



B2Bi

Version 2.3.2
April 2018

ICAP User Guide



Copyright © 2018 Axway

All rights reserved.

This documentation describes the following Axway software:

No part of this publication may be reproduced, transmitted, stored in a retrieval system, or translated into any human or computer language, in any form or by any means, electronic, mechanical, magnetic, optical, chemical, manual, or otherwise, without the prior written permission of the copyright owner, Axway.

This document, provided for informational purposes only, may be subject to significant modification. The descriptions and information in this document may not necessarily accurately represent or reflect the current or planned functions of this product. Axway may change this publication, the product described herein, or both. These changes will be incorporated in new versions of this document. Axway does not warrant that this document is error free.

Axway recognizes the rights of the holders of all trademarks used in its publications.

The documentation may provide hyperlinks to third-party web sites or access to third-party content. Links and access to these sites are provided for your convenience only. Axway does not control, endorse or guarantee content found in such sites. Axway is not responsible for any content, associated links, resources or services associated with a third-party site.

Axway shall not be liable for any loss or damage of any sort associated with your use of third-party content.

Contents

1 Native Anti - Virus/Malware for B2Bi	i
The ICAP Inline Processor	i
Purpose	i
Configuring the ICAP Inline Processor	i
	v
How the scanning process works	vi

Native Anti - Virus/Malware for B2Bi 1

B2Bi natively provides a file Anti-virus / Malware hookup integration. It is based on ICAP, to avoid dependency on specific AV vendors.

The ICAP Inline Processor

Purpose

The Internet Content Adaptation Protocol (ICAP) Inline Processor allows an administrator to configure ICAP engines to secure B2Bi exchange processes. This provides data loss prevention (DLP) and anti-virus (AV) scans. This option is preferable to the alternative of using non-secure connections and adding SSL coding, typically recommended against because of the negative performance impact.

The ICAP functionality for B2Bi is embedded in an [Inline Processor](#). It can be added to a trading pickup as an attribute and as a message handler processing action.

Configuring the ICAP Inline Processor

Initial deployment

After the latest version of B2Bi is installed, and prior to the configuration of ICAP scanning within B2Bi, you must:

Note The folder names may differ depending upon the version of B2Bi that is installed.

1. Locate the `avScanner.properties` file within this directory: `B2Bi_installation\Interchange\samples\icapAv\`
2. Deploy the configuration file (`avScanner.properties`) in this directory: `B2Bi_share\common\conf\avConf`
3. In the case of a B2Bi cluster, repeat this process on all the B2Bi cluster nodes.

Update the avScanner.properties file

The anti-virus inline processor requires the Av-scanning properties to be configured correctly. The properties are auto-documented in the avScanner.properties file.

Properties include *filters* that specify which files are not to be scanned, based on criteria such as:

- max file size
- file extensions and/or file names
- protocols
- partners

Enable the AV-scanning

The following procedures explain how to enable AV-scanning in a trading pickup as a message attribute and the inline-processor in a message handler processing action.

Enable the AV-scanning as a message attribute on a trading pickup

1. Open a Trading or Application Pickup exchange definition.
2. Navigate to the **Message attributes** tab.
3. **Add a fixed value to messages** called for instance *AVScan* and set a value
4. **Save** the Trading pickup definition.

Change this pickup

Community: *w001*, Message protocol: *AS4*, Transport: *HTTP (embedded)*

[Test...](#)

☒ Enable this pickup

Name: • TP_AS4_W001

☒ Make this the default delivery

[HTTP \(embedded\) settings](#)
[Accounts](#)
[From address](#)
[To address](#)
[Message attributes](#)
[EDI Splitter](#)
[Inline processing](#)
[Schedule](#)
[Advanced](#)

Message attributes template

Default message attributes template to apply [Select default message attributes template...](#)

☐ Message attributes template has priority over fixed message attributes

Fixed message attributes

Assign fixed values to message attributes

Name	Metadata name	Value	
AVScan	AVScan	1	Delete

Add a fixed message attribute

Attribute name: [Action](#) [Add attribute](#)

Value:

[Add](#)

Enable the AV-scanning in a message handler processing action

1. Navigate to **Manage Trading Configuration**.
2. Select a Community.
3. Select **Processing** from the Community Map.
4. Select **Message Handler** from the Processing Map.
5. Select **Manage message processing actions**.
6. Select **Add a new message processing action**.
7. Create the condition that is required for the message handler processing action to execute. The condition contains the attribute set on the trading pickup and click **Next**.
8. Select as operator **Perform inline processing via a Java class** and use the following value in **Class Name**: **com.axway.antivirus.inlineprocessor.AntivirusProcessor**
9. Click **Next**.
10. Provide a friendly name and click **Finish**.

Message processing actions

This page enables you to define processing actions. Processing actions can apply to a single community or multiple communities. Processing actions are tasks triggered by the presence or absence of message attributes.

Showing 1 - 1 of 1 message processing actions. To refine your results, enter criteria in the search panel.

<input type="checkbox"/> Friendly name	Action	Conditions for triggering action	Processing order
<input type="checkbox"/>	Perform inline processing: com.axway.antivirus.inlineprocessor.AntivirusProcessor	AVScan = 1	1

Monitoring the Scan process

Log file ->

After enabling the virus scan in your configuration, when a file that matches the criteria is scanned, the following entries appear in the Trading Engine log (TE.log), for example:

```
2018-08-23 06:18:50,726 - INFO [Thread-1028]
(AntivirusConfigurationWatcher) - Antivirus configuration changed. File
affected: avScanner.properties.
2018-08-23 06:18:50,726 - INFO [Thread-1028]
(AntivirusConfigurationManager) - Scanner configuration not present or
modified - attempting to load it.
2018-08-23 06:18:50,741 - DEBUG [Thread-1028]
(AntivirusConfigurationHolder) - Scan from integrator value is: false
2018-08-23 06:18:50,741 - DEBUG [Thread-1028]
(AntivirusConfigurationHolder) - Reject file on error value is: true
2018-08-23 06:18:50,741 - DEBUG [Thread-1028]
(AntivirusConfigurationHolder) - Antivirus standard receive length is: 8192
2018-08-23 06:18:50,741 - DEBUG [Thread-1028]
(AntivirusConfigurationHolder) - The ICAP server version is: 1.0
```

```

2018-08-23 06:18:50,741 - DEBUG [Thread-1028]
(AntivirusConfigurationHolder) - Antivirus hostname is: cos7-dev-
19.lab.buch.axway.int
2018-08-23 06:18:50,741 - DEBUG [Thread-1028]
(AntivirusConfigurationHolder) - Antivirus port is: 1344
2018-08-23 06:18:50,741 - DEBUG [Thread-1028]
(AntivirusConfigurationHolder) - Antivirus preview size is: 1024
2018-08-23 06:18:50,741 - DEBUG [Thread-1028]
(AntivirusConfigurationHolder) - Antivirus service name is: squidclamav
2018-08-23 06:18:50,741 - DEBUG [Thread-1028]
(AntivirusConfigurationHolder) - Antivirus standard send length is: 8192
2018-08-23 06:18:50,741 - DEBUG [Thread-1028]
(AntivirusConfigurationHolder) - Antivirus connection timeout is: 2000
2018-08-23 06:18:50,741 - DEBUG [Thread-1028]
(AntivirusConfigurationHolder) - Antivirus maximum file size is: 60000000
2018-08-23 06:18:50,741 - INFO [Thread-1028]
(AntivirusConfigurationManager) - Scanner configuration successfully
loaded.

```

The Message Tracker

In Message Tracker, a metadata attribute is added that indicates the scan status of the message.

Message details

Document summary		Message processing details		Document activity		Message attributes	
Attribute name		Attribute value					
AVScan Status		Clean					
B2Bi consumed security		nosecurity					
B2Bi consumption timestamp		1535027735594					
B2Bi override direction flag		false					
B2Bi pickup name		filesystem pickup					
Community message delivery		true					
Consumption URL		\\WINDOWS172\shared_cluster_av\common\data\filesystem					
Delivery Exchange Name		in					
Direction		Inbound					
Document class		Binary					
From routing ID		Partener					
MIME type		application/octet-stream					
Payload count		1					
Receiver party name		Comunitate					
Sender party name		Partener					
To routing ID		Comunitate					
Show metadata names							

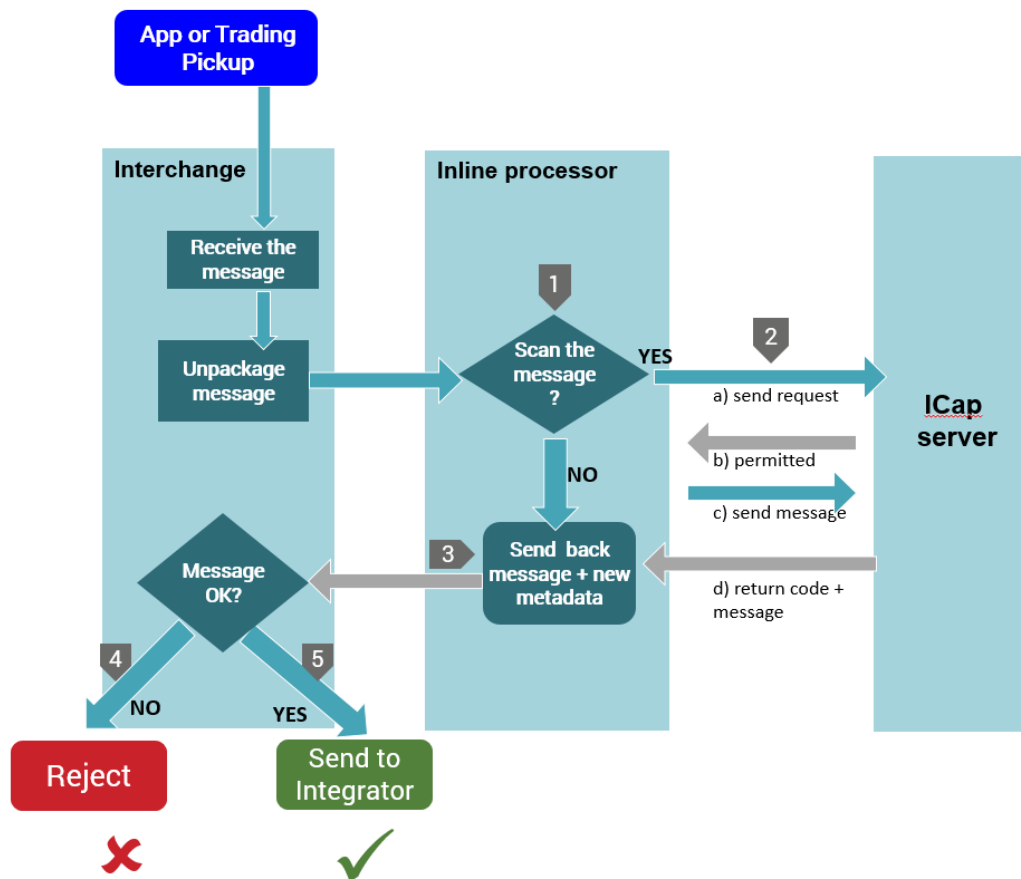
Message details

[Document summary](#)[Message processing details](#)[Document activity](#)[Message attributes](#)

Attribute name	Attribute value
AVScan Info	Message Infected - rejecting message. Threat: X-Infection-Fo More...
AVScan Status	Infected
B2Bi consumed security	nosecurity
B2Bi consumption timestamp	1535027750742
B2Bi override direction flag	false
B2Bi pickup name	filesystem pickup
Community message delivery	true
Consumption URL	\\WINDOWS172\shared_cluster_av\common\data\filesystem
Direction	Inbound
Document class	Binary
From routing ID	Partener
MIME type	application/octet-stream
Payload count	1
Receiver party name	Comunitate
Sender party name	Partener
To routing ID	Comunitate

How the scanning process works

The following diagram illustrates the ICAP file scanning process when the scanning option is activated:



1. If the message received from Interchange has restrictions defined in the `avScanner.properties` file, the Inline processor decides whether to scan the message or not
2. If the message is to be scanned, the dialog between the Inline processor and the ICAP server is as follows:
 - a. The Inline processor sends the OPTIONS request to connect to the ICAP server
 - b. The ICAP server indicates which type of request are permitted and gives back the maximum size of the preview the server can use.
 - c. The Inline processor sends the message in chunks
 - d. The ICAP server sends a code and a message

3. The inline processor sends the message with the new metadata back to Interchange - "AVScanStatus"- "AVScanInfo"
4. The message is rejected if it is Infected or if an ERROR occurred
5. The message is send to Integrator for processing.

Notes and limitations:

1. If the backup option is activated, and the files are infected, a backup of the file is saved on the system.
2. If the backup option is disabled, the files are deleted directly.
3. The payload of the infected files cannot be viewed or downloaded from the Message Tracker.
4. If a message has more than one attachments, and these are infected:
 - the infected attachment is not sent to processing
 - In the original message, the link for the failed attachment is still available

