TIBCO Hawk® Database Adapter

Security Guide

Version 6.2.1
July 2022

Contents

Introduction

This document describes guidelines to ensure security within the TIBCO Hawk® Database Adapter and the channels of communication between the adapter and the Hawk agent. It also provides additional security-related guidance and recommendations for other aspects of external communication. In particular, this document provides details of product connectivity and configuration of security options.

Secure Communication Channels

TIBCO Hawk® is a distributed peer-to-peer monitoring and management framework. The Hawk agents are deployed on each machine or node, which monitors OS, applications, and systems locally or remotely via microagents. Most communication among the Hawk® components (Hawk agents, console, and adapters) is limited to data center services.

Hawk® Database Adapter extends the Hawk® monitoring environment to include one or more relational databases. This ability to link a database with other systems and applications is valuable because database tools, while robust and feature-rich, assume the database server is completely isolated from other environments. Hawk® Database Adapter allows you to perform database monitoring and adds management capabilities to Hawk®.

Data Ingest and Ingress

Ingest and ingress of data into Hawk® Database Adapter is limited to the following modes:

- JDBC (connectivity to external Relational Databases)

Data Egress

Data can be sent out from Hawk® Database Adapter in the following ways:

- Microagent Method return (Hawk AMI API)

Communication Channels and Their Security Configurations

By default, some communication channels are not secure, but they can be secured by configuring channels and transports to use the Secure Socket Layer (SSL) or Transfer Layer Security (TLS) protocol. For information about how to configure a component for secure communication, see the *TIBCO Hawk® Installation, Configuration, and Administration guide*.

For configuration information about Hawk® Database Adapter, see the documentation for Hawk® Database Adapter.

The following diagram illustrates the component and communication protocols in a typical Hawk® deployment for Hawk® Database Adapter:
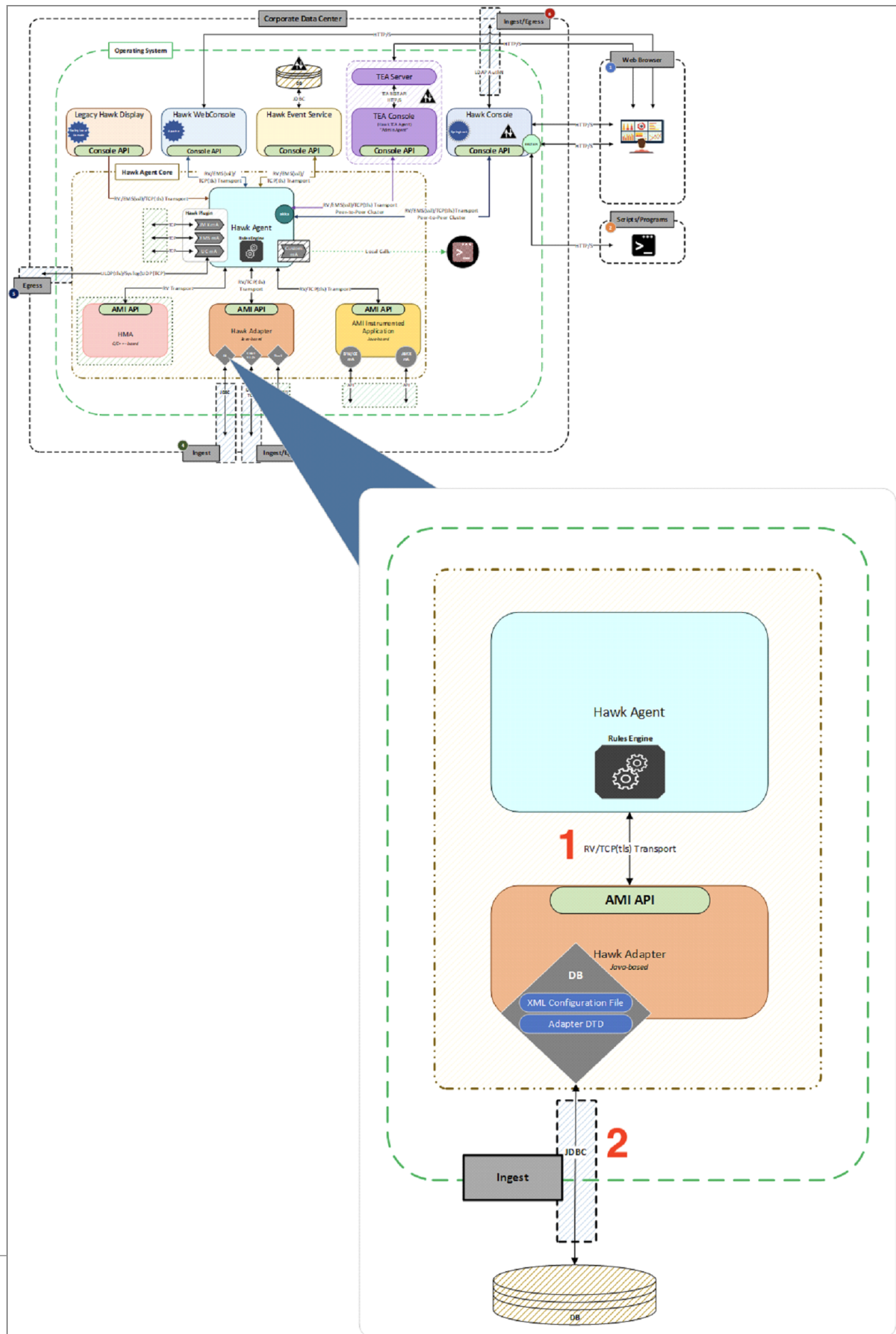
The following table describes the communication channels that can be configured, along with the references to more information, if applicable.

Key	Communication Channels	Connection	Description and References
1	RV/ TCP	RV - Unsecured/ TCP over TLS	AMI API. TCP Transport offers TLS/ SSL support. For more information, see the *TIBCO Hawk® Installation, Configuration, and Administration guide.*
2	JDBC	JDBC: • Oracle • Sybase • Microsoft SQL • Postgres	JDBC Adapter to monitor RDBMS databases, tables

Other Recommendations for Running Hawk® Database Adapter Securely

This chapter provides some recommendations to secure other aspects of communication when using Hawk® Database Adapter.

General Security Environment

Hawk® Database Adapter supports both TIBCO Rendezvous as well as TCP transport for communicating with Hawk agent. TIBCO recommends that you use TCP transport, which also supports secured communication over TLS.

Selection of Passwords

Hawk® Database Adapter requires an XML configuration file that contains the external database connectivity parameters, including the database user password. Use the `tibhawkpassword` utility of Hawk® to obfuscate the password and store it in the XML configuration file.

Data Center Placement

The Hawk® architecture assumes all the Hawk® components are running on a trusted network, with access only from trusted computers and accounts. Consider the following security and data protection recommendations when deploying your data center (on-premises or on the cloud).

On-premises

When deploying Hawk® components to the data center, keep Hawk® components behind a firewall. This adds extra layers of security in protecting your data.

On the Cloud

When deploying Hawk® components to the virtual data center, keep Hawk® components behind a firewall. Running your Hawk® components in the same virtual private cloud (VPC) as your core services provides additional protection and better performance during data collection.

Backups

You must export all backups (for example, XML configurations) to a secure location to ensure quick recovery in case of a failure. Secure backup is necessary because of the sensitive nature of the files (for example, configurations) that might be restored to production systems for recovery.

TIBCO Documentation and Support Services

For information about this product, you can read the documentation, contact TIBCO Support, and join TIBCO Community.

How to Access TIBCO Documentation

Documentation for TIBCO products is available on the TIBCO Product Documentation website, mainly in HTML and PDF formats.

The TIBCO Product Documentation website is updated frequently and is more current than any other documentation included with the product.

Product-Specific Documentation

Documentation for TIBCO Hawk® Database Adapter is available on the TIBCO Hawk® Database Adapter Product Documentation page.

To directly access documentation for this product, double-click the following file:

TIBCO_HOME/release_notes/TIB_hawkdbhma_6.2.1_docinfo.html where *TIBCO_HOME* is the top-level directory in which TIBCO products are installed. On Windows, the default *TIBCO_HOME* is C:\tibco. On UNIX systems, the default *TIBCO_HOME* is /opt/tibco.

The following documents for this product can be found in the TIBCO Documentation site:

- *TIBCO Hawk® Database Adapter Release Notes*
- *TIBCO Hawk® Database Adapter Installation*
- *TIBCO Hawk® Database Adapter User's Guide*
- *TIBCO Hawk® Database Adapter Security Guide*

How to Contact TIBCO Support

Get an overview of TIBCO Support. You can contact TIBCO Support in the following ways:

- For accessing the Support Knowledge Base and getting personalized content about

products you are interested in, visit the TIBCO Support website.

- For creating a Support case, you must have a valid maintenance or support contract with TIBCO. You also need a user name and password to log in to TIBCO Support website. If you do not have a user name, you can request one by clicking **Register** on the website.

How to Join TIBCO Community

TIBCO Community is the official channel for TIBCO customers, partners, and employee subject matter experts to share and access their collective experience. TIBCO Community offers access to Q&A forums, product wikis, and best practices. It also offers access to extensions, adapters, solution accelerators, and tools that extend and enable customers to gain full value from TIBCO products. In addition, users can submit and vote on feature requests from within the TIBCO Ideas Portal. For a free registration, go to TIBCO Community.

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