



TIBCO® BPM Enterprise

Security Guidelines

Version 5.3.0
May 2022



Contents

Contents	2
Introduction	3
Secure Communication Channels	4
Kubernetes Security Recommendations	6
TIBCO Documentation and Support Services	7
Legal and Third-Party Notices	9

Introduction

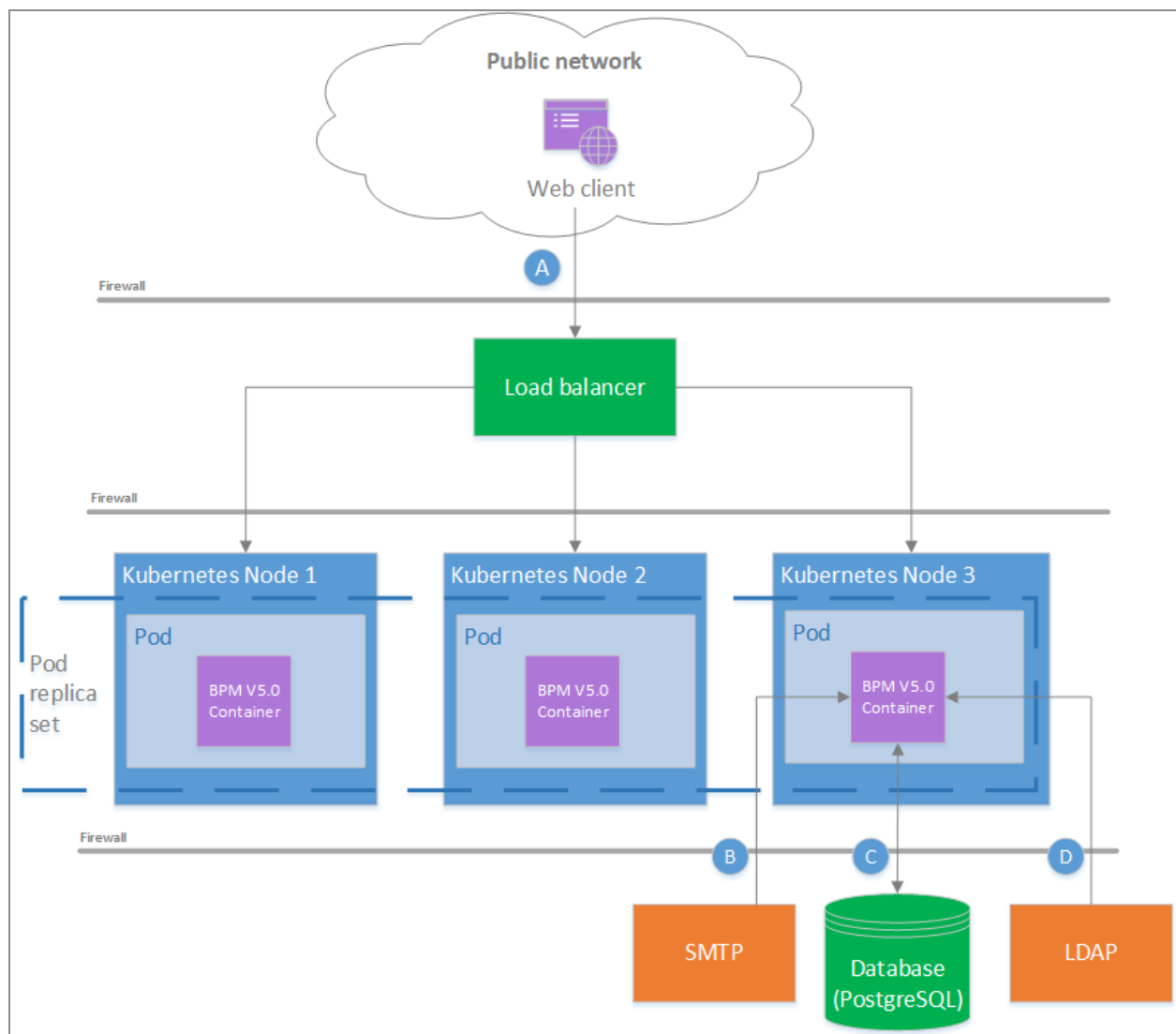
This security guidelines document describes the guidelines for a secure operation of TIBCO® BPM Enterprise. In addition, it provides security-related guidance and recommendations for external communication including communication with the database, and with the end-user interface.

Secure Communication Channels

All TIBCO BPM Enterprise communication must be carried out through secure communication channels. The channels must be secured by a combination of authenticated and authorized access and encryption of data.

By default, some communication channels are not secure. However, they can be secured by configuring the channels to use either HTTPS or TLS.

The following diagram illustrates the basic TIBCO BPM Enterprise communication channels:



The following table describes the communication channels, configuration details, along with the references for additional information:

Flow	Communication Channel	Configuration	Description
A	Web client - Load balancer	Configure the load balancer to use HTTPS.	<p>This is the communication from the client's browser to the load balancer or ingress controller that is used by the hosting Kubernetes system.</p> <p>For details, see the documentation for your external load balancer or ingress controller.</p>
B	TIBCO BPM Enterprise uses SMTP server with TLS	This is done by configuring an SMTP shared resource.	<p>The configuration to establish communication with the SMTP server used by TIBCO BPM Enterprise.</p> <p>For details, see <i>TIBCO® BPM Enterprise Administration</i>.</p>
C	TIBCO BPM Enterprise Database with TLS		<p>This is the database connection configuration used by TIBCO BPM Enterprise.</p> <p>For details, see <i>TIBCO® BPM Enterprise Installation</i>.</p>
D	TIBCO BPM Enterprise uses LDAP with TLS		<p>This is the connection configuration for the required LDAP server used by TIBCO BPM Enterprise.</p> <p>For details, see <i>TIBCO® BPM Enterprise Installation</i>.</p>

Kubernetes Security Recommendations

For a secure TIBCO BPM Enterprise operation, it is necessary to secure operations of the Kubernetes environment in which you execute TIBCO BPM Enterprise. There are no TIBCO BPM Enterprise-specific security aspects for using Kubernetes. Some of the Kubernetes security recommendations include:

- Run containers as a non-root user
- Enable role-based access
- Enable TLS for each component
- Scan container images
- Monitor logs
- Rotate encryption keys and certificates
- Additional security measures for etcd cluster

When configuring Kubernetes, conform to the most updated security best practices. For details about how to secure operations on Kubernetes, see the latest Kubernetes documentation and other related resources.

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

The following documentation for this product is available on the [TIBCO® BPM Enterprise Product Documentation](#) page:

- *TIBCO® BPM Enterprise Release Notes*
- *TIBCO® BPM Enterprise Concepts Guide*
- *TIBCO® BPM Enterprise Installation*
- *TIBCO® BPM Enterprise Administration*
- *TIBCO® BPM Enterprise Getting Started*
- *TIBCO® BPM Enterprise Client User's Guide*
- *TIBCO® BPM Enterprise Developer's Guide*
- *TIBCO® BPM Enterprise Security Guidelines*

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](#).

Legal and Third-Party Notices

SOME TIBCO SOFTWARE EMBEDS OR BUNDLES OTHER TIBCO SOFTWARE. USE OF SUCH EMBEDDED OR BUNDLED TIBCO SOFTWARE IS SOLELY TO ENABLE THE FUNCTIONALITY (OR PROVIDE LIMITED ADD-ON FUNCTIONALITY) OF THE LICENSED TIBCO SOFTWARE. THE EMBEDDED OR BUNDLED SOFTWARE IS NOT LICENSED TO BE USED OR ACCESSED BY ANY OTHER TIBCO SOFTWARE OR FOR ANY OTHER PURPOSE.

USE OF TIBCO SOFTWARE AND THIS DOCUMENT IS SUBJECT TO THE TERMS AND CONDITIONS OF A LICENSE AGREEMENT FOUND IN EITHER A SEPARATELY EXECUTED SOFTWARE LICENSE AGREEMENT, OR, IF THERE IS NO SUCH SEPARATE AGREEMENT, THE CLICKWRAP END USER LICENSE AGREEMENT WHICH IS DISPLAYED DURING DOWNLOAD OR INSTALLATION OF THE SOFTWARE (AND WHICH IS DUPLICATED IN THE LICENSE FILE) OR IF THERE IS NO SUCH SOFTWARE LICENSE AGREEMENT OR CLICKWRAP END USER LICENSE AGREEMENT, THE LICENSE(S) LOCATED IN THE “LICENSE” FILE(S) OF THE SOFTWARE. USE OF THIS DOCUMENT IS SUBJECT TO THOSE TERMS AND CONDITIONS, AND YOUR USE HEREOF SHALL CONSTITUTE ACCEPTANCE OF AND AN AGREEMENT TO BE BOUND BY THE SAME.

This document is subject to U.S. and international copyright laws and treaties. No part of this document may be reproduced in any form without the written authorization of TIBCO Software Inc.

TIBCO, the TIBCO logo, the TIBCO O logo, Business Studio, TIBCO Business Studio, and Spotfire are either registered trademarks or trademarks of TIBCO Software Inc. in the United States and/or other countries.

Java and all Java based trademarks and logos are trademarks or registered trademarks of Oracle and/or its affiliates.

This document includes fonts that are licensed under the SIL Open Font License, Version 1.1, which is available at: <https://scripts.sil.org/OFL>

Copyright (c) Paul D. Hunt, with Reserved Font Name Source Sans Pro and Source Code Pro.

All other product and company names and marks mentioned in this document are the property of their respective owners and are mentioned for identification purposes only.

This software may be available on multiple operating systems. However, not all operating system platforms for a specific software version are released at the same time. See the readme file for the availability of this software version on a specific operating system platform.

THIS DOCUMENT IS PROVIDED “AS IS” WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NON-INFRINGEMENT.

THIS DOCUMENT COULD INCLUDE TECHNICAL INACCURACIES OR TYPOGRAPHICAL ERRORS. CHANGES ARE PERIODICALLY ADDED TO THE INFORMATION HEREIN; THESE CHANGES WILL BE INCORPORATED IN NEW EDITIONS OF THIS DOCUMENT. TIBCO SOFTWARE INC. MAY MAKE IMPROVEMENTS AND/OR CHANGES IN THE PRODUCT(S) AND/OR THE PROGRAM(S) DESCRIBED IN THIS DOCUMENT AT ANY TIME.

THE CONTENTS OF THIS DOCUMENT MAY BE MODIFIED AND/OR QUALIFIED, DIRECTLY OR INDIRECTLY, BY OTHER DOCUMENTATION WHICH ACCOMPANIES THIS SOFTWARE, INCLUDING BUT NOT LIMITED TO ANY RELEASE NOTES AND "READ ME" FILES.

This and other products of TIBCO Software Inc. may be covered by registered patents. Please refer to TIBCO's Virtual Patent Marking document (<https://www.tibco.com/patents>) for details.

Copyright © 2021-2022. TIBCO Software Inc. All Rights Reserved.