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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
October 11, 2022	The relevant signature package version is 3533.	1.550.2-31	5.7.0-47	This JDPI-Decoder version is supported only on the Junos OS 12.3X48-D95+ and later releases, 15.1X49-D200+ and laterreleases, and 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 12.3X48D95+ and later releases, 15.1X49-D200+ and later releases which support the v5 engine, and 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

The following sections describe new features and enhancements available in the JDPI-Decoder releases:

New Software Features and Enhancements Introduced in JDPI-Decoder Release

The following sections describe new features and enhancements available in JDPI-Decoder Release.

New Applications

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	STREET-FIGHTER	Gaming	AMAZON	Street Fighter is a fighting video game franchise developed and published by Capcom . This plugin classifies traffic generated by Street Fighter IV Champion Edition an online mobile video game.

Table 2: New Applications *(Continued)*

Sr. No.	Application Name	Application Type	Reported Over	Description
2	MEISTERLABS	Web	HTTP	MeisterLabs is German application editor. This plugin classifies their website. MindMeister is a mind mapping tool and MeisterTask is a task management application.
3	CLICKVIEW	Multimedia	HTTP	This plugin classifies ClickView free services available on the website and the android application. ClickView is an educational videos and resources platform.
4	HSR	Infrastructure	ETH	High-Availability Seamless Redundancy provides redundancy for industrial Ethernet networks. This headers is used for packet duplication removal. The ixEngine does not run the duplication removal algorithm.
5	SECTIGO	Web	HTTP	This plugin classifies website traffic of sectigo.com. Sectigo is a certification authority.
6	DOUYIN	Messaging	BYTEDANCE	Douyin, by ByteDance, is the Chinese version of TikTok, a video sharing social network.
7	TESTWISE	Web	HTTP	This plugin classifies Testwise website access. Testwise is a scoring and reporting service platform for schools.
8	SPELLINGCITY	Web	HTTP	SpellingCity is an online educational tool that helps children learn to spell. This plugin classifies website traffic.

Table 2: New Applications *(Continued)*

Sr. No.	Application Name	Application Type	Reported Over	Description
9	NEWORK	Web	HTTP	This plugin classifies website traffic of nework.app. NeWork is an online workspace that supports team communication and it is provided by NTT Communitcations, meetings use Jitsi services.
10	LETS-ENCRYPT	Web	AMAZON-AWS	Let's encrypt is a free SSL/TLS certification authority. This plugin classifies website traffic.
11	BLUEJEANS	Messaging	AKAMAI-VIDEO	BlueJeans is a cloud video conferencing platform.
12	WHATSAPP-API	Messaging	HTTP	WhatsApp Business API is the interface to automate or manage large number of messages.
13	AZURE-SPEECH	Web	HTTP	Speech is an Azure Cognitive Service to transcribe spoken audio to text, translate and convert text to realistic speech.
14	OPENSESAME	Web	HTTP	OpenSesame is an online courses platform.
15	HSRPRP	Infrastructure	ETH	High-Availability Seamless Redundancy (HSR) and Parallel Redundancy Protocol (PRP) provide redundancy for industrial Ethernet networks. This plugin classifies supervision frames.

Table 2: New Applications *(Continued)*

Sr. No.	Application Name	Application Type	Reported Over	Description
16	PRP	Infrastructure	ETH	Parallel Redundancy Protocol provides redundancy for industrial Ethernet networks. This plugin detects the Redundancy Control Trailer (RCT) to Ethernet frames. The ixEngine does not run the duplication removal algorithm.
17	MS-STREAM	Multimedia	HTTP	Microsoft Stream is the corporate video-sharing service of Microsoft Office365.
18	ANGHAMI	Multimedia	HTTP	Anghami application provides an audio streaming service.
19	AZURE-STT	Web	HTTP	Speech Speech-To-Text is the Speech service to transcribe spoken audio to text.
20	LOOKER	Web	HTTP	Looker Data Sciences, Inc. is an American computer software company. It was acquired by Google in 2019 and is now part of the Google Cloud Platform.
21	AZURE-S2S	Web	HTTP	Speech Speech-To-Speech is the Speech service for translation.
22	OSN	Multimedia	COMCAST	This plugin classifies website browsing and OSN streaming applications traffic. Orbit Showtime Network (OSN) is a Middle Eastern multinational direct-broadcast satellite provider and also a video platform for Middle East and North Africa (MENA).

Table 2: New Applications *(Continued)*

Sr. No.	Application Name	Application Type	Reported Over	Description
23	SMARTSHEET	Web	HTTP	Smartsheet is a software as a service (SaaS) providing collaboration and work management tools.
24	ZUOYEBANG	Web	BAIDU	Zuoyebang is a chinese e-learning platform owned by Baidu.
25	FLEETSMITH	Infrastructure	HTTP	Fleetsmith is Apple's fleet management SaaS for Apple devices, leveraging the MDM feature of their OS.
26	BOTIM	Messaging	HTTP	Botim is a mobile communication application to make audio/video calls and chat.
27	TWILIO	Web	HTTP	Twilio is a cloud communication platform. This plugin classifies website traffic.
28	UDEMY	Web	HTTP	Udemy is an online courses platform.
29	AZURE-MS	Multimedia	HTTP	Microsoft Azure Media Services is a cloud-based media workflow platform.
30	JUNIPER	Web	ADOBE	This plugin classifies traffic going to Juniper Web interface.
31	BEIN-SPORTS	Multimedia	APPLE-IOS-UPDATE-SSL	This plugin classifies BeIN Sports Connect for APAC and Middle East countries and BeIN Sports website. BeIn Sports is a Qatari network of sports television channels.

Table 2: New Applications *(Continued)*

Sr. No.	Application Name	Application Type	Reported Over	Description
32	PINDUODUO	Web	BMFF	This plugin classifies application and website browsing of Pinduoduo and does not manage live video streaming. Pinduoduo is a Chinese e-commerce company.
33	TRITONDIGITAL	Multimedia	HTTP	Triton Digital provides audio and podcasts streaming services.
34	LIBSYN	Multimedia	HTTP	Libsyn provides audio and podcasts streaming services.
35	RIOT-GAMES	Gaming	CLOUDFLARE	Riot Games is a videogame company, and has developed games like League of Legends, Valorant, etc... This plugin classifies website traffic.
36	WEEBLY	Web	HTTP	Weebly is a web hosting service platform. This plugin classifies website traffic.
37	AZURE-TTS	Web	HTTP	Speech Text-To-Speech is the Speech service to translate and convert text to realistic speech.
38	MOLOCO-ADS	Web	HTTP	Moloco is an advertising platform.
39	SOGOU-INPUT	Web	HTTP	Sogou Input is a Chinese input method editor developed by Sohu.com, Inc. under its search engine brand name, Sogou.
40	SYNCHROPHASOR	Infrastructure	TCP	IEEE C37.118 Synchrophasor Protocol conveys electrical current measurements in power grid substations.

Table 2: New Applications *(Continued)*

Sr. No.	Application Name	Application Type	Reported Over	Description
41	163-WEBMAIL	Web	163	163Mail is an email platform owned by Netease.
42	SEGMENT	Web	HTTP	Segment is a customer data platform. It is a Twilio services.

Updated Applications

lists the application updates in this release of JDPI-Decoder.

Table 3: Updated Applications

Sr. No.	Application Name	Application Type	Reported Over	Description
1	WHATSAPP	Messaging	HTTP	WhatsApp Business API is the interface to automate or manage large number of messages
2	SOLIDWORKS	Infrastructure	HTTP	This plugin Classifies SolidWorks collaboration servers and Solidworks website. Solidworks is a CAD (Computer-Aided Design) suite from Dassault Systems.

Table 3: Updated Applications *(Continued)*

Sr. No.	Application Name	Application Type	Reported Over	Description
3	SMB	Infrastructure	File-Servers	This protocol triggers when it detects Server Message Blocks (also known as Common Internet File System, CIFS). It operates as an application-layer network protocol mainly used to provide shared access to files and services between nodes on a network. Most usage of SMB involves computers running Microsoft Windows Operating Systems.
4	POP3	Messaging	HTTP	Secure version of the POP3 protocol.
5	VITAL-QIP	Infrastructure	HTTP	Vital QIP is DDI application (DNS, DHCP, IPAM (IP Address Management)) that comes with a manager (AMS) to administrate Vital QIP appliance.

Table 3: Updated Applications *(Continued)*

Sr. No.	Application Name	Application Type	Reported Over	Description
6	KEYENCE-BARECODE	Infrastructure	HTTP	This plugin classifies the control protocol of Keyence Barecode scanners, that is also used by AutoID Network Navigator, their setup software.
7	HTTP	Web	HAPROXY/HTTP-PROXY/HTTP-TUNNEL/NET-PROXY/SOCKS4/SOCKS5/TCP/UDP	This signature detects HyperText Transfer Protocol (HTTP). World Wide Web uses this protocol. This signature defines how messages are formatted and transmitted and what actions Web servers and browsers should take in response to various commands. HTTP usually runs on TCP port 80.
8	MS-ADWS	Infrastructure	HTTP	Microsoft Active Directory Web services are used for the administrative tasks on an Active Directory.

Table 3: Updated Applications *(Continued)*

Sr. No.	Application Name	Application Type	Reported Over	Description
9	MS-NMF	Infrastructure	HTTP	.NET Message Framing Protocol, also known as its URI scheme 'tcp.net', is a Microsoft framing protocol for TCP. It also enables port sharing between several applications.
10	IWAREHOUSE	Infrastructure	HTTP	iWarehouse is a fleet and warehouse management from Raymond Corporation, a forklift manufacturer, part of Toyota. This plugin classifies the protocol of the on-board device, named Monitor.
11	SMTP	Messaging	Mail	This signature detects Simple Mail Transfer Protocol (SMTP), which is protocol for e-mail transmission across the Internet. It is an Internet standard host-to-host mail transport protocol. SMTP usually runs on TCP port 25.

Table 3: Updated Applications *(Continued)*

Sr. No.	Application Name	Application Type	Reported Over	Description
12	BR-AUTOMATION	Infrastructure	HTTP	B&R Industrial Automation is a manufacturer for the industry. This plugin classifies a plastic molding machinery.
13	EVASIVE-PROTOCOL	Infrastructure	HTTP	This protocol classifies common mechanisms used by evasive applications. Those mechanisms can be shared by several different applications.
14	LINKEDIN	Web	HTTP	This signature detects Linkedin, which is a Web-based social networking application used to keep in contact with business professionals.
15	TELEGRAM	Messaging	HTTP	Telegram is an instant messaging protocol like Whatsapp. This plugin also classifies traffic generated by Telegram API embedded by telgram.org web site.

Table 3: Updated Applications *(Continued)*

Sr. No.	Application Name	Application Type	Reported Over	Description
16	FACEBOOK	Web	HTTP	This signature detects Facebook Applications - an extension of Facebook.
17	MS-DFSR	Infrastructure	HTTP	The Distributed File System Replication (DFSR) service is a new multi-master replication engine that is used to keep folders synchronized on multiple servers.
18	SKYVPN	Infrastructure	HTTP	SkyVpn encrypts your data to secure your connection as a VPN using domain fronting and encrypted traffic.
19	QUIC	Web	HTTP	QUIC is an open networking protocol developed primarily at Google for transporting web content.
20	CALL-OF-DUTY-MOBILE	Gaming	HTTP	Call of Duty: Mobile is a free to play mobile videogame. This plugin classifies only the traffic generated by the online playing.

Table 3: Updated Applications *(Continued)*

Sr. No.	Application Name	Application Type	Reported Over	Description
21	RAKUTEN	Web	HTTP	This signature detects Rakuten, a large Japanese online retailer.
22	EPIC-GAMES	Gaming	HTTP	epic_games is an American video game and software development corporation.
23	PUBG	Gaming	HTTP	PlayerUnknown's BattleGrounds is a First Personal Shooter (FPS) online video game.
24	UNREAL-ENGINE	Gaming	HTTP	unreal_engine is a video game engine developed by Epic Games.
25	ANONYTUN-VPN	Web	HTTP	AnonyTun is an android VPN client offering to their users to customize a few parameters related to tunnel.
26	chrome_remote_desktop	Web	HTTP	This signature classifies chrome remote desktop based on DNS caching and SSL common name on PC as well as on Mobile.

Table 3: Updated Applications *(Continued)*

Sr. No.	Application Name	Application Type	Reported Over	Description
27	VIBER	Messaging	HTTP	Viber is an application for iPhone and Android phones that lets you make free phone calls and send text messages to anyone who also has the application.
28	SKYPE	Infrastructure	HTTP	This signature detects SSL access to any of the Skype domains. Skype is a VOIP and popular instant messenger service maintained by Microsoft.
29	FIFA	Gaming	HTTP	Fifa is a football video game edited by EA Sports. This plugin classifies video game online traffic.
30	GOOGLETALK	Messaging	Instant-Messaging	This signature detects the Google Talk client using the Jabber (XMPP) protocol.
31	MPLUS-MESSENGER	Messaging	HTTP	M+ is a taiwanese mobile IM application with audio/image file send feature.

Table 3: Updated Applications *(Continued)*

Sr. No.	Application Name	Application Type	Reported Over	Description
32	TOKBOX	Web	HTTP	TokBox was a PaaS (Platform as a Service) company that provided hosted infrastructure, APIs and tools required to deliver enterprise-grade WebRTC capabilities. It was acquired by Vonage.
33	SIEMENS-APOGEE	Infrastructure	HTTP	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.
34	DNS	Infrastructure	Networking	This signature detects Domain Name System (DNS), which is used for Internet mail and host address support.
35	STARKVPN	Infrastructure	HTTP	Stark VPN is a vpn application.

Table 3: Updated Applications *(Continued)*

Sr. No.	Application Name	Application Type	Reported Over	Description
36	SYNOLOGY-BACKUP	Infrastructure	HTTP	Centralize backup tasks for physical and virtual environments to keep your data and services always available.
37	IBM	Web	HTTP	IBM (International Business Machines Corporation) is an American multinational technology company.

Custom Applications

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

New or Modified Application Groups

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

Obsolete Applications

shows the applications that are now obsolete either because they are no longer in use in the field or they have been replaced with more recent applications. While configuration commit will not fail ifthese obsolete applications are already configured,the recommendation is to remove these applications from configurations of AppSecure modules (AppFW, AppQoS, APBR, AppQoE and Unified Policy), as they will no longer be classified or reported. The applications which have been replaced are added as an alias

under a related application which are provided in the specific reason column. You cannot configure a new policy with these obsolete applications, instead

Table 4: Obsolete Applications

Sr. No.	Application Name	Specific Reason	Description
1	ALYAMANALARABY	This application is deprecated and no longer supported.	Worlwide news website famous in the Yemen.
2	RIFFSY	This application is deprecated and no longer supported.	Riffsy's GIF Keyboard (Tenor.co) permits users to share and discover animated GIFs and videos on mobile.
3	COMM	This application is deprecated and no longer supported.	COMM is a VoIP and Instant messaging application for mobile phones commonly used in Japan.

Resolved Issues

describes the resolved issues in this release of JDPI-Decoder.

Table 5: Resolved Issue

Problem Report	Description
1620323	AppID does not recognizing the Keyence-Barecode traffic.
1615455	Updated SolidWork application signature.
1617440	AppID not recognizing VITAL QIP traffic.

Table 5: Resolved Issue *(Continued)*

Problem Report	Description
1661299	AppID stops to identify dynamic application, policy allows traffic instead of denying it.
1664770	The srxpfe process generates core files during sigpack switch.

Requesting Technical Support

IN THIS SECTION

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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 *JTACUser 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

- October 11, 2022—Revision 1, JDPI Release Notes.