

Juniper Networks Deep Packet Inspection-Decoder (Application Signature) Release Notes

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RELEASE

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Recent Release History

[Table 1 on page 1](#) summarizes the features and resolved issues in recent releases. You can use this table to help you decide to update the JDPI-Decoder version in your deployment.

Table 1: JDPI-Decoder Features and Resolved Issues by Release

Release Date	Signature Pack Version	JDPI Decoder Version	Engine Version 5	Features and Resolved Issues
07 June 2023	The relevant signature package version is 3604.	1.550.2-43	5.7.1-47	This JDPI-Decoder version is supported only on the Junos OS 19.2R1 and later releases on all supported SRX Series platforms. Starting in Junos OS release 20.1R1, enhancements to custom applications are included in the JDPI-Decoder release.

Overview

The JDPI-Decoder is a dynamically loadable module that mainly provides application classification functionality and associated protocol attributes. It is hosted on an external server and can be downloaded as a package and installed on the device. The package also includes XML files that contain additional details of the list of applications and groups. The list of applications can be viewed on the device using the CLI command `show services application-identification application summary`. Additional details of any particular application can be viewed on the device using the CLI command `show services application-identification application detail <application>`. For additional details, see [Application Signature](#).

NOTE: This application signature package does not support v4 engines. This upgrade is only supported on Junos OS 19.2R1 and later releases which support the v5 engine. This signature package is not compatible with Junos OS releases supporting v4 engine. There are no more updates planned for PB1.460.2-46 for Junos OS releases supporting v4 engine.

New Features and Enhancements

IN THIS SECTION

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- [New Applications | 2](#)
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The following sections describe new features and enhancements available in the JDPI-Decoder releases:

New Software Features and Enhancements Introduced in JDPI-Decoder Release

New Applications

[Table 2 on page 2](#) shows the applications that are added in this release of JDPI-Decoder.

Table 2: New Applications

Sr. No.	Application Name	Application Type	Reported Over	Description
1	CODESYS	Infrastructure	TCP	Codesys is an embedded system and its IDE for industrial Programmable Logic Controller (PLC). This plugin classifies the protocol between the IDE and the PLC.

Table 2: New Applications (*Continued*)

Sr. No.	Application Name	Application Type	Reported Over	Description
2	CAMSTAR	Infrastructure	HTTP	Siemens Opcenter Execution, former Camstar, is a Manufacturing Execution System (MES). This plugin classifies the XML server and HTTP Web Services.
3	MBCONNECT	Infrastructure	HTTP	MBConnect24 is a cloud based service portal for industrial applications edited by MB Connect Line. This plugin classifies OpenVPN access from MBConnect physical routers and access to the web application.
4	SENTINEL-RMS	Infrastructure	HTTP	Sentinel Rights Management System (RMS) is a license manager from Thales. This plugin classifies the communication from the client to the local license server.
5	EPICOR	Infrastructure	HTTP	Epicor is an ERP. This plugin classifies local MS NMF flows and SaaS version.
6	NUSP	Infrastructure	TCP	This plugin classifies NUSP protocol. NUSP is custom protocol from NUUO company for initializing and maintaining video streams from cameras.
7	SYNERGIS-ADEPT	Web	HTTP	Adept is an electronic documents management application edited by Synergis Software. This plugin classifies local instances of the application.
8	IBM-AS-SRVMAP	Infrastructure	TCP	This plugin classifies traffic related to the IBM i Access server mapper service.

Table 2: New Applications (*Continued*)

Sr. No.	Application Name	Application Type	Reported Over	Description
9	DR-SCHENK-IS	Infrastructure	POSTGRESQL	Dr Schenk Inspection System is product inspecting and analyzing raw material from factory on product chain. It gathers sensors, actuators and visualization components all interacting with the Inspection System.
10	BOSCH-CONETTIX	Infrastructure	UDP	Bosh Conettix is a security alarm product line. This plugin classifies the D6600 when no encryption is configured.
11	CCSS-QMM	Infrastructure	TCP	QMessage Monitor, by Helpsystems, sends alerts to IT administrators based on filters on AS/400 Message Queues. This protocol is between the AS/400 application and a Windows client.
12	SIGNALR	Infrastructure	HTTP	SignalR is an open-source Microsoft library for real-time functionalities in web applications. This plugin classify Azure hosted (signalr.net) and local HTTP server instance versions.
13	MS-SSRP	Infrastructure	UDP	Microsoft SQL Server Resolution Protocol is a discovery protocol for Microsoft SQL Server instances. It is specified as MC-SQLR.
14	ZEBRA-ZPL	Infrastructure	TCP	Zebra Programming Language (ZPL) is used to control some Zebra label printers.
15	INTERMEC-PRINTER	Infrastructure	TCP	Intermec Printer Language (IPL) is used by some models of Intermec label printers.

Table 2: New Applications (*Continued*)

Sr. No.	Application Name	Application Type	Reported Over	Description
16	INVAR-ASRS	Infrastructure	MS-NMF	Invar Systems AS/RS (Automated Storage and Retrieval System) control protocol, part of Invar Integrated Warehouse Management System.
17	AAON-PRISM	Infrastructure	TCP	AAON Prism 2 is a software for control of AAON HVAC, Wattmaster Commlink 5 module over IP.
18	OVSOLUTIONS	Infrastructure	NUSP	This plugin classifies OV Solutions Server traffic. OV Solutions company provides surveillance equipment and software like NVR (Network Video Recording).
19	WHATSAPP-CHAT	Messaging	WHATSAPP-SSL	WHATSAPP chat service.
20	WHATSAPP-VOICE-VIDEO	Messaging	WHATSAPP-SSL	WHATSAPP voice and video service.
21	WHATSAPP-FILE-TRANSFER	Messaging	WHATSAPP-SSL	WHATSAPP file transfer service.
22	MS-TEAMS-CHAT	Messaging	MS-TEAMS	MS-TEAMS chat service. Needs ssl decryption for detection.
23	MS-TEAMS-AUDIO	Messaging	MS-TEAMS	MS-TEAMS audio service. Needs SSL decryption for detection.
24	MS-TEAMS-VIDEO	Messaging	MS-TEAMS	MS-TEAMS video service. Needs ssl decryption for detection.
25	MS-TEAMS-FILE-TRANSFER	Messaging	MS-TEAMS	MS-TEAMS file transfer service. Needs SSL decryption for detection.
26	BOXDOTNET-LOGIN	Web	BOXDOTNET	BOX.NET Login. Needs SSL decryption for detection.

Table 2: New Applications (*Continued*)

Sr. No.	Application Name	Application Type	Reported Over	Description
27	BOXDOTNET-SHARE	Web	BOXDOTNET	BOX.NET share service. Needs SSL decryption for detection.
28	BOXDOTNET-UPLOAD	Web	BOXDOTNET	BOX.NET file upload service. Needs SSL decryption for detection.
29	BOXDOTNET-DOWNLOAD	Web	BOXDOTNET	BOX.NET file download service. Needs SSL decryption for detection.
30	DROPBOX-LOGIN	Web	DROPBOX	DROPBOX login. Needs ssl decryption for detection.
31	DROPBOX-SHARE	Web	DROPBOX	DROPBOX share service. Needs ssl decryption for
32	DROPBOX-UPLOAD	Web	DROPBOX	DROPBOX upload file
33	DROPBOX-DOWNLOAD	Web	DROPBOX	DROPBOX download file.
34	SALESFORCE-LOGIN	Web	SALESFORCE	SALESFORCE login. Needs SSL decryption for detection.
35	SALESFORCE-UPLOAD	Web	SALESFORCE	SALESFORCE upload service. Needs SSL decryption for detection.
36	SALESFORCE-DOWNLOAD	Web	SALESFORCE	SALESFORCE download service. Needs SSL decryption for detection.
37	GOOGLE-DOCS-LOGIN	Web	GOOGLE-DOCS	GOOGLE DOCS login. Needs ssl decryption for detection.
38	GOOGLE-DOCS-UPLOAD	Web	GOOGLE-DOCS	GOOGLE DOCS upload service.
39	GOOGLE-DOCS-DOWNLOAD	Web	GOOGLE-DOCS	GOOGLE DOCS download service.

Table 2: New Applications (*Continued*)

Sr. No.	Application Name	Application Type	Reported Over	Description
40	SLACK-CHAT	Web	SLACK	SLACK chat service.
41	SLACK-AUDIO	Web	SLACK	SLACK audio service.
42	SLACK-VIDEO	Web	SLACK	SLACK video service.
43	SLACK-UPLOAD	Web	SLACK	SLACK file upload service.
44	SLACK-DOWNLOAD	Web	SLACK	SLACK file download service.

Updated Applications

[Table 3 on page 7](#) lists the application updates in this release of JDPI-Decoder.

Table 3: Updated Applications

Sr. No.	Application Name	Application Type	Reported Over	Description
1	JETDIRECT	Infrastructure	TCP	The Jetdirect protocol is used by HP network printers.

Table 3: Updated Applications (*Continued*)

Sr. No.	Application Name	Application Type	Reported Over	Description
2	NBNS	Infrastructure	8021Q	NetBios Name Service (NBNS) is a protocol resulting from NetBios, and which makes it possible to manage the names in a Microsoft NetBios network. NetBios names are human readable and NBNS serves the same purpose as the DNS system in IP environments.
3	RLOGIN	Remote-Access	TCP	This signature detects RLOGIN, a remote access protocol.
4	HTTP-PROXY	Web	TCP	Indicates that a flow is proxied through HTTP CONNECT mechanism.

Table 3: Updated Applications (*Continued*)

Sr. No.	Application Name	Application Type	Reported Over	Description
5	SHAREPOINT-DOCUMENT	Web	SHAREPOINT	SharePoint is a web application platform designed as a centralized replacement for multiple web applications, like content management and document management systems. This plugin classifies the document management module of SharePoint.
6	CISCO-RRM	Infrastructure	UDP	Cisco Wireless LAN controller coordinates a set of Cisco wireless LAN access points. This plugin classifies the NDP packets and the protocol used between WLC instances for the Radio Resource Management functionality. The WLC also communicates with the APs using capwap tunnels, this will be classified as that protocol.

Table 3: Updated Applications (*Continued*)

Sr. No.	Application Name	Application Type	Reported Over	Description
7	IPERF	Infrastructure	TCP	The iPerf protocol is used by the self-titled tool for network performance measures.
8	MS-TEAMS	Messaging	HTTP	Microsoft Teams is the chat-based workspace in Office 365. Most of the application traffic is classified as skype or office365.
9	LINE	Messaging	BLOGIMG	Line is a Japanese Instant Messaging and Voip application for smartphones and PCs. Please note : the parent attribute 'call' and its children are deprecated for Line (since mid-2014) but can be extracted from SIP.
10	VMOTION	Infrastructure	TCP	vMotion is the VMware protocol which allows hot migration of virtual machines between different vSphere servers running on different hosts.

Table 3: Updated Applications (*Continued*)

Sr. No.	Application Name	Application Type	Reported Over	Description
11	ZOOM	Messaging	AMAZON	Zoom Video Conferencing, also referred to as Zoom by users, combines video conferencing, online meetings, and mobile collaboration into one platform.
12	CHROME-REMOTE-DESKTOP	Web	GOOGLE-GEN	This signature classifies Chrome remote desktop based on DNS caching and SSL common name on PC as well as on Mobile.
13	SIEMENS-APOGEE	Infrastructure	TCP	This plugin classifies the main data protocol used by Siemens Apogee HVAC product line. This device also uses BACnet and other control protocols that are not covered here.

Table 3: Updated Applications (Continued)

Sr. No.	Application Name	Application Type	Reported Over	Description
14	AVAMAR	Infrastructure	SSL	AVAMAR is a backup system distributed by Dell EMC offering data deduplication. System with data deduplication is able to backup only once a duplicated object like an email or file that has been copied several times on a system. Classification focus on classification of traffic between client and server.
15	SALESFORCE	Web	HTTP	This signature detects usage of the Salesforce.com Customer Relationship Management (CRM) application.
16	FLEXERA	Infrastructure	ADOBE	This plugin classifies FLEXNet license servers and Flexera website.
17	H225RAS	Infrastructure	Q931	This signature detects the H.225 RAS VOIP protocol.
18	SLACK	Web	HTTP	Slack is an online team collaboration tool, featuring both a web browser application and mobile apps.

Table 3: Updated Applications (Continued)

Sr. No.	Application Name	Application Type	Reported Over	Description
19	ACRONIS-BACKUP	Infrastructure	ACRONIS	Acronis Backup is a backup platform that uses cloud or local storage and can save multiple hosts using agents. Online storage is classified as acronis_cloud.
20	BOXDOTNET	Web	ADOBE	This signature detects Box.com which is a Web-based file sharing application used to share files and documents with friends, family, and coworkers.

Custom Applications

This release of JDPI-Decoder does not introduce any enhancements to the custom applications.

However, to address Problem Report 1703248 for sigpack, we support custom app identification over HTTP_PROXY app. Prior to 20.1 release, custom apps over HTTP_PROXY was by default supported as custom app over HTTP. But from 20.1 onwards, default support for custom apps over HTTP_PROXY was not supported.

The syntax is as follows:

```
set services application-identification application JUNI1 over HTTP-PROXY signature <name> member <name> context (http-proxy-header-host| http-proxy-header-user-agent| http-proxy-url-parsed)
```

```
set services application-identification application JUNI1 over HTTP-PROXY signature <name> member <name> pattern <pattern>
```

```
set services application-identification application JUNI1 over HTTP-PROXY signature <name> member <name> direction (client-to-server|server-to-client)
```

For Junos upgrade from a version earlier than 20.1 to any version 20.1 or later, if any custom app over HTTP_PROXY is configured over HTTP, it should be converted to HTTP_PROXY based custom app.

New or Modified Application Groups

This release of JDPI-Decoder does not include any application additions and modifications.

Obsolete Applications

There are no changes in the Obsolete applications list in this release.

Resolved Issues

[Table 4 on page 14](#) describes the resolved issues in this release of JDPI-Decoder.

Table 4: Resolved Issues

Problem Report	Description
1630200	TCP-based Syslog traffic not being identified by AppID jtac jdpiddecoder.
1642592	Incorrect classification for NETBIOS and RLOGIN by ixEngine.
1664661	PB1.550.x : New Microservices for junos: MS-TEAMS micro-apps not getting detected with PB 1.550.2-30.
1685940	AppID not recognizing Camstar traffic. customer jdpiddecoder.
1685869	APPID is not recognizing Cisco Wireless RRM UDP_12134 and mark it is Unknown customer.

Table 4: Resolved Issues (Continued)

Problem Report	Description
1680602	PB 1.550.x :New Microservices for junos:SALESFORCE not detected with proto-bundle version - PB 1.550.2-31.
1680226	Siemens Apogee APPID showing unknown jtac jdpidecoder
1677223	AppID: PI application being classified as Unknown jtac jdpidecoder.
1678764	Avamar AppID is marked as application type Unknown for TCP port 28002 customer jdpidecoder.
1678910	PB 1.550.x : New Microservices for junos:ZOOM not detected with proto-bundle version - PB 1.550.2-31.
1673378	DECT application is not identified by AppID on SRX4100 cluster. customer jdpidecoder.
1673918	PB 1.550.x : Dynamic-application junos:CHROME-REMOTE-DESKTOP does match with matching traffic.
1675071	APPID: Cisco Wireless RRM is not identified.
1589933	Zoom micro apps are not getting detected with live zoom audio/video traffic systest jdpidecoder.
1680604	PB 1.550.x : New Microservices for junos:SLACK not detected with proto-bundle version - PB 1.550.2-31.
1693485	Acronis TCP_9876 detecting as Unknown.
1673378	DECT application is not identified by AppID on SRX4100 cluster.
1703248	Support for Custom Apps should be configured over HTTP_PROXY app.

Requesting Technical Support

IN THIS SECTION

- [Self-Help Online Tools and Resources | 16](#)
- [Creating a Service Request with JTAC | 17](#)

Technical product support is available through the Juniper Networks Technical Assistance Center (JTAC). If you are a customer with an active J-Care or Partner Support Service support contract, or are covered under warranty, and need post-sales technical support, you can access our tools and resources online or open a case with JTAC.

- JTAC policies—For a complete understanding of our JTAC procedures and policies, review the *JTAC User Guide* located at <https://www.juniper.net/us/en/local/pdf/resource-guides/7100059-en.pdf>.
- Product warranties—For product warranty information, visit <http://www.juniper.net/support/warranty/>.
- JTAC hours of operation—The JTAC centers have resources available 24 hours a day, 7 days a week, 365 days a year.

Self-Help Online Tools and Resources

For quick and easy problem resolution, Juniper Networks has designed an online self-service portal called the Customer Support Center (CSC) that provides you with the following features:

- Find CSC offerings: <https://www.juniper.net/customers/support/>
- Search for known bugs: <https://prsearch.juniper.net/>
- Find product documentation: <https://www.juniper.net/documentation/>
- Find solutions and answer questions using our Knowledge Base: <https://kb.juniper.net/>
- Download the latest versions of software and review release notes: <https://www.juniper.net/customers/csc/software/>

- Search technical bulletins for relevant hardware and software notifications: <https://kb.juniper.net/InfoCenter/>
- Join and participate in the Juniper Networks Community Forum: <https://www.juniper.net/company/communities/>
- Create a service request online: <https://myjuniper.juniper.net>

To verify service entitlement by product serial number, use our Serial Number Entitlement (SNE) Tool: <https://entitlementsearch.juniper.net/entitlementsearch/>

Creating a Service Request with JTAC

You can create a service request with JTAC on the Web or by telephone.

- Visit <https://myjuniper.juniper.net>.
- Call 1-888-314-JTAC (1-888-314-5822 toll-free in the USA, Canada, and Mexico).

For international or direct-dial options in countries without toll-free numbers, see <https://support.juniper.net/support/requesting-support/>.

Revision History

- June 07, 2023—Revision 1, JDPI Release Notes.

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