface, <code>Network::getStatistics</code> listed only <code>100</code> interface.
4.8.1	1-8H5V0Y	The alert state in the database reflected only the state of the rulebase instead of the alert text.
4.8.1	1-8FI2FX	The Hawk 4.8.1 Console API was not able to discover Hawk 4.6 Agents correctly. Once an "agent alive" event was detected, it was followed shortly by an "agent expired" event.
4.8.0	1-7Y6R2P	The Hawk HMA did not start on the Linux (glibc 2.2.x, kernel 2.2.4 and above, 32-bit) platform.
4.8.0	1-7TOXB9	On the HP-UX (Itanium) platform, continuous invocation of the <code>Process:getProcess</code> microagent method caused the <code>tibhawkhma</code> process to terminate.
4.8.0	1-80F1ZT	Using TIBCO Hawk Display, the options specified by the Advanced Action Editor>Perform Action> Maximum Of 'nn' times, No sooner than 'yy' seconds did not function as expected.

Closed in Release	Defect # (Cont'd)	Description (Cont'd)
4.8.0	1-7FQ82G	After creating an administration domain that uses TIBCO Enterprise Message Service as the message transport and enabling SSL with the Do Not Verify Host field set, TIBCO Hawk Agent did not start.
4.7.0	1-78MVZD	After migrating from Hawk 4.5 to Hawk 4.6, errors were encountered when sending email notifications.
4.7.0	1-37REXH	(AS/400 only) The method <code>logfile:onNewLine</code> microagent would lock the file (source or physical) that was being monitored. This has been fixed. The method can refer monitor a physical data file. If a source physical file is specified an error will be displayed as this file type is not supported.
4.7.0	1-7BHLJP	Rulebase actions that used the <code>ConditionTrueTime</code> variable would fire more than once even if the action was set to perform once only.
4.6.1	1-6Y3X9Y	When using EMS as the transport, if there was more than one outstanding alert on the agent when the Display was started, the All Alerts tab of the Display showed only one alert.
4.6.1	1-6VAADB	When the agent invoked the method <code>Process:getProcess()</code> in order to service a rule that used this method as the datasource and concurrently the user executed from a command window, a command that returned a large dataset, the <code>tibhawkhma</code> process would crash.
4.6.1	1-6ZJ25Q 1-70PQ5D	(Solaris only) Memory leak persisted in the Process microagent.
4.6.1	1-6YNQJ7	Multiple subscriptions to the method <code>FileSystem:getByFileSystem()</code> with different input arguments resulted in the error message <code>Result of subscriptions is empty</code> .
4.6.1	1-6YY1Q9	(LINUX only) The <code>tibhawkhma</code> process crashed when the methods <code>System:getSystemInfo()</code> and <code>Process:getProcess()</code> were invoked simultaneously.
4.6.1	1-6YNQL4	(Microsoft Windows only) The method <code>Process:getProcess</code> sometimes returned the value <code>ACCESS DENIED</code> for the Command return field.

Closed in Release	Defect # (Cont'd)	Description (Cont'd)
4.6.1	1-6XXEV0	The Hawk Agent would hang while trying to send an alert, clear or heartbeat if it lost connection to the EMS server.
4.6.1	1-6X47YW	When using a monitoring archive (MAR) which contained rulebases that use schedule(s), the rulebase is loaded before the schedule (s) is available when the Agent is starting up. This caused the rules to trigger incorrect alerts.
4.6.1	1-70A8IX	Emails sent as an action within a rulebase did not retain their format. Also, the address of the sender did not contain the fully qualified domain name.
4.6.0	1-4GB90N	The <code>Custom:Execute</code> microagent method did not release file handles which resulted in <code>Too many files open' errors</code> .
4.6.0	1-51R8HK	(Microsoft Windows only) The TIBCO Hawk HMA was unable to handle event message file names specified in the unicode format.
4.6.0	1-51WHWT	(LINUX only) Removed the dependency of the AMI Library on the C++ shared library.
4.6.0	1-55OCF5	(LINUX only) The AMI API libraries were not compatible with Red Hat Linux AS 3.0 (glib 2.3 platform). This has been fixed. A separate installation package is available for the glib 2.3 platform.
4.6.0	1-4HC4QX	(Microsoft Windows only) When using the configuration utility and if EMS was selected as the primary transport in the <code>Transport</code> tab, you were not able to specify any values for the <code>Network</code> parameter for <code>Rendezvous Setting for HMA and Primary AMI Session</code> field.
4.6.0	1-5IKLVU	On 64 bit AIX 5.2 multi processor machines, the <code>tibhawkhma</code> was returned incorrect values for <code>system:getCpuInfo</code> method.
4.6.0	1-6B8Z7M	On 64 bit AMD Opteron Linux systems the 64 bit AMI API libraries were missing.

Closed in Release	Defect # (Cont'd)	Description (Cont'd)
4.6.0	1-4PQH1	<p>When using the <code>RulebaseEngine.LoadRulebaseFromFile()</code> <code>microagent</code> method to load a rulebase where the file name is different from the rulebase name, no error message is reported and the rulebase is loaded.</p> <p>This has been fixed. If you now try to load a rulebase from a file, where the rulebase name and the file name are different, a <code>corrupt rulebase</code> error is generated and the rulebase is not loaded.</p>
4.6.0	1-1R26V6	<p>(Linux AS 3.0) When the installer is invoked on LINUX AS 3.0 the following error occurs:</p> <pre>Error occurred during initialization of VM Unable to load native library: /tmp/isjis5DFH/lib/i386/libjava.so: symbol __libc_wait, version GLIBC_2.0 not defined in file libc.so.6 with link time reference</pre>
4.6.0	1-65APPT	The <code>ExecuteCLCommand</code> returned a failure code even if it succeeds execution.
4.5.1	1-3R345G	Installing TIBCO Hawk 4.5 after installing TIBCO Runtime agent 5.2 would require the user to additionally install TIBCO Hawk 4.5 hotfix1.
4.5.1	1-3R3459	<p>Installing TIBCO Hawk 4.5 after TIBCO Runtime Agent 5.2 would require that you manually delete the <code>\$HAWK_HOME\bin\pdh.dll</code> file.</p> <p>Similarly, upgrading from TIBCO Runtime Agent 5.1.3 to TIBCO Runtime Agent 5.2 would also require you to delete the <code>\$HAWK_HOME\bin\pdh.dll</code> file.</p>
4.5.1	1-2RIZ1D	<p>(Microsoft Windows only) Installing TIBCO Hawk on Microsoft Windows 2000 Professional which did not have any other TIBCO product installed, gave the following error:</p> <pre>The Dynamic Link Library LIBEAY32.dll could not be found in the specified path: %SYSTEM_PATH%</pre>
4.5.1	1-3GD059	The TIBCO Hawk installer installed the entire TIBCO EMS product suite instead of installing just the TIBCO EMS client.
4.5.1	1-3RABL7	The Hawk security policy <code>TrustedWithDomain</code> did not work on Microsoft Windows 2003.

Closed in Release	Defect # (Cont'd)	Description (Cont'd)
4.5.1	1-3D8UK5	(Microsoft Windows only) The HMA crashes with a NTDLL exception. This has been fixed. Please delete the \$HAWK_HOME\bin\pdh.dll file which was installed by the TIBCO Hawk 4.5 during product installation.
4.5.1	1-3C4EY9	The log file microagent stops functioning after encountering a line which contains only a carriage-return character.
4.5.1	1-3F6PJU	(Microsoft Windows 2003 only) The logfile microagent was preventing application logfile rollovers.
4.5.1	1-3DDSKU	(HP-UX on HPPA and Itanium only) Improved performance of the <code>process:getInstanceCount</code> and <code>process:getInstanceCountByCommand</code> .
4.5.1	1-36URUQ	(Microsoft Windows only) If you delete any additional AMI sessions created in the 'Rendezvous Settings for additional AMI Sessions' in the 'Transport tab', the AMI sessions re-appear when the Configuration Utility is re-started.
4.5.1	1-35IITR	(HP-UX only) Virtual KBytes value returned by the <code>process:getProcess</code> microagent method did not match the value returned by the <code>top</code> command. This has been fixed. It is recommended that you install the following HP-UX patches for the <code>top</code> command: HPUX 11.00: PHCO_26020 HPUX 11.11: PHCO_29072
4.5.0	1-KH6BX	(Solaris 64-bit Platform only) The <code>system:getSystemInfo()</code> always returned the value 0 (zero) for the Avg Running datapoint.
4.5.0	1-1T9XTR	(Solaris 64-bit Platform only) The <code>process:getProcess</code> always returned the value 0 (zero) for the CPU Time, Stack Kbytes, Heap Kbytes.
4.5.0	1-1WCKK6	The method timeout value is not used for plug-in microagent method invocation.

Closed in Release	Defect # (Cont'd)	Description (Cont'd)
4.5.0	1-1ONCM0	When using TIBCO Hawk on the Solaris platform, the method <code>System:getSystemInfo</code> didn't provide the duration for which the system is up and running. This has been fixed. The method <code>System:getSystemInfo</code> now returns <code>Up Time</code> , which is the system up time in seconds.
4.5.0	1-Z2PKI	(All 64-bit Solaris) The <code>getProcess</code> method of the Process microagent always returns zero for "CPU Time", "Stack KBytes", and "Heap KBytes" for 64-bit processes.
4.5.0	SR_ID:1-2A X2F9	TIBCO Hawk installer always upgraded to TIBCO Rendezvous 7.2 (bundled version). This has been fixed. Now if the installer finds TIBCO Rendezvous 6.9, it gives the user an option to upgrade to TIBCO Rendezvous 7.2 (bundled version). If you have TIBCO Rendezvous 7.0 or 7.1 installed, the installer will automatically install TIBCO Rendezvous 7.2(bundled version) due to known issues with the version of OpenSSL utilized by TIBCO Rendezvous 7.0 and 7.1.
4.2.1	1-1R26UU	In TIBCO Hawk Display, if an icon was not found, the generated error message did not include the name of the icon file. This has been fixed.
4.2.1	1-1R26UY	A display file saved using an earlier version of TIBCO Hawk would show a partial window when the <i>Advanced Action Editor</i> was opened. This has been fixed and now the <i>Advanced Action Editor</i> window can be resized.
4.2.1	1-10SM41	<code>onNewLineWithPatternFile</code> problem evaluating digits at the end of the line using perl end of line marker "\$".
4.2.1	1-154FG5	TIBCO Hawk Event Services <code>onAlert</code> AMI method reports incorrect <code>alert-state</code> for notifications. This has been fixed.
4.2.1	1-14CPAT	TIBCO Hawk suite installer for Windows would not install TIBCO Hawk unless TIBCO Rendezvous 7.1 or higher was installed. This has been fixed. TIBCO Hawk can now be installed with Rendezvous 6.9.
4.2.1	1-12MR24	(LINUX Platform only) The <code>Filestat</code> microagent would not support monitoring of files greater than 4 GB in size. This has been fixed.

Closed in Release	Defect # (Cont'd)	Description (Cont'd)
4.2.1	1-10MC54	If a period group in the exclusion list contains more than one period and there is a period that is not in-schedule, the exclusion logic failed. This has been fixed.
4.2.1	1-11CQ4H	The method <code>Process.getInstanceCountByCommand()</code> returns inaccurate count on Microsoft Windows platform. This has been fixed.
4.2.1	1-12CUCO	(Microsoft Windows only) Missing security dll, HawkTrustedUserID.dll, from installation. Without this .dll, if you implement Trusted Security Model, you will get: <pre>Unable to initialize Tibco Hawk Display ... Exiting java.lang.UnsatisfiedLinkError : no HawkTrustedUserID in java.library.path</pre>
4.2.1	1-12DNCP	Chapter 7 of the TIBCO Hawk 4.2.0 Installation and Configuration Guide (PDF and HTML) contained incorrect information. This chapter has been corrected.
4.2.1	1-12IJR1	The AMI API sample programs were not included in the installation package. This has been fixed.
4.2.1	1-1VE622	(All platforms except LINUX) The <code>getFileStatus</code> method of the <code>Filestat</code> microagent returned wrong <code>inode</code> and <code>filesize</code> information. This has been fixed.
4.2.0	1-KDDPK	The Process microagent methods on Solaris failed to detect 64-bit processes. This has been fixed.
4.2.0	1-XY9NR	In the Trusted security model, if a user was authorized for all methods for a node (including both info and action), the user could not use a group operation on that node. The user is now able to use group operations on that node.
4.2.0	1-YHHWK	The <code>getCpuInfo</code> method of the System microagent on Solaris was limited to returning information only for processors numbered 0-64. This limitation has been removed and information for all processors is now returned.
4.2.0	1-ZJGLX	(Microsoft Windows 2000 Advanced Server) The 'Commit Limit' data field returned by the Performance:Memory microagent sometimes returned negative values. It now returns only positive values.

Closed in Release	Defect # (Cont'd)	Description (Cont'd)
4.1.1	1-HRFL	Linux Advance Server 2.1: The <code>getSystemInfo</code> method of the System microagent now returns correct values for "Real Memory" and "% Free Real Memory". (SR# KFXZD)
4.1.1	1-R4GU7	<p>If the <code>-logdir</code> parameter in the <code>hawkhma.cfg</code> file specified a log directory path that contained a space, the HMA would not start and an error message would appear saying the directory name was invalid.</p> <p>This has been changed. The <code>-logdir</code> parameter now allows a space in the pathname if the entire pathname is enclosed in double quotes, as shown:</p> <pre>"C:\Program Files\HawkLog"</pre>
4.1.1	1-T188P	Executing a Java program from the Hawk Display Tools menu used to result in a <code>java.io.IllegalAccessException</code> . This has been fixed in TIBCO Hawk 4.1.1.
4.1.1	1-T1899	The <code>OutOfRange</code> operator in the Test Editor is now exclusive instead of inclusive. For example, specifying an <code>OutOfRange</code> value of 1-6 now excludes the values 2, 3, 4 and 5. The values 1 and 6 are not considered out of range and are not excluded.
4.1.1	1-T2QJ9	<p>The AMI Java API has been improved. All queue processing (hidden) threads are shut down during <code>AmiSession.stop()</code>. You can use <code>announce()</code> and <code>AmiSession.stop()</code> to repeatedly start and stop the same <code>AmiSession</code> instance.</p> <p>Note: Do not call <code>AmiSession.stop()</code> from an AMI method invocation callback. The callback executes on a queue processing thread and <code>stop()</code> shuts these threads down. If <code>stop()</code> is called, the thread that called <code>AmiSession.stop()</code> might not stop or might get errors when it tries to complete the method invocation after the AMI session is gone.</p> <p>If a stop microagent method must be used, another thread must make the <code>AmiSession.stop()</code> call. For example, you can queue the request over to the main dispatching thread.</p>
4.1.1	1-T7X4X	In previous releases, the Logfile microagent was unable to detect the rollover of empty log files. This has been fixed in 4.1.1.

Closed in Release	Defect # (Cont'd)	Description (Cont'd)
4.1.1	1-TT7IA	When using the Performance Data Helper library DLL (Pdh.dll) in Windows NT 4.0, a problem with the Microsoft Win32 SDK sometimes caused the sum of the total disk counter instance counter (<code>_Total</code>) to be incorrect. TIBCO Hawk 4.1.1 contains the latest Windows service pack, which fixes this problem. The related Microsoft article is Q311500. (SR# 1-GPZLT)
4.1.0	1-BIY71, 1-CRVA5	Calling <code>shutdown()</code> on <code>AgentManager</code> and <code>AgentMonitor</code> in the console API now properly cleans up threads.
4.1.0	1-CYG73	The TIBCO Hawk sample <code>Trusted.txt</code> 's commented explanation does not match the file's trusted setting. The Spot microagent used for user1 should be Custom microagent.
4.1.0	1-D4DWJ	The method <code>Self::getMicroAgentInfo()</code> returns a new field <code>DisplayName</code>
4.1.0	1-D599Z	Moving the mouse pointer inside the Rulebase Icon (or the Container Icon) displays the full name of the rulebase (or the container name) as a tool tip.
4.1.0	1-D5BTB	Multi-ported NIC card info re-reported from Performance microagent network interface method.
4.1.0	1-E67LD	The Windows <code>Process.getProcess()</code> method caused system handle count growth. This has been fixed.
4.1.0	1-E8DH3	The AMI C and C++ API libraries were renamed to eliminate naming conflicts with OS libraries. The prefix "tibhawk" was added to each of the library names. For example, <code>ami.dll</code> was changed to <code>tibhawkami.dll</code> . See the <i>TIBCO Hawk AMI C Reference</i> and <i>TIBCO Hawk AMI C++ Reference</i> for a complete list of the new libraries.
4.1.0	1-ESGK5	The Windows <code>FileStat.getFileStatus</code> return values "Seconds Since Accessed", "Seconds Since Modified", and "Seconds Since Creation" were returning the actual time in seconds, not the elapsed time in seconds. This has been fixed.
4.1.0	1-EXQCB	JVM settings <code>-mx</code> and <code>-ms</code> were not properly set for all platforms. The <code>startagent</code> script has been fixed to apply the proper settings.

Closed in Release	Defect # (Cont'd)	Description (Cont'd)
4.1.0	1-F8GUU 1-5E3LB	<p>These bugs were caused by having PostedCondition in the ClearTest. if PostedCondition was specified in the ClearTest (in the Advanced Test Editor) and you clicked Apply Change, the Apply Change button remained enabled. If you quit out of the rulebase editor, then re-entered the rulebase editor and edited the test again, the posted condition was not selected correctly in the test editor. However, the rulebase was sent to the agent or repository correctly.</p> <p>The Apply Changes button is now disabled after the rulebase is sent. In the test editor, the posted condition is also selected correctly.</p>
4.1.0	1-FHDD, 1-HH3X1	Fixed rulebase engine bug relating to methods that returned null data. Bug had resulted in <code>MAX_DATA_ELEMENT Exceeded</code> error messages.
4.1.0	1-GYALP	This defect only affected TIBCO Hawk installations that used TIBCO Hawk security. If you invoked a method on a secure agent from the console that resulted in a permission denied exception message, it caused the agent to send a point-to-point message to the console every 5 seconds thereafter. The effect was cumulative; if you made 10 such method invocations, the agent sent out 10 point-to-point messages every 5 seconds. This has been fixed.
4.1.0	1-HJ6GE	Rulebases mapped to the parent group of a group now get loaded.
4.1.0	1-HJ6GO	Validity dates removed from Binding page.
4.1.0	1-HTQYT	Subscriptions to Performance:Process() terminated and failed to resume automatically if all instances of the monitored processes exited and then restarted. This resulted in NoDataSourceError alerts in rules using this method. This has been fixed.
4.1.0	1-INYTH	The agent was incorrectly stating that an error had occurred when there was no error. When a datasource error was cleared, the agent was logging an error message of the form <code>DataSource COM.TIBCO.XX.XX not registered.</code>
4.1.0	1-KH69U	The Windows Performance Microagent did not properly identify identical object instances (e.g. two identical network cards). Identical object instances are now correctly identified by appending an instance number (i.e. instance#1, instance#2, instance#N).

Closed in Release	Defect # (Cont'd)	Description (Cont'd)
4.1.0	1-KH6AA	The Windows Performance Microagent did not correctly identify the index column values for the Process (Process ID) and Thread (Thread ID) objects for machines where Performance Objects were translated to non-English (e.g. French, German, Italian). This has been fixed.
4.1.0	1-KH6AK	(Windows) If the Performance Microagent component of HMA failed to retrieve performance counters and instances information for a given object during its initialization phase, HMA would abort. This has been fixed. HMA now logs the event and continues with the next object.
4.1.0	1-KH6AX	<p>When subscribing to the HMA <code>TibRendezvous.onRvDaemonStatus</code> method, if the TIBCO Rendezvous daemon did not deliver the HOST STATUS message in time, the subscription was terminated with the misleading error message "Specified AMI error handle is invalid or corrupted." This only happened rarely, such as when multiple <code>onRvDaemonStatus</code> subscriptions existed on similar transports (for example, with the RV parameters <code>7474 " tcp:7474, > 7474 " tcp:localhost:7474, 7474 " 7474</code>).</p> <p>This has been corrected and these error conditions are logged into the HMA trace log with appropriate messages.</p>

Release 4.0.x

Closed in Release	Component	Platform	Description
4.0.5	Console API	All	The console API microagent subscription functionality has been improved to reduce the amount of message traffic.
4.0.5	Logfile Microagent	All	In a pattern file, if a pattern was specified with severity level 0, the pattern was ignored. This has been fixed.
4.0.5	Hawk Display	All	In Canvas View, colored polylines did not retain color when cut and pasted on the canvas. This has been fixed.

Closed in Release	Component	Platform	Description (Cont'd)
4.0.5	Performance Microagent	Windows	When the performance microagent was restarted using the <code>Restart</code> method, any rulebases or subscriptions on the performance microagent would report a <code>No DataSource</code> error until the new instance of the performance microagent was initialized. This has been fixed by ensuring that the new performance microagent instance is initialized before the existing performance microagent terminates.
4.0.5	HMA	Windows	While monitoring a single process using the <code>Performance:Process</code> method on Windows, the HMA could sometimes terminate in the situation where the monitored process is abruptly killed. This has been fixed.
4.0.5	HMA	Windows	Specifying a blank directory, file name or both in the <code>setTraceParameter</code> method could cause HMA to terminate. This has been fixed.
4.0.5	Documentation	All	Error codes are now documented in the <i>TIBCO Hawk Administrator's Guide</i> .
4.0.4	Logfile Microagent	All	The logfile microagent failed to report <code>No DataSource Error</code> if the logfile being monitored did not exist. This has been fixed.
4.0.4	Network Microagent	HP-UX only	If an HP-UX machine had several network interfaces, the network microagent <code>getStatistics</code> method returned incorrect information. This has been fixed.
4.0.4	64-bit AMI Library	HP-UX 11i	Fixed a build problem in the 64-bit AMI library, <code>libami64.sl</code> on HP-UX.
4.0.4	TIBCO Rendezvous Microagent	All	The TIBCO Rendezvous <code>onRvDataLoss</code> method caused the TIBCO Hawk HMA to crash under a rare condition while receiving a Rendezvous DATALOSS advisory message with a missing <code>ADV_DESC</code> field. This has been fixed.

Closed in Release	Component	Platform	Description (Cont'd)
4.0.3	Display	All	When the Get Microagents, Get Rulebases, and Get Schedules operations were invoked using older versions of TIBCO Hawk (for example, 4.0.1 or 3.1.4) from a 4.0.2 version of the Hawk Display, the operations failed when used with the Trusted security policy turned on. This has been fixed.
4.0.3	HMA	All	A thread-safety bug existed in the regular expression pattern matching code that could cause the HMA to crash. Each HMA microagent runs on a separate thread. If methods are executed on two or more HMA microagents where regular expression patterns have been specified in the method arguments there is a potential for two or more threads to execute this thread-unsafe code and cause the HMA to crash. This is more likely to occur on multi-cpu hardware where true parallel thread execution can occur. This bug affected the Process, FileStat, Performance, FileSystem, and Network microagents. This problem has been fixed.
4.0.2	Agent	Windows	On Windows platforms, when TIBCO Hawk was used to monitor a file using the logfile microagent, it sometimes hindered the ability of the monitored file to rollover. This has been fixed.
4.0.2	Display	All	If a microagent returned multiple rows with the same index, Hawk Display threw an <code>ArrayOutOfBoundsException</code> . This has been fixed.
4.0.2	Agent	All	The ID returned for the <code>_onUnsolicitedMsg</code> method was incorrectly defined. This could cause rulebase test evaluation to fail for tests using the ID returned. This has been fixed.
4.0.2	Agent	All	The <code>Logfile:onNewLine</code> method failed to correctly evaluate the file name when a back quoted substitution string was used. This has been fixed.
4.0.2	Agent	All	Under some conditions, the use of wildcards for user names in the trusted.txt file did not function. This has been fixed.

Closed in Release	Component	Platform	Description (Cont'd)
4.0.1	Agent	All	The <code>sysInfo</code> microagent was missing from the platform-independent microagents. This has been fixed.
4.0.1	HMA	All	<code>Rendezvous:onRvDaemonStatus</code> sometimes returned negative counters after rvd was killed and restarted. This has been fixed.
4.0.1	HMA	All	The HMA process would sometimes get terminated if the DEBUG trace level was turned on the TIBCO Rendezvous microagent and a Rendezvous error was encountered. This has been fixed.
4.0.1	HMA	All	The HMA process sometimes got terminated if <code>Rendezvous:onRvDaemonStatus</code> subscription was started and then cancelled repeatedly. This has been fixed.
4.0.1	HMA	Windows	When events are being logged to the Event Log at extremely high sustained rates and the Event Log is configured with "Overwrite events as needed" enabled and events are being overwritten, the event log monitoring thread in the HMA would occasionally terminate. This has been fixed.
4.0.1	Display	All	The cursor did not focus properly on the "And," "Or," "Not," "Delete," and "Undo" buttons in the compound test editor when used with JDK 1.3.1. This has been fixed.
4.0.1	Display	All	Modifying an existing "Host" to a "Group" from the Rulebase Map editor created two entries for the newly created group. This has been fixed.
4.0.1	HMA	HP-UX	The TIBCO Hawk HMA failed to run on PA-RISC 1 machines. This has been fixed.
4.0.1	Display	Solaris	The Compound Test Editor window could not be resized. This has been fixed.
4.0.1	TIBCO Hawk Agent	All	In the Logfile microagent, the <code>onNewLinewithPatternFile</code> method would not correctly parse pattern strings containing a blank space. This has been fixed.

Closed in Release	Component	Platform	Description (Cont'd)
4.0.1	All	Solaris	On Solaris 7 and 8 with 64-bit architecture, the <code>System::getSystemInfo()</code> microagent method returned no data. This has been fixed.
4.0.0	TIBCO Hawk Display	All	In TIBCO Hawk Display, the rulebase editor had no checks for the case where a user erroneously could create two tests within a rule that use the same Post Condition as an action. This has been fixed.

Known Issues

This section lists known issues in this release.

Key #	Summary/Workaround
HK-3761	<p>Summary (HP-UX) Hawk Agent/Display crashes when the JVM microagent, passing a null argument, is invoked.</p> <p>Workaround Do not invoke the <code>JavaVirtualMachine.getVirtualMachineInfo()</code> method:</p> <ul style="list-style-type: none"> • with null argument (that is, do not leave the Process Name blank) • by passing TIBCO applications that use the wrapper to start their JVM in the argument.
HK-3723	<p>Summary If the Java process uses the IBM JDK and the Hawk Agent uses Sun JDK, the JVM microagent cannot discover JVMs running in the Java process.</p> <p>Workaround Make sure that Hawk Agent uses the same JDK (IBM JRE version 1.6 that support for attach APIs) as used by the Java process.</p>
HK-3710	<p>Summary TIBCO Hawk Enterprise View cannot be accessed when HTTP Adapter is configured with https on Tomcat.</p> <p>Workaround TIBCO Hawk 4.9 supports SSL on Weblogic but not on Tomcat and Jetty.</p>
HK-3645	<p>Summary Unable to create a domain when TIBCO Runtime Agent 5.6 and TIBCO Administrator 5.6 are installed in the same TIBCO_HOME where TIBCO Hawk 4.9 is installed.</p> <p>Workaround Replace <code>slf4j-jar</code> files in <code>tpcl/5.6/lib</code> with <code>log4j-1.2.15.jar</code>, <code>slf4j-api-1.5.2.jar</code>, and <code>slf4j-log4j12-1.5.2.jar</code> from <code>tibco/hawk/4.9/lib</code>.</p>
HK-3573	<p>Summary Adding Hawk domain with SSL to TIBCO Administrator throws errors.</p> <p>Workaround None</p>
HK-3511	<p>Summary The Configuration File Option of the Windows configuration tool does not work.</p> <p>Workaround Specify the absolute path when using the Configuration File Option.</p>

Key #	Summary/Workaround
HK-3488	<p>Summary When ActiveMatrix nodes are stopped or started using the HPA microagent, the Action status of the node does not get updated in the ActiveMatrix Administrator UI -> Infrastructure > Nodes screen.</p> <p>Also, these actions do not get logged into the 'Outcome of Recently Completed Tasks and Actions' data provided by ActiveMatrix Administrator.</p> <p>Workaround You can discover these actions by checking the log file of the ActiveMatrix node at <code>CONFIG_FOLDER/tibcohost/nodes/<nodename>/log</code>.</p>
HK-3487	<p>Summary (HP-UX) AMXHost microagent is not supported on HP-UX platform.</p> <p>Workaround None</p>
HK-3393	<p>Summary (MAC) Unable to start the Hawk Agent and Hawk Display on MAC OS.</p> <p>Workaround</p> <ol style="list-style-type: none"> 1. Open the <code>TIBCO_HOME/tibrv/8.3/lib</code> directory. 2. Move the following files to a separate folder (for example, <code>tibrv/8.3/lib/hidden</code>): <ul style="list-style-type: none"> <code>libcrypto.0.9.8.dylib</code> <code>libcrypto.dylib -> libcrypto.0.9.8.dylib</code> <code>libssl.0.9.8.dylib</code> <code>libssl.dylib -> libssl.0.9.8.dylib</code> <code>libtibrvsd.dylib</code> <code>libtibrvsd64.dylib</code> <code>libz.dylib</code> 3. Restart the Hawk Agent.

Key #	Summary/Workaround
HK-3305	<p>Summary (HP-UX) After installing TIBCO Hawk 4.9 on HP-UX, Hawk agent, Hawk Display, and Event Service do not start.</p> <p>Workaround To start Hawk Agent, Hawk Display, and Event Service on HP-UX 11i:</p> <ul style="list-style-type: none"> Update HP-UX 11i system with the latest patch. <p>OR</p> <ul style="list-style-type: none"> Manually export the path of JVM 1.6. In other words, execute one of the following shell commands (based on 32-bit or 64-bit installation) before invoking any executable for TIBCO Hawk components: <p>% export SHLIB_PATH=JRE_1.6_path/lib/PA_RISC2.0/server (32-bit) % export SHLIB_PATH=JRE_1.6_path/lib/PA_RISC2.0W/server (64-bit)</p> <p>For example: % export SHLIB_PATH=/home/swadmin/jre1.6/PA_RISC2.0/server</p>
HK-3299	<p>Summary On Windows 7 (64-bit), when you configure the Monitoring plug-in of TIBCO Administrator for TIBCO Hawk 4.9 with TIBCO Runtime Agent 5.6.2, starting the TRA domain throws an error.</p> <p>Workaround</p> <ol style="list-style-type: none"> Edit <code>TIBCO_HOME/tra/domain/<domain_name>\tibhawkagent_<domain>.tra</code> to point the HAWK_HOME to Hawk 4.9. Append <code>HAWK_HOME\lib\hawkconfigcommon.jar</code> to <code>TIBCO_HOME/tra/domain/<domain_name>/tibcoadmin_<domain></code> class path.
HK-3705	<p>Summary (HPPA) The Hawk Display fails to start when TIBCO Hawk 4.9 is installed in the same TIBCO_HOME where TIBCO Runtime Agent 5.6.0 and TIBCO Administrator 5.6.0 are installed.</p> <p>Workaround Replace <code>agents.jar</code> and <code>console.jar</code> in <code>HAWK_HOME\lib</code> folder with <code>com.tibco.hawk.agent_4.9.0.xxx.jar</code> and <code>com.tibco.hawk.console_4.9.0.xxx.jar</code> from <code>TIBCO_HOME\components\shared\1.0.0\plugins</code>.</p>
HK-2966	<p>Summary The Hawk agent in TIBCO Runtime Agent does not load the Hawk plug-in For TIBCO Administrator automatically.</p> <p>Workaround Edit the <code>HAWK_HOME\bin\tibhawkagent_<domain>.tra</code> to point the HAWK_HOME to Hawk 4.9.</p>

Key #	Summary/Workaround
HK-2912	<p>Summary (SUSE Linux) The method <code>COM.TIBCO.hawk.hma.TibRendezvous.onRvDaemonStatus</code> returns a wrong value for field Inbound Data Loss on SUSE 11 64-bit platform.</p> <p>Workaround None</p>
HK-2895	<p>Summary (Windows) When Logfile microagent is used to monitor a fast roll over log file, it causes the log file to stop rolling over.</p> <p>Workaround Try faster scan rate, that is, 1 sec and 258K for block size. The scan rate and block size should match the rate at which the log file is increasing.</p>
HK-2890	<p>Summary (SUSE Linux) The method <code>COM.TIBCO.hawk.hma.Network.getConfig</code> works on RHEL 4.x but returns an exception on SUSE Linux 11.</p> <p>Workaround None</p>
HK-2889	<p>Summary (SUSE Linux) The method <code>COM.TIBCO.hawk.hma.Network.getConfig</code> works on RHEL 4.x but returns an exception on SUSE Linux 11.</p> <p>Workaround None</p>
HK-1412 1-KH6BS	<p>Summary If the HMA is stopped and then restarted with a different -timeout value, any Hawk Displays that had discovered the HMA originally will still have the cached descriptions of the HMA reflecting the old -timeout value.</p> <p>Workaround Restart TIBCO Hawk Display to get the new HMA -timeout value.</p>
HK-1411 1-KH6BN	<p>Summary Clicking the <code>Insert</code> button from the Action Editor displays a scrollable list of parameters returned by the microagent's method chosen as the data source. The vertical scroll bar fails to appear if the microagent's method returns a large number of parameters.</p> <p>Workaround Manually type in the return parameter name (in the proper syntax) in the text area.</p>
HK-881 1-6MUP3P	<p>When using the <code>-xtype</code> option when creating or updating a MAR file, the type for all application-specific rules was changed to the one specified with the <code>-xtype</code> option.</p>
HK-879 1-6M04OL	<p>While creating or updating a MAR file, the MAR utility templated the application-specific <code>action</code> data sources in a rulebase even if the data source used in the rule was an Agent-specific rule. Also, the application-specific template variables would not be substituted when the MAR file was deployed.</p>

Key #	Summary/Workaround
HK-312 1-8AABL6	<p>Summary The Physical Memory numbers returned by the <code>System:getTunableInfo</code> method do not match the underlying HP-UX operating system command line output.</p> <p>Workaround None at this time.</p>
HK-307 1-8WXEIN	<p>Summary You cannot upload the Monitoring-Console plugin to a TIBCO Administrator domain running on a machine which does not have a full installation of TIBCO Hawk.</p> <p>Workaround Make sure you have a full installation of TIBCO Hawk.</p>
HK-224 1-93IHCZ	<p>Summary The Hawk Display does not reconnect to the EMS server after connection to EMS server is severed. In some instances, when the connection to the EMS server is severed, the Display receives an error callback with the exception - <code>java.io.EOF</code> exception. The Display cannot determine that the connection is severed and thus does not try to recover the connection.</p> <p>Workaround Ensure that you have a subscription to an Agent while running the Display. If there is an active subscription when the connection is severed, the Display attempts to recover the connection.</p>
HK-220 1-8X64ZH	<p>Summary (Mac OS X only) For the <code>Network:getStatistics</code> method, data for the following columns is reversed:</p> <p>The <code>Input Packets</code> column contains data for the <code>Input Error Packets</code> column, and vice versa.</p> <p>The <code>Output Packets</code> column contains data for the <code>Output Error Packets</code> column, and vice versa.</p> <p>Workaround None at this time.</p>
HK-219 1-8X5PYM	<p>Summary (Mac OS X only) The method <code>Process:getProcess</code> shows negative values for the <code>% Memory</code> column.</p> <p>Workaround None at this time.</p> <p>The absolute value of the <code>% Memory</code> is correct.</p>
HK-215 1-92A203	<p>Summary On Microsoft Windows, the Thread method of the Performance microagent returns the following error - "Row 0 and row 1 have the same index value(s)". This is caused when the PDH counter returned more than one threads with the same ID. As a result, the table is not indexed correctly.</p> <p>Workaround None at this time.</p>

Key #	Summary/Workaround
HK-205 1-6M04NL	<p>Summary While creating or updating a MAR file, the MAR utility templatizes both the rule and the <code>action</code> data sources in a rulebase if the data sources are of same application-specific type even if they are different microagents.</p> <p>Workaround Use the <code>-xasis</code> option while creating or updating a MAR file. This will not templatize the rulebases.</p>
HK-43 1-7CCVDB	<p>Summary When using the Hawk Console, in the Agents or Rulebases tab if you have grouped the agents by the cluster and any new agent is added or removed, the contents of the page do not get refreshed</p> <p>Workaround None at this time.</p>
HK-17 1-8X0S4D	<p>Summary (Microsoft Windows only) If the Hawk installer detects an existing installation of TIBCO Rendezvous 8.1.0, you are prompted to re-install TIBCO Rendezvous.</p> <p>If the TIBCO Hawk installer detects an existing installation of TIBCO Rendezvous is 8.1.0, exit the installation and install TIBCO Rendezvous 8.1.1 or above before continuing to install TIBCO Hawk.</p> <p>Workaround None at this time.</p>
HK-14 1-8X2Y2X	<p>Summary When upgrading an earlier installation, the documentation and the software development toolkit is installed even if you unchecked the check box for these components during the Custom installation process.</p> <p>Workaround None at this time.</p>
HK-129 1-2HSWFE	<p>Summary (AIX) The method <code>Network:getStatistics</code> returns <code>No Data</code> for the loopback interface.</p> <p>Workaround None at this time.</p>
HK-3384	<p>Summary (AIX) AIX agent can not be discovered from other machines in the same Hawk domain.</p> <p>Workaround Make sure that the TIBCO Rendezvous messages are not blocked.</p>
HK-143 1-KH6BA	<p>Summary (Microsoft Windows platforms only) Japanese characters are not supported for use in regular expressions in the HMA microagents <code>Performance</code>, <code>Process</code> and <code>Filestat</code>. Currently only ASCII characters can be used for pattern matching.</p> <p>Workaround None.</p>

