ivanti

Pulse Client for Desktop Release Notes
9.1R15

Build 15819

FIPS Version Build 15821

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Overview

This is the release-notes document for Pulse Desktop Client (Pulse Client) version 9.1R15. This document provides a cumulative list of all enhancements, fixes and known issues for 9.1R15. If the information in the release notes differs from the information found in the documentation set, follow the release notes.

Pulse Client provides a secure and authenticated connection from an endpoint device (either Windows, macOS or Linux) to a Ivanti gateway (either Ivanti Connect Secure or Ivanti). For a complete description of the capabilities of Pulse Client, see online help within Pulse Client itself, or *Pulse Desktop Client Administration Guide* available at https://www.ivanti.com/support/product-documentation .

Noteworthy Information in 9.1R15 Release

- **From 9.1R15 onwards, some features are deprecated. Ensure you remove all related configurations before upgrading to 9.1R15. Upgrade may fail if all configurations are not removed. For more information refer KB45044.**

- Pulse rebranding package generation is not supported on Monterey due to the unavailability of Python 2.x.

- The Cloud App Visibility (CAV) and SRX Type connection features are deprecated from 9.1R15 release.

Noteworthy Information in 9.1R14 Release

- From release 9.1R14, few features are targeted for deprecation. For these features, 9.1R14 update does not support new configurations, however it supports modification to existing configuration. On upgrade, there are no changes to the existing configurations. These features will be permanently deprecated in next releases. For detailed list of deprecated features refer KB44747.

- Rebranding of Pulse Secure logo, copyright, and some references to reflect Ivanti branding is in progress. The rebranding activity to Ivanti will be continued through next release. Pulse Connect Secure (PCS) is referred to as Ivanti Connect Secure (ICS) and Pulse Policy Secure (PPS) is referred to as Ivanti Policy Secure (IPS).

- Blue Screen issue seen in previous PDC releases is resolved. The fix works only for Windows 10 and above.

Noteworthy Information in 9.1R13 Release

- CEF browser version upgraded to CEF92 for Windows and macOS platforms.

- The Pulse client log file name updated to `PulseClient.log` and `PulseClient.log.old` instead of `debuglog.log` and `debulog.log.old`.

- Performance improvements (Download) for Pulse Windows Clients in ESP mode:

  - Actual download speeds depends on external factors like latency, packet drops, etc. The download speed is also regulated by TCP congestion control algorithm set on the backend servers. It is known that traditional algorithms like CUBIC, limits the throughput based on packet drops. Modern algorithms such as BBR (Linux only) offers better throughput under the same conditions.

  - The improvement is not applicable for FIPS mode (1.0.2u build), which is expected to run in SSL mode.

Noteworthy Information in 9.1R12 Release

- CEF browser must be used only for FIDO2 authentication on macOS and Windows.

- The SAML authentication using the CEF browser does not prompt to enter credentials for the subsequent authentication, when Single Logout (SLO) is not enabled, till the session expires on the IDP. It is required to prompt for credentials each time during establishing a session than enable SLO.

- CEF Libraries for macOS & Windows are hosted on below URLs:

  - Windows: https://pcstp.pulsesecure.net/cef/windows/cef32.87.zip

  - MacOS: https://pcstp.pulsesecure.net/cef/macOS/cef64.87.zip, https://pcstp.pulsesecure.net/cef/macOS/cefarm64.87.zip (ARM64)

- The Pulse Client installer for RHEL 7/Centos 7 is not available by default in Pulse Connect secure server. The RHEL 7/CentOS 7 installer is available for download at https://www.ivanti.com/.

Noteworthy Information in 9.1R11 Release

- From release 9.1R11 onwards, the following considerations are applicable for FIPS compliant Pulse Client:

- Pulse Client package by default does not support FIPS mode due to an upgrade in OpenSSL libraries.

- The Pulse Client installer for FIPS mode is available for download at https://www.ivanti.com/ Pulse Client package can be uploaded to server for end users access.

- FIPS compliant version uses the *Pulse Client build 6727*.

- The About page in the User Interface displays if the installation is FIPS compliant.

- Upgrading the Pulse Client in FIPS mode to non-FIPS mode is not supported.

- Debug log file size is enhanced from 10MB to 25 MB to capture more detailed information.

- NDIS versions of JNPRVA and JNPRVAMGR drivers are upgraded.

- From 9.1R11, the CEF libraries are hosted on Ivanti Servers and available for download at : https://pcstp.pulsesecure.net/cef/linux/cef64.tar.bz2.

Pulse Client users using 9.1R10 and earlier versions can download CEF libraries from: https://cef-builds.spotifycdn.com/cef_binary_80.1.14%2Bga33bdbc%2Bchromium-80.0.3987.149_linux64_minimal.tar.bz2. For more information, refer KB44699.

Noteworthy Information in 9.1R10 Release

When Host header feature is enabled on the server, the Client upgrades will not work. For more information refer to KB44646.

New Features

The following table describes the major features that are introduced in the corresponding release.

Features	Description
Release 9.1R15	
Split DNS for FQDN	This feature allows to split the DNS traffic between Physical Adapter (PA)'s DNS server and Virtual Adapter (VA)'s DNS server. This feature is disabled by default. To enable this feature, navigate to **System --> Configuration --> Advance Client Configuration** and set the value as: *<enable-SplitDNS-driver>true</enable-SplitDNS-driver>*.
Windows Edge as external browser	This feature supports Windows Edge as default external browser. Add a DWORD "EnableMSEdgeAsExternalBrowser" and set the value to 1 under **Computer\HKEY_CURRENT_USER\SOFTWARE\Pulse Secure\Pulse** to set user settings and/or **Computer\ HKEY_LOCAL_ MACHINE\SOFTWARE\WOW6432Node\Pulse Secure\Pulse** to set machine settings to launch Windows Edge as default external browser.
PSAM on MacOS	Pulse Secure client supports Secure Application Manager (SAM) for MacOS. Ensure the system extensions option is enabled.
Windows 10 21H2 support	Pulse client now supports Windows 10 21H2.
Ubuntu 20.04.3	Pulse client now supports Ubuntu 20.04.03.
Release 9.1R14	
Minimum Client version enforcement	This feature provides an option for the admin to force upgrade the client version when Minimum Client Version is configured.
Client support for Windows on ARM processor	Windows 10/Windows 11 systems on ARM64 processors supports PDC.
Release 9.1R13.1	

Features	Description
Windows 11	Pulse client now supports Windows 11.
Mac OS 12	Pulse client now supports Mac OS 12.
Release 9.1R13	
FQDN based split tunnelling with Proxy server	This feature supports proxy when using FQDN based split tunnel. This feature is supported both on Server-side and Client-Side Proxy. ⓘ Note: DNS Alias Names are not supported with proxy. This feature is available for Windows and MAC only.
PSAM FQDN/IP Allow/Deny Policy	A FQDN over IP precedence flag is set in the PSAM configuration such that PSAM honors FQDN policy over IP based policy in case of resource conflicts. This feature is available for Windows only.
Release 9.1R12	
Role Level Upgrade Prompts	This feature provides an option for the administrators to disallow Pulse Client Upgrade prompts for the end users.
Disable NetBIOS	This feature provides an option to enable/disable the NetBIOS configurations.
Pulse Client Universal Binary for macOS	Pulse client supports universal binary for macOS for Intel and ARM.
RHEL 7 support	This feature allows to install RHEL7 Package on RHEL7 or Centos7 machines. The Pulse Client installer for RHEL 7/Centos 7 is not available by default in Pulse Connect secure server. The RHEL 7/CentOS 7 installer is available for download at https://my.pulsesecure.net.
FIDO2 security key (for example, YubiKey) support with CEF on Window	This feature allows Unified Pulse Client to use Chromium Embedded Framework (CEF), to support FIDO2 security key (for example, YubiKey) authentication using FIDO2 U2F protocol. Qualified with Okta and Azure AD as IdP.
FQDN based split tunnel support for Linux	FQDN based split tunnel support is now extended to Linux platforms.

Features	Description
Release 9.1R11.5	
No new features in this release.	
Release 9.1R11.4	
No new features in this release.	
Release 9.1R11	
YubiKey support with CEF on Mac OS	This feature allows Unified Pulse Client to use Chromium Embedded Framework (CEF), to support YubiKey authentication using U2F protocol on MacOS.
Windows 20H2 Qualification	Pulse Client now supports Windows 20H2.
MacOS Big Sur Qualification	Pulse Client now supports MacOS BigSur.
Apple Silicon (M1) Support on Rosetta 2	Pulse Client supports Apple Silicon (M1) Support on Rosetta 2.
Single logout support for PDC on Linux	SAML Single Logout (SLO) is the protocol that allows users to logout from Service Provider (SP) as well as Identity Provider (IdP) and requiring users to provide credentials again upon next SAML authentication.
Lock-down exception enhancements	This feature allows the PCS to populate the list of core access rules depending on the platforms. Administrators can modify and reorder the list.
Release 9.1R10	
No new features for this release.	
Release 9.1R9	
YubiKey support with CEF for Unified Pulse Linux Client	This feature allows Unified Pulse Linux Client to use Chromium Embedded Framework (CEF), to support YubiKey authentication using U2F protocol.

Features	Description
Unified Pulse Linux client packaging to PCS	This feature provides Unified Pulse Linux Client for download, for supported Linux platforms. The download links for DEB and RPM packages are provided in the Installers page.
IPv6 Support for Unified Pulse Linux Client	This feature allows Unified Pulse Linux Client to support various IPV6 scenarios like, IPV6 in IPV4, IPV4 in IPV6, and IPV6 in IPV6. The feature also supports IPV6 split tunnel rules, Route Precedence, and IPV6 route monitoring.
Source IP Security	This feature supports Source IP Enforcement through a Pulse Policy Secure (PPS) gateway.
ESP Tunnel for Mixed Mode	This feature allows the PCS to use ESP tunnel for 6in4 and 4in6 traffic.
SAML Single Logout Support	SAML Single Logout (SLO) is the protocol that allows users to logout from Service Provider (SP) as well as Identity Provider (IdP) and requiring users to provide credentials again upon next SAML authentication.
Release 9.1R8.2	
System Extension support on MacOS	System Extensions/Network Extensions allow to extend the functionality of macOS without requiring kernel-level access.
Pulse Client installer notarization	Pulse macOS client installer allows notarization to support future macOS releases and improve security on macOS and its applications.
Release 9.1R8	
No new features for this release.	
Release 9.1R7.1	
No new features for this release.	
Release 9.1R7	
No new features for this release.	
Release 9.1R6	
No new features for this release.	

Features	Description
Release 9.1R5	
PSAM session window	This feature allows the PSAM users to view the active session information of the configured applications and destinations.
Security Enhancement to support HTTPOnly cookie	Added support to handle the *HTTPOnly* session cookies in pulse client as part of security enhancement.
Disabling JNPRNS via Advance Client configuration	The feature runs a script/workflow to disable *JNPRNS* driver every time the user establishes a VPN connection and prevents reattaching of *JNPRNS* driver on restart. This process results in slight increase in time taken for establishing the VPN connection.
Support for Fedora 30, Ubuntu 19.10 and Debian 10.10 platforms	Pulse Linux Client on Windows now supports Fedora 30, Ubuntu 19.10 and Debian 10 platforms.
Release 9.1R4.2	
No new features for this release.	
Release 9.1R4.1	
No new features for this release.	
Release 9.1R4	
PSAM details tab	This allows the PSAM users to see the details of the applications which are tunneled via SAM client.
Support after Linux NPAPI removal	This allows to launch JSAM and HOB from Linux browser after deprecation of NPAPI support..
Yubikey smart card support	Yubikey can be used as PIV smart card for VPN authentication. **Accept certificates with smartcard logon Enhanced Key Usage** option should be enabled on PCS.
Windows Hello for Business	Pulse Desktop Client will now support Windows Hello for business using certificate trust.
Release 9.1R3.1	

Features	Description
Linux Client Auto Reconnect	Pulse Desktop Linux Client will now automatically attempt to reconnect in case of an interrupted connection, such as temporarily losing the Wi-Fi connection.
Release 9.1R3	
EKU/OID filtering for client certificate selection	Pulse Clientnow provides the administrator an option to specify EKU Text or EKU OID for filtering the certificates displayed in the certificate selection prompt during Cert-Auth. Pulse Client filters the certificates automatically, so that only relevant certificates are displayed.
Optional loading for KEXT Component	Pulse Client on macOS nows load KEXT component only if **Traffic Enforcement** or **Lockdown mode** options are enabled. Otherwise, the KEXT component, which requires high privilege access, is not loaded.
pulselauncher.exe to access certs from System Store	Pulse launcher tool (pulselauncher.exe), which is a standalone client-side command-line program, can now access certificates located in system store allowing for certificate-based authentication from the tool.
Release 9.1R2	
FQDN resource and IPv4 resource-based split tunneling conflict resolution	PCS supports both FQDN-based and IP-based split tunneling capabilities. When a customer uses both split tunneling rules, PCS now provides flexibility for the customer to choose which rules to give precedence, and ensures the resource access is not impacted when there are conflicting rules.
Manage Pulse Client versions feature support	PCSnow supports the ability to enforce a minimum client version that can connect to the VPN. Administrators have the flexibility to provide a minimum version requirement separately for desktop and mobiles to enforce different client versions.
Support for Windows 10 Version 1903 (OS build 10.0.18362.207)	Pulse Clienton Windows now supports Windows 10 Version 1903 (OS build 10.0.18362.207) Enterprise, 64 bit and Windows 10 Version 1903 (OS build 10.0.18362.207) Professional, 64 bit.
macOS KEXT Notarization	Apple mandates that all macOS applications are notarized by Apple. The Pulse Client for macOS KEXT component is now notarized by Apple.

Features	Description
Release 9.1R1	
Launching Pulse Desktop Client using URL	Pulse Client can now be launched using a URL. Customers can insert the URL in any tools (For example: Support ticket management tool), so that when a user clicks on the URL, Pulse Clientis invoked and connects to the VPN. The **Allow saving logon information** option must be enabled in the Ivanti Connect Secure server settings to use the Launching Pulse Desktop Client using URL feature. (Enable **Allow saving logon information > Users > Pulse Client > Connections > <connection name>**).
Pulse SAM IPv6 Support	Pulse Client now supports IPv6 traffic tunneling in Pulse SAM mode on Windows 10, Windows 8.1 and Windows 7 platforms.
Automatic Keyboard popup on Surface Pro	When a user selects the username or password field for Pulse Client installed on a Windows Surface device, the virtual keyboard automatically pops up so that the user can enter the required credential.

Fixed Issues

The following table lists issues that have been fixed and are resolved by upgrading to this release.

Problem Report Number	Summary
Release 9.1R15	
PRS-408165	[macOS] Under certain conditions, macOS users may experience "ERR_NETWORK_STATE_CHANGE" error when browsing via google chrome on a new session for first time.
PRS-407232	[Linux] Pulse client installation fails on machines which are having curl version lower than 7.61.
PRS-407149	[Windows] Able to add new URLs in Pulse client with Always on VPN and lock down is configured.
PRS-407007	[Windows] With FQDN split tunneling configured, after the disconnect pulse service still consuming the CPU and reconnect is getting failed.
PRS-406330	[Windows] PDC tried to connect to Wi-Fi even when the network is not in range when using non broadcast SSID.
PRS-406007	[Windows] Pulse embedded browser may fail to complete SAML login when cookie access is denied.
PRS-405995	[Linux] PDC on Ubuntu is not showing scroll bar for choosing realm.
PRS-405950	[Linux] Ubuntu Pulse Linux Client showing Certificate warning while trying to access the VPN URL.
PRS-405894	[Linux] Linux Pulse Client does not connect the second time.
PRS-405759	[Linux] RHEL8 RPM now has updated packaging.
PRS-405158	[Windows] Logs are generated on the desktop when accessing the VPN using Internet Explorer / MS Edge.
PRS-404977	[Windows] Local printer redirection will take effect based on the settings configured.

Problem Report Number	Summary
PRS-407143	Internet Check during HC for EDR products is removed to prevent false-positive scenarios - https://kb.pulsesecure.net/articles/Pulse_Secure_Article/KB45142.
Release 9.1R14	
PRS-406144	Crash while processing TCP DNS packets.
PRS-405717	Crash when invalid label length is encountered.
PRS-405395	Secondary RSA Authentication is failing on PDC.
PRS-405200	Host checker remediation page for PDC shows up blank intermittently.
PRS-404874	SLO is not functional while using Embedded Browser with Fortiauthenticator as IDP.
PRS-404596	Discrepancies in PDC IP based location awareness checks.
PRS-404482	Machine then user tunnel working incorrectly.
PRS-404439	When the Embedded browser session starts, all the cookies are removed.
PRS-404332	PDC fails to download PAC file from specific network post upgrading to 9.1R12.
PRS-403720	(Windows/macOS) Occasional PulseSecureService.exe crash in PDC Build 9.1.R12 which results in PDC disconnection.
PRS-403705	Memory deallocation issues were identified on bot Console and PulseTray applications.
PRS-403139	Blue screen on Windows10 21H1 after upgrading to 9.1R11.5.
PRS-403009	Windows VPN client (L2TP VPN) is blocked by latest Pulse Client upon PSAM connection.
PRS-402330	Linux PDC runs an outdated Chromium version in PDC built-in browser.
PRS-399319	Default IPV6 route does not get properly restored after VPN connection.
PRS-396578	Multiple Users getting disconnected immediately after connecting to PCS server.

Problem Report Number	Summary
Release 9.1R13.1	
PRS-405355:	MacOS users are getting disconnected with latest PDC
PRS-403519	End users see disconnects and reconnects on the PDC UI, When connected to PCS that resolves to IPv6.
PRS-403498	(Host Checker) OS check pass on Windows 11 systems.Policy is configured for "Windows 10-64-Bit".
PRS-402861	Pulse Desktop Client continuously changes between connected and connecting states, When connected to PCS that is configured in SSL Transport mode.
PRS-403002	Users are not able to connect the resource from WSL on windows 11 through PSAM, Install Ubuntu 20 with WSL 2 on Windows11 and try to connect to resource behind PCS server through PSAM.
PRS-402871	SAML, Custom Sign-in pages and Pulse Collaboration features do not work with External Browser on Windows 11, When using external browser.
PRS-402470	Pulse Client Agent Type on PCS "Active Users" Page shows as "Windows 10 Pulse Secure" for Windows 11 end points, When using Windows 11 Operating System.
PRS-403388	Pulse client VPN tunnel connection fluctuates with Split-Tunnel, When connected to PCS that is configured in ESP Transport mode along with (IP/FQDN) Split-Tunneling.
PRS-403270	Telnet/SSH bookmarks are not working on Windows 11, When using Windows 11 as client machine.
PRS-404422	Merging Occasional PulseSecureService.exe crash fix to R13.1.
Release 9.1R13	
PRS-403560	User Certificate authentication fails in Mac OS when a generic exception occurs during the certificate structure is validation.
PRS-403552	Client cert information, such as serial number and certificate, is not available in PCS user access logs.

Problem Report Number	Summary
PRS-403335	PDC Support for Debian 10.10 past PDC 9.1R8.2
PRS-403018	"Failed to setup virtual adapter error" message displays when PDC upgrade fails and rolls back to older version.
PRS-402686	Pulse Desktop Client gets disconnected while accessing resource if the DNS response packet is very big and does not reconnect automatically.
PRS-402667	Conditional Access "Certificate selection prompt" does not appear through PDC on macOS 11.3 and later
PRS-402606	CentOS 8 shows blank screen while trying to authenticate with Pulse client having AZURE SAML Authentication.
PRS-402425	Intune compliance check fails with macOS native embedded browser.
PRS-400954	Memory / Handler Utilization increases with Pulse client installed over a period and cause laptops to slow down until it is rebooted.
PRS-400252	EAPOL flooding causes high CPU Utilization.
PRS-399996	After PDC Upgrade from 9.1R2 to 9.1R11, machine tunnel is not formed.
PRS-399985	Machine cert detection fails on Pulse Client version 9.1R11 when using credential provider.
PRS-397907	Any screen sharing application does not work when Pulse Client is running.
PRS-397580	Performance improvements (Download) for Pulse Windows Clients in ESP mode
Release 9.1R12	
PRS-402136	Connection set-- name is not populating special characters properly.
PRS-401716	ESAP download fails through Pulse Client when host header validation is enabled on PCS.
PRS-401744	Pulse Client Repair Tool Fails To Complete - Error 1720.

Problem Report Number	Summary
PRS-401559	Machine authentication using certificate failing with error CertOpenStore () failed error: 0x5: Access is denied when using pulselauncher command.
PRS-401536	On some machines, the pulse client upgrade prompt is not seen for the end-user when connecting to 9.1R11.5 PCS using the older client (like 9.1R11.3 or 9.1R11.4).
PRS-401135	PDC 9.1R11 disconnects lead to Kernel panic in macOS Catalina 10.15.7.
PRS-400954	Memory / Handler Utilization increases with Pulse client installed over a period of time and causes slowness on Laptops until the laptop is rebooted.
PRS-400951	Unable to assign NCIP from the static IP pool in PCS 9.1R11.4.
PRS-400826	Users are facing the Blue Screen of Death issue after upgrading to the 9.1R11 client.
PRS-400161	PulseUI crashes Ubuntu 20.04 LTS.
PRS-400155	PDC Linux PulseUI Crash Due to ZTA.
PRS-400067	Windows Pulse Client 9.1r11 with Avaya One-X causing BSOD.
PRS-399985	Machine cert detection failing on Pulse Client version 9.1R11 when using credential provider.
PRS-399862	Pulse Linux client requires interaction for upgrade.
PRS-399654	A user with a Mac PC running Mojave 10.14.6 runs into a issue where at times it takes three minutes to disconnect.
PRS-399859	IPv6 default route on Mac is not set correctly with PDC 9.1r11.
PRS-399369	SAML authentication looping after entering the credentials in Ubuntu 20.04.
PRS-399328	PulseTray process crash due to PZTA code merge on MacOS client.
PRS-399238	FQDN based AlwaysON VPN connection disconnects while undocking or coming out of sleep mode

Problem Report Number	Summary
PRS-399227	VPN session reconnects from Pulse Linux CLI client if the session is deleted from PCS
PRS-399153	After upgrade the PDC 9.1R10 lockdown is not working
PRS-399117	User is unable to open the HMTL link in the remediation instruction when the HC fails on MAC machine.
PRS-399098	Domain suffix cleanup issue after VPN tear down when customer modifies DNS suffix list during runtime.
PRS-399064	No Internet access when connected via Pulse; but in 9.1R10.
PRS-399033	PDC 9.1R11 Windows client behavior taking 2x longer time for "securing connection" and disappearing UI profiles.
PRS-398133	PDC upgrade to 9.1R9 or 9.1R10 breaks PSAM for certain users.
PRS-397785	Pulse: Kernel panic on macOS when traffic enforcement is enabled
PRS-397852	Pulse 9.1R9 for MacOS behavior: Menu disappears and reappears continually with no internet access but was fine in 9.0R6.
PRS-397636	PDC fails to download PAC file defined in IE browser auto proxy URL location.
PRS-397595	PAC file has extra line added which cause resource access issue with same connection again.
PRS-396811	When FQDN based Split Tunnel is enabled, DDNS registers both physical and virtual IPs to internal DNS server.
PRS-396789	SAML Embedded Browser tries to open on Secondary Screen while the Monitor is in disconnect state.
PRS-396578	Multiple Users getting disconnected immediately after connecting to PCS server.
PRS-396337	PDC VPN connection failover in A/A cluster setup taking more than 3 mins time.
PRS-394768	Query regarding the NCF_HIDDEN flag

Problem Report Number	Summary
PRS-394765	FQDN url configured under split tunnel deny policy is passing through tunnel.
PRS-393340	Host Checker Crash in Mac OS.
PRS-392746	Unable to switch between the server URL's post upgrading to Pulse Client 9.1R7 from 5.3R7
PRS-375669	802.1x Pulse is not connecting automatically while boot from Hibernate Mode.
PRS-347695	Long delay when disconnecting with Pulse client 5.2RX on macOS connecting to 8.1RX.
Release 9.1R11.5	
PRS-401534	ESAP download fails through Pulse Client when host header validation is enabled on PCS.
PRS-396310	Intermittently, physical Interface DNS is not Restored.
Release 9.1R11.4	
PRS-400064	PDC 9.1R11 triggers lockdown enforcement when the workstation is unattended.
PRS-398765	PDC 9.1R11 in MacOS Big Sur and Catalina after "sudo reboot" loses internet connectivity until Pulse service is disabled.
PRS-397907	Any screen sharing application does not work when Pulse client is running.
Release 9.1R11	
PRS-398689	Failed to download the CEF package from Spotify download location. For more information on fix, refer KB44699.
PRS-397072	Host Check fails on macOS 11.1 when the policy is enforced. For more information on fix, refer KB44663.

Problem Report Number	Summary
PRS-396863	Customizing username/password and secondary username / secondary password label is not displayed on PDC Linux client.
PRS-396802	Host checker policy based on process check failed on Linux machine.
PRS-396469	COM API failure during initialization leads to the failure of the interface classification. Hence, the Hyper-V virtual adapter is wrongly classified as a Physical adapter.
PRS-396418	Host checker not detecting Linux process running under root.
PRS-396162	PSAM fails to intercept Web application traffic using Java Applet.
PRS-396116	Browser-based Host checker fails to get launched in 64 Bit Internet Explorer.
PRS-395636	Premier Java RDP does not launch when Java8u261 is used in MAC OS.
PRS-393408	PSAM: DNS resolution fails intermittently.
PRS-392916	PSAM fails to tunnel ipv6 traffic when a resource is configured more than once with a different port (For instance, [fc01:2001:xx:xx::xx]:80 [fc01:2001:xx:xx::xx]:443).
PRS-380696	Predefined Host Checker policy can now be configured with a ignore category based on the vendor.
Release 9.1R10	
PRS-396275	Pulse Client Debug log file path contains spaces.
PRS-396113	Host Checker OS check failure on Big Sur.
PRS-395612	The auto connection is not triggered when connecting through Bluetooth tethering, as it is treated as a virtual adapter.
PRS-395140	Certificate Authentication is not working with EKU/OID Filtering enabled when certificates are stored in machine store.
PRS-394581	IT administrators can now upgrade/install Pulse macOS Client from PCS successfully.

Problem Report Number	Summary
PRS-393600	Proxy PAC file is populated incorrectly since the buffer is not clearing after each update.
PRS-393450	When branding option is used to customize Pulse Desktop Client and an upgrade is attempted, it fails in some cases.
PRS-392746	The fix is to not to evaluate the LA policy before connection establishment. Also, we have verified that the DNS are restored after the first connection gets disconnected and before the second connection tries to establish the connection. This affects the PDC Releases between 9.1R5-9.1R9.1
PRS-392580	'Advanced Connection Details' translation string of Pulse client on non-english OS is not correct.
PRS-392577	The existing Opswat SDK/ESAP files are retained during the Pulse Client Upgrade on Windows, instead of replacing it with the default ESAP version.
PRS-390086	End-Points connected through slow internet will not hit the incomplete ESAP package download scenario.
PRS-388636	Juniper Network Service is disabled by default from 9.1R10 Release when connecting to PCS.
Release 9.1R9	
PRS-394724	Due to Memory Corruption caused by the Pulse SAM driver, the computer crashes with Blue screen Stop code: "PDC WATCHDOG TIMEOUT".
PRS-394604	Agent Type on active users page on PCS fails to show Windows OS version with 9.1R8 PDC builds.
PRS-394541	Certificate authentication fails from 9.1 R5 to 9.1 R8 on Ubuntu machines.
PRS-394345	Pulse adapter shows as "Unidentified Network" intermittently. The fix is implemented per MSFT recommendation : https://support.microsoft.com/en-us/help/4550028/firewall-profile-does-not-switch-to-domain-when-using-third-party-vpn

Problem Report Number	Summary
PRS-394214	Connection fails even after successful authentication at IdP if capital letters are used to create SAML Connection URL in Pulse Desktop Client.
PRS-394093	Unable to intercept traffic using WFP driver when a subnet is defined in WSAM destination.
PRS-394075	Pulse Collaboration stops working after Setup Client download fails, after upgrading it to PCS 9.1R8.
PRS-393739	Lockdown exception path for MS Teams using system variables is not working.
PRS-388783	PSAM driver memory leaks for UDP traffic.
PRS-388972	Session extension fails when custom sign-in page is configured for the sign-in policy. This is addressed in 9.1R9.
Release 9.1R8.2	
PRS-393652	Wireless Dot1x authentication fails on upgrading to PDC 9.1R8.
PRS-393440	Host Checker fails with TnccHandleException.
PRS-393346	The Sign-In Notification page shows the text underlined.
PRS-393157	GPU used by the Pulse Client on MAC with SAML Embedded Browser is used to connect to VPN.
PRS-392444	Some heavy applications such as Microsoft Teams configured through PSAM may exhibit slowness with time due to a Memory Leak in PSAM driver.
PRS-392320	RHEL 8 has deprecated many libraries that are required by libwebkitgtk, which is used by Pulse Client.
PRS-391172	Pulse Client does not change the interface metric to "1" and sets to "automatic".
PRS-390943	Pulse client not reverting back the windows hosts file after the pulse client logs off.
PRS-389976	Setup client unable to invoke PSAL on MAC machines.

Problem Report Number	Summary
Release 9.1R8	
PRS-392383	Pulse Client UI reports "Pulse Secure service is not running".
PRS-390998	System proxy settings are ignored due to wrong hardcoded path to libproxy.so.
PRS-390864	Pulse Desktop Client (Windows/MAC) does not honor the configured Split-Tunneling policies (Allow or Deny) due to Non-Compressed DNS responses.
PRS-390115	Pulse Client on macOS uses dedicated graphics card, causing faster battery drain.
PRS-389851	Pulse Client gets stuck at Host Checker when endpoint has Pulse Secure Installer Service (PSIS) older than 9.1R7.1 installed.
PRS-378040	Microsoft APIs return the incorrect value '6.2' when running Host Checker for system files such as GdiPlus.dll, as the applications are not manifested for Windows 8.1 and Windows 10.
Release 9.1R7.1	
PRS-392785	Upgrade to PDC 9.1R7 results in folder access issues. Pulse Logs can miss certain files or folders.
PRS-390486	DNS entries set manually on Physical adapters are not restored when FQDN Split Tunneling is configured.
PRS-392325	Not able to open 'C:\ProgramData\Pulse Secure' folder after installing PULSE9.1R7.
PRS-392444	Some heavy applications such as Microsoft Teams configured through PSAM may exhibit slowness with time due to a Memory Leak in PSAM driver.
PRS-391108	PSAM resource is not accessible when configured more than once with different port numbers on multiple lines. Only resource:port configured in first line is accessible. This issue is fixed only for IPV4, IPV6 issue is tracked with PRS-392916.

Problem Report Number	Summary
PRS-390922	Intermittently, DNS entries on physical adapters are not restored if the machine is rebooted during a tunneled connection that has FQDN split tunneling configured.
Release 9.1R7	
PRS-390306	Pulse Desktop Client (Windows) does not honor the configured Split-Tunneling policies (Allow or Deny) due to Non-Compressed DNS responses. For more information, refer to KB article https://kb.pulsesecure.net/articles/Pulse_Secure_Article/KB44461/?kA13Z000000L3IN.
PRS-390704	MSI uninstall through SCCM fails with "1622 (ERROR_INSTALL_LOG_FAILURE)".
PRS-390512	PDC sets the "Domain Suffix Order" set incorrectly on macOS.
PRS-390472	Intermittently, Pulse Desktop Client (Windows) does not update the exclude routes in its routing table after a tunnel connection. For more information, refer to KB article https://kb.pulsesecure.net/articles/Pulse_Secure_Article/KB44461/?kA13Z000000L3IN.
PRS-389668	FQDN Split tunneling Deny Policies matches the substring as opposed to the complete suffix match (e.g. rass.net goes out of the tunnel even when the FQDN ST Deny rule is set to *.s.net).
PRS-391241	Pulse client installation may fail on native foreign Windows 10 operating system. For more information, refer to KB article https://kb.pulsesecure.net/articles/Pulse_Secure_Article/KB44485/?kA13Z000000L3IN.
Release 9.1R6	

Problem Report Number	Summary
PRS-389100	Intermittently, DNS entries on physical adapters are not restored if the machine loses Network connectivity or if it goes to sleep/hibernate during a tunnelled connection when using FQDN split tunnelling. For more information, refer to KB article https://kb.pulsesecure.net/articles/ Pulse_Secure_Article/KB44429/?kA13Z000000L3Fn.
Release 9.1R5	
PRS-388633	Unable to access Internet Sites after upgrading PDC to 9.1R4 on Mac OS
PRS-388691	It has been reported that the location awareness rule evaluation is returning unexpected results in 9.0R6 & 9.1R4 compared to the previous versions.
PRS-387110	Virtual adapter stops intercepting packets on Mac using PDC 9.1.3 build 1413
PRS-388636	Juniper Network Service can be disabled on Pulse client if it causes interop issues (Such as Slowness/Still Traffic).
PRS-388412	PAC file is not changing to instantproxy.pac when "No proxy" is configured on the PCS server.
PRS-388265	During cert auth, Pulse client is reconnecting multiple times leading to increased authentication attempts.
PRS-388262	IPv6 Default route does not get created for the VA if the native adapter (en0) is configured with both v4 and v6 addresses.
PRS-387552	While processing 802.1x connection setup in "machine then user" mode, PPS ends up using the same Access-Accept attributes for both machine and user auth.
PRS-385220	Prompts saying unable to import Certificate Revocation List while Captive portal in Embedded browser loads on Windows machine - PDC 9.1.4 (1937.1).

Problem Report Number	Summary
PRS-381658	MAC PDC client fails to detect the smart card in the presence of client auth EKU has configured till pulse App restarted.
PRS-379979	Multiple windows login prompt when we use Pulse Credential Provider with Host Checker.
PRS-368884	Upon performing a switch user, 802.1x connection is disconnected when using a pulse client whereas it doesn't while using Native supplicant.
Release 9.1R4.2	
PRS-388662	After upgrading to 9.1R4 and above, PSAM is unable to access any resources when multiple ports are configured.
PRS-387136	Pulse Client connection is not connected after resuming from Sleep.
PRS-359819	Pulse Layer 3 session disconnects when RDP session is closed, causing the resource to drop.
Release 9.1R4.1	
PRS-379737	PSAM forces all the Java URL's request default to IPv6.
PRS-382268	PDC throws Authentication rejected by server [Error : 1319] when using global url
PRS-382271	Users are facing issues while accessing the Shock Wave Flash application via PSAM. The application gets stuck randomly.
PRS-382277	PSAM WFP mode blocks local socket bind operation.
PRS-387062	PSAM sending unintended traffic via tunnel to VPN in PULSE9.1R3
Release 9.1R4	
PRS-385393	PSAM resource access does not work when connecting to 9.0 or 8.3 gateways using 9.1 client.
PRS-385207	PSAM does not work with local host-based applications when WFP is enabled.
PRS-384881	CAV feature generating traffic to PCS node, though not enabled. Cloud license is not installed on PCS.

Problem Report Number	Summary
PRS-384768	Pulse: File Based PAC support deprecated.
PRS-382796	CLI based PDC on Linux fails to prompt for password during authentication.
PRS-382167	Route table is not getting updated once the session is extended, when Embedded browser is enabled.
PRS-381808	Lockdown mode is not getting enforced on the Client machine.
PRS-381613	For macOS machines, Pulse SAML embedded browser prompts to pick the certificate from the list of incorrect certificates to authenticate with Microsoft Azure IDP.
PRS-380636	Pulse client wireless suppression does not re-enable wireless adapter intermittently.
PRS-380251	Chrome browser version 76.x on macOS is unable to proxy the traffic and access the resource.
PRS-380125	Embedded Browser for Captive portal comes up blank when Lockdown mode is enabled.
PRS-379972	The pop-up message in Japanese is garbled while un-installing Pulse Client 9.1R2.
PRS-373430	Location Awareness policy is getting evaluated for both physical and virtual adapter and causing the Pulse client disconnection.
Release 9.1R3.1	
PRS-380218	Unable to resolve the DNS in Pulse Desktop Client - 9.1R2 for macOS.
PRS-379939	Wireless Suppression - Wireless adapters are disabled and needs to be enabled manually.
PRS-378109	Unable to establish tunnel with smart card reader when end-user has latest 10.15 macOS i.e.Catalina.
Release 9.1R3	
PRS-380761	FQDN Split Tunneling Route, AddRoute shows error 87.

Problem Report Number	Summary
PRS-380652	"Host checker did not get installed properly" error appears on browser after the machine reboot.
PRS-379992	Incorrect client platform as 'Windows' instead of 'Win' causes lockdown exception to fail.
PRS-379156	"Failed to clear PIN" error when using Yubikey smart card.
PRS-378089	Pulse Client prompt "Blank screen" when using SAML-OKTA Authentication with Pulse Embedded Browser.
PRS-377657	Pulse UI will be in securing connection state for more than 3 minutes. when traffic enforcement is enabled for both Ipv4 and Ipv6
PRS-377995	On multi-display setups, the Pulse Secure desktop client login window spawns offscreen.
PRS-377274	Enter Key is not working when using SAML Authentication with Pulse Embedded Browser.
PRS-376663	Username is limited to 32 character on ChromeOS Pulse Client.
PRS-376034	For stealth mode connection Use Desktop Credentials option should not be enabled while creating the connection.
Release 9.1R2	
PRS-372170	Missing certificate issue when Pulse Client is launched in Ubuntu 18.0.4 version.
PRS-360574	IPv6 - After upgrading Pulse Client from 5.3R2 to 5.3R4.1 on a macOS machine, IPv6 DNS is not getting set on the Virtual adapter.
PRS-374418	Pulse Client Uninstall.app is not code signed.
PRS-376098	Logon Scripts are not running with lockdown mode enabled.
PRS-371051	Installing Pulse Client 9.0R2+ on macOS is creating a performance hit over time.
PRS-371718	Kernel panic issues is observed on macOS Mojave (10.14) with Pulse Client version 9.0R3 (build 1599).

Problem Report Number	Summary
PRS-374606	Machine tunnel is not working as expected with DNS domain suffix and step up deletes the domain from the list incorrectly.
PRS-372350	NSIS error message is thrown after installing Pulse Client through SCCM.
PRS-372096	Smart card (Certificate) authentication is failing with Pulse Client 9.0R3 after Gemalto SafeNet client is upgraded to 10.2.
PRS-372087	Overwrite DNS suffixes on macOS clients.
PRS-368845	Random IPv4 resource is failing when ACL and split tunneling are configured with FQDN.
Release 9.1R1	
PRS-376174	Symbolic link creation fails after Pulse upgrade.
PRS-369889	Authentication with Host Checker verification fails on Kernel 4.18.0-10.
PRS-371071	Unable to add multiple certificates to gnome-keyring.
PRS-375343	Pulse: Customer facing frequent disconnection post adding FQDN and IPv4 addresses in Split tunneling rules.
PRS-372327	Wireless suppression fails to re-enable wireless NIC when surface PRO's USB network adapter is unplugged.
PRS-371725	Pulse: macOS: Re-branding: Modified Username and Password Label not showing completely on MAC machines.
PRS-371066	Color management is not working in macOS 10.14(Mojave) when French language is used.
PRS-370972	Wireless disconnects after upgrading to Win 10 1803.
PRS-370894	Pulse desktop client prompts for proxy credentials when wild card exception is used in PCS URL.
PRS-370690	Captive Portal detection via Pulse client fails and shows a blank page with latest 9.0R2.1 version in Windows 10 OS.
PRS-370459	Pulse is not honoring the zscaler proxy exception.

Problem Report Number	Summary
PRS-370348	20 seconds delay is observed to establish the tunnel when the unreachable proxy PAC is unreachable.

Known Issues

The following table lists Known Issues in the current release.

Problem Report Number	Summary
Release 9.1R15	
PRS-408550	**Symptom**: "ERROR_NETWORK_CHANGED" error shown when browsed on chrome. **Condition**: FQDN based split-tunnel VPN connection along with server-side proxy is configured either manually or using PAC file. **Workaround**: None.
PRS-408534	**Symptom**: Pulse rebranding package generation fails on Monterey platform. **Condition**: On Monterey where python 2.x support is not available. **Workaround**: Pulse rebranding package can be generated on BigSur or a macOS where python 2.x support is available which can be deployed on all platforms including Monterey.
PRS-407222	**Symptom**: All DNS queries go through virtual adapter including domains that are added in exclude split tunnel policy. . **Condition**: IVE DNS and Physical adapter DNS are configured with same IP address on a FQDN based split tunnel plus SplitDNS enabled VPN connection. **Workaround**: Configure different DNS IP addresses either on the physical adapter or virtual adapter.
PRS-407174	**Symptom**: Failed to send UDP IPv4 traffic through PSAM Tunnel on macOSX. **Condition**: Sending the data without mentioning the data length. **Workaround**: Sending the data by defined data length.
PRS-408780	**Symptom**: Intermittently facing resource access issues

Problem Report Number	Summary
	Condition: SplitDNS feature is enabled. **Workaround**: Disconnect and Reconnect the VPN connection.
PRS-405565	**Symptom**: Intermittently observing the "Invalid PCS URL" pop up. **Condition**: When VPN got disconnected due to some issues. **Workaround**: Click Ok and Reconnect.
PRS-408733	**Symptom**: BSOD in call out functions of splitdnsfilter driver (Inbound and outbound.) if third party drivers (Symantec, McAfee) are present in the network stack of Tunnel adapter. **Condition**: Issue is caused by an interop issue between splitdnsfilter driver and other third-party drivers. **Workaround**: Disable third party software.
Release 9.1R14	
PRS-406107	**Symptom**: IPv6 UDP traffic fails on PSAM tunnels. **Condition**: IPv6 resource configured in the ICS and when PSAM tunnel established with IPv4/IPv6 connection, Failed to send IPv6 UDP traffic. **Workaround**: None.
PRS-406045	**Symptom**: dsAccessService daemon re-starts and FQDN resource gets routed through physical adapter instead of tunnel. **Condition**: User accessing a FQDN resource that is configured in ICS as follows, Split tunnel policy is set FQDN resource to route through tunnel along with some IPv4 resources whereas FQDN's corresponding IP is set to route through physical adapter and precedence of FQDN over IP address is configured under **System** -> **Configuration** -> **VPN tunneling**. **Workaround**: None

Problem Report Number	Summary
PRS-405948	**Symptom**: Even after the successful Pulse client Installation/Upgrade, the "Installing Application Please Wait " or "launching application" pop-up stays on the screen for a few seconds. **Condition**: Minimum client version enforcement and forceful upgrade are enabled on the ICS. **Workaround**: None. Note - This behavior is not applicable for normal/legacy PDC upgrades.
PRS-405946	**Symptom**: On macOS the Pulse client download proceeds without the user consent. **Condition**: When MCV forceful upgrade is enabled on the ICS by admin. **Workaround**: None.
PRS-405606	**Symptom**: Context switch from User to machine is taking more than 3 mins. **Condition**: This happens during Credential provider and Machine authentication use case, where 2nd user logs into machine and logs off. **Workaround**: None
PRS-405556	**Symptom**: On-screen keyboard blocks the view of PDC window and hides the typing text from users view. **Condition**: When using on-screen keyboard for typing on systems with Windows 10 or Windows 11 operating system having touch screen capabilities. **Workaround**: Adjust the PDC window to have a better users view when using on-screen keyboard.
PRS-405413	**Symptom**: The cefBrowser.exe.dmp files get generated in the background sometimes. No user/functionality impact. **Condition**: This issue is observed on Windows 10 Enterprise N machines. **Workaround**: None.

Problem Report Number	Summary
Release 9.1R13	
PRS-403943	**Symptom**: PDC on Mac system preserves client side proxy settings as available on establishing VPN connection instead of disable client side proxy settings. **Condition**: When admin configured "disable client side proxy settings" under Users > Resource Policies > connection profiles (select respective profile) > Proxy server settings. **Workaround**: None.
PRS-403801	**Symptom**: The "This Site can't be Reached" error message displays for few seconds during SAML Authentication **Condition**: When untrusted certificate is configured on the PCS. **Workaround**: Use the trusted certificate on PCS.
PRS-403799	**Symptom**: A Warning Icon displays on the top left corner of the CEF browser. **Condition**: When using CEF92 browser. **Workaround**: None
PRS-403795	**Symptom**: Launching or triggering installation of Pulse client from Internet Explorer fails. **Condition**: When launching PDC from IE. **Workaround**: None.
PRS-403727	**Symptom**: CEF Browser download goes in a loop. **Condition**: When Pulse client is downgraded from R13 to R12. **Workaround**: Delete all files from "C:\Program Files (x86)\Common Files\Pulse Secure\JamUI\CEFBrowser\x86" except temp, CefBrowser.exe, and CefSubprocess.exe and download again.
PRS-403725	**Symptom**: For SAML authentication using embedded browser, user is prompted for credentials every time even when SLO is not enabled.

Problem Report Number	Summary
	Condition: When the FIDO2 CEF Browser is enabled for embedded browser **Workaround**: None
PRS-403654	**Symptom**: Pulse Client Firewall System Extension logs are written to the old debuglog.log filename **Condition**: When Lockdown or Traffic Enforcement is enabled. **Workaround**: None
PRS-403625	**Symptom**: When user clicks Disconnect, the connection is stuck in Disconnecting state for 120 seconds. **Condition**: This happens only when CEF Browser is enabled (U2F) for SAML authentications and SAML Single LOgout(SLO) is configured for the same connection. After the two minutes, the next time user connects, the connection goes through, and credentials prompts are correct. **Workaround**: None
PRS-403510	**Symptom**: DNS Alias Name are not added to proxy.pac file. **Condition**: Access sites through browsers when connected to VPN **Workaround**: None
PRS-403428	**Symptom**: PulseClient.log file is not present in diagnostic bundle. **Condition**: Collaboration Client installed with latest PCS build does not include PulseClient.log file in diagnostic bundle. **Workaround**: End-user must manually collect and share PulseClient.log file.
Release 9.1R12 (Windows 11 updates)	
PRS-403519	**Symptom**: End users see disconnects and reconnects on the PDC UI. **Condition**: When connected to PCS that resolves to IPv6. **Workaround**: PCS resolves to IPv4 address.

Problem Report Number	Summary
PRS-403498	**Symptom**: (Host Checker) OS check pass on Windows 11 systems. **Condition**: Policy is configured for "Windows 10-64-Bit". **Workaround**: None.
PRS-402861	**Symptom**: Pulse Desktop Client continuously changes between connected and connecting states. **Condition**: When connected to PCS that is configured in SSL Transport mode. **Workaround**: Configure ESP Transport Mode.
PRS-403002	**Symptom**: Not able to connect the resource from WSL on windows 11 through PSAM. **Condition**: Install Ubuntu 20 with WSL 2 on Windows11 and try to connect to resource behind PCS server through PSAM. **Workaround**: None.
PRS-402871	**Symptom**: SAML, Custom Sign-in pages and Pulse Collaboration features do not work with External Browser on Windows 11. **Condition**: When using external browser. **Workaround**: Use Embedded browser.
PRS-402470	**Symptom**: Pulse Client Agent Type on PCS "Active Users" Page shows as "Windows 10 Pulse Secure" for Windows 11 end points. **Condition**: When using Windows 11 Operating System. **Workaround**: None.
PRS-403388	**Symptom**: Pulse client VPN tunnel connection fluctuates with Split-Tunnel. **Condition**: When connected to PCS that is configured in ESP Transport mode along with (IP/FQDN) Split-Tunneling. **Workaround**: None.

Problem Report Number	Summary
PRS-403270	**Symptom**: Telnet/SSH bookmarks are not working on Windows 11 **Condition**: When using Windows 11 as client machine. **Workaround**: None.
Release 9.1R12	
PRS-402802	**Symptom**: PCS Active users page displays Non-FIPS build as FIPS build for Mac client. **Condition**: Mac Client with Non-FIPS build (PDC build with OpenSSL 111). **Workaround**: None.
PRS-402686	**Symptom**: When accessing certain resources, Pulse Desktop Client gets disconnected and does not reconnect automatically. **Condition**: When the DNS response for a particular resource exceeds 8192 bytes, then PDC is not able to process the response. The service crashes and is not able resume the prior session. **Workaround**: None.
PRS-402615	**Symptom**: On connecting to a PCS with R12, a Console Window flashes briefly, once - during the first connection. **Condition**: If the installed Pulse SetupClient's version is lower than the PCS, Setup Client gets upgraded on first connection. During this upgrade, a Console Window flashes briefly. **Workaround**: None.
PRS-402606	**Symptom**: After successful SAML authentication VPN session is not migrating from the CEF browser to the Client shows the blank screen. **Condition**: When SAML authentication is configured for Default sign-in URL with "Enable FIDO2 U2F for SAML authentication" is configured in the connection set. **Workaround**: Use non Default sign-in URL for SAML authentication.

Problem Report Number	Summary
PRS-402433	**Symptom**: Administrator deleted custom lockdown exception rules are still effective on pulse desktop client system. **Condition**: This issue arises only when administrator deletes all manually added lockdown exceptions. Deleting one or many manually created lockdown exceptions works good. **Workaround**: Administrator to set the Action as "Block" on all manually added rules when deleting all manually created lockdown exception rules.
PRS-402413	**Symptom**: On Windows server 2019, upon client upgrade, the connection list keeps getting reloaded again and again. **Condition**: Occurs only during upgrade and not with fresh install. **Workaround**: Uninstall the existing client and install the new client.
PRS-402303	**Symptom**: On task bar Wi-Fi symbol Yellow exclamation mark with no internet access appears, though PDC is connected and shown as up. Internet & Pulse Intranet sites are unreachable. **Condition**: This is observed on Windows 10 1909 laptop. PDC is connected and suddenly after 30-40 mins of usage Internet / Pulse Intranet sites go unreachable. On Wi-Fi symbol Yellow exclamation mark with no internet access appears, but PDC still shows as up and connected. **Workaround**: End used need to disconnect PDC connected profile and needs to reconnect to regain the internet and intranet sites.
PRS-402291	**Symptom**: On rare occasions, observed PulseSetupClient crash on macOS. **Condition**: None. **Workaround**: None. The Client recovers automatically.
PRS-402289	**Symptom**: On rare occasions, observed the dsAccess service crash. **Condition**: None. **Workaround**: None. The client recovers automatically.

Problem Report Number	Summary
PRS-402266	**Symptom**: FIDO2 Yubikey Authentication is failing on Windows8.1. **Condition**: When Azure AD is used as IDP. **Workaround**: None.
PRS-402182	**Symptom**: FIDO2 Yubikey Authentication is failing on macOS. **Condition**: When Azure AD is used as IDP. **Workaround**: None.
PRS-402089	**Symptom**: FIDO2 Yubikey Authentication is failing to prompt the pin. **Condition**: During the Credential Provide use case. **Workaround**: None.
PRS-402080	**Symptom**: With SLO enabled, during client Disconnect untrusted cert prompt will come twice for user to accept. **Condition**: This happens only If the PCS is not having a valid certificate. **Workaround**: None.
PRS-401406	**Symptom**: Pulse Client occasionally prompts for the credentials during SAML authentication through browser even when SLO is disabled. **Condition**: When the CEF browser is used for the SAML Authentication. **Workaround**: None. Enter credentials to sign in.
PRS-400275	**Symptom**: User is able to proceed with connection after clicking the decline on pre sign-in notification. **Condition**: Pre sign-in notification along with SAML authentication. **Workaround**: None.
PLD-1103	**Symptom**: Traffic not routed as per the FQDN rules. **Condition**: FQDN based split tunneling is configured.

Problem Report Number	Summary
	Workaround: None.
PLD-1102	**Symptom**: Connection stays in connect requested state. **Condition**: After fresh installation. **Workaround**: Need to restart the system.
Release 9.1R11.5	
PRS-401716	**Symptom**: ESAP download fails through Pulse Client when host header validation is enabled on PCS. **Condition**: When Pulse client session is initiated through Browser and the PCS is configured with ESAP versions higher than 3.4.8. **Workaround**: Initiate connection from Pulse client.
PRS-401630	**Symptom**: End-user gets prompted to re-enter credentials after upgrading the Pulse client. **Condition**: Upon the Pulse Client upgrade. **Workaround**: None. Re-enter the credentials.
PRS-401536	**Symptom**: On some machines, the pulse client upgrade prompt is not seen for the end-user when connecting to 9.1R11.5 PCS using the older client (like 9.1R11.3 or 9.1R11.4). **Condition**: Only for non-admin users. **Workaround**: Upgrade Client using Browser.
Release 9.1R11.4	
PRS-400668	**Symptom**: Pulse Desktop Client (PDC) always displays upgrade prompt even when client version on the endpoint and the server are same. Clicking on upgrade prompt performs no action (Cosmetic/UI issue).

Problem Report Number	Summary
	Condition: Occurs when the Pulse Desktop Client has Symantec signed binaries and the PCS on which it is hosted (9.1R11.3/ 9.1R10.2/ 9.1R9.2/ 9.1R8.4) is signed by Digicert. **Workaround**: Disable End-point upgrade on Pulse Connect Secure (PCS). Enable again only when a higher version of PDC is activated on PCS and let the users trigger the client upgrade through the browser.
PRS-400550	**Symptom**: Connection from standalone PDC prompts an upgrade, but proceeding with the upgrade fails. **Condition**: The upgrade fails when directly connecting to a PCS server with PDC version higher than that is currently installed on the endpoint. **Workaround**: For workaround, refer to KB44792.
PRS-400623	**Symptom**: 'Failed to download application' error seen on Pulse client after connecting to PCS. **Condition**: This is seen on some machines, when Pulse Client is deployed with SCCM. **Workaround**: Reboot the endpoint or Kill Pulse Secure Setup Client from task manager. Note: This is one time activity.
Release 9.1R11	
PSD-6844	**Symptom**: With Pulse client as 802.1x Wireless supplicant, the wireless connection fails to get an IP address even though authentication succeeds. **Condition**: This happens only if TLS 1.2 is not used for the EAP and TLS communication and TLS 1.1 or lower version gets used. **Workaround**: None.
PRS-398339	**Symptom**: Certificate authentication in combination with Credential Provider log on fails, after user enters windows log on credentials at Credential provider tile.

Problem Report Number	Summary
	Condition: This happens only when certificate authentication was configured with Credential Provider in both L2 and L3 access scenarios. **Workaround**: None.
PRS-397921	**Symptom**: PulseService crash is observed once user manually kills the PulseService.exe from TaskManager and PulseService tries to recover automatically. **Condition**: When PulseService is running successfully and user manually kills the PulseService from TaskManager. **Workaround**: None.
PRS-397583	**Symptom**: PSAM Fails to intercept Web application traffic using Java Applet when IPv6 is enabled on PCS. Configured resource is not accessible using Java based APIs. **Condition**: IPv6 is enabled on PCS and PSAM destination policy is configured for the application. **Workaround**: None.
PRS-396557	**Symptom**: When Enable Driver Logs option is enabled and try Save/Upload logs (within 5 secs), the driver logs are not generated. **Condition**: The flush timer to disk for driver logging has been set as 5 secs and hence this behavior. **Workaround**: None.
PRS-396538	**Symptom**: Enable Driver Logs option is disabled if already enabled while exiting Pulse.exe. **Condition**: This is done to avoid driver logging running in the background even though the user has exited the application. **Workaround**: If the user exits the application, enable the "Enable Driver Logs" option from the menu to start the driver logging.

Problem Report Number	Summary
PRS-393885	**Symptom**: On uninstalling the Pulse Client, the jnprva.sys and jnprvamgr.sys files are retained in C:\Windows\System32\drivers directory. **Condition**: The files are expected to be removed from drivers directory when the uninstall process is complete. **Workaround**: None.
PLD-968	**Symptom**: Failure message displays when VPN connection is established with HC remediation. **Condition**: Connect to VPN with HC remediation. **Workaround**: With remediation, Pulse application shows failures message on UI before connecting.
Release 9.1R10	
PRS-397089	**Symptom**: Linux Legacy client (NC client) will not be released from 9.1R10 Release **Condition**: From 9.1R10 Release **Workaround**: Use 9.1R9 or earlier Linux Legacy Client (NC Client).
PRS-396901	**Symptom**: When connecting to PCS through browser, PSAL detection time runs out and manual download is offered, even though PSAL is installed. **Condition**: Extra components need to be downloaded the first time the user connects to PCS version >= 9.1R10, to upgrade from version < 9.1R10 (the issue is not triggered for fresh installations, or for future upgrades after 9.1R10). If the internet connection is not fast enough the PSAL is not upgraded in time, and the PSAL detection time runs out. **Workaround**: Users need to wait 3+ minutes (dependant on internet connection speed) and click "Try Again" on the website.
PRS-396800	**Symptom**: Host Checker fails to launch with the latest PCS build on Safari browser.

Problem Report Number	Summary
	Condition: When IPv6 address is used instead of FQDN. **Workaround**: Recommended to use FQDN.
PRS-396726	**Symptom**: Active user page "Agent Type" shows "Mac OS 10.15" and it should be "Mac OS 11.0.1". **Condition**: Use Safari on macOS version BigSur 11.0.1. **Workaround**: None.
PRS-396991	**Symptom**: Pulse Client Download is failing when Host Header is enabled on the Server. **Condition**: With Host Header option Enabled on PCS/PPS. **Workaround**: Disable Host Header to upgrade the clients. For more information refer to [KB44646](KB44646).
PRS-396998	**Symptom**: Pulse Client upgrade pop up is not prompting when Host Header is enabled on the Server. **Condition**: With Host Header option Enabled on PCS/PPS. **Workaround**: Disable Host Header to upgrade the clients. For more information refer to [KB44646](KB44646).
PRS-396868	**Symptom**: Pulse Unified Linux Client requires dependency of libgtkmm-3.0-1v5. The dependency is not install-able by running the command apt-get install libgtkmm-3.0-1v5 **Condition**: The operating system is Ubuntu 18.04 **Workaround**: Append the following line to /etc/apt/sources.list: deb http://cz.archive.ubuntu.com/ubuntu bionic main Execute the following commands to install the dependency: `apt-get update`

Problem Report Number	Summary

	```apt-get install libgtkmm-3.0-1v5```
	
	Install Pulse Client using the below command:
	
	```dpkg -i /path/to/pulsesecure-version.deb```

PLD-931	**Symptom**: Pulse Unified Linux Client does not save logging level information across multiple launches. **Condition**: Pulse Unified Linux Client is installed in Linux Operating System. **Workaround**: None.
PLD-916	**Symptom**: Pulse Unified Linux Client fails to kill processes as part of host checker remediation. **Condition**: If the processes are started through a wrapper script (like bash or python), then in such a case, Pulse Client fails to identify and kill such processes as part of remediation based on MD5 sum of the script. **Workaround**: None.
Release 9.1R9	
PRS-396113	**Symptom**: Host Checker OS check failure on Big Sur. **Condition**: Big Sur is configured as part of OS Check for MAC. **Workaround**: None.
PRS-396149	**Symptom**: Web process crashes observed on Pulse Connect Secure Appliance. **Condition**: With new PSAM improvement changes, when PSAM is configured with client application functionality, ACL Deny results are always treated as UDP connection deny request which is causing the issue. **Workaround**: Configure resources with WSAM destinations.
PRS-395994	**Symptom**: Invalid server message appears during browser based PDC installation.

Problem Report Number	Summary
	Condition: During fresh browser based PDC installation **Workaround**: N/A
PRS-395658	**Symptom**: Pulse client prompts for credentials when client is installed or invoked through browser. **Condition**: When Pulse Client is installed or invoked from browser with FIPS option enabled in PCS. With this combination if Pulse Client is invoked, session resumption fails and Pulse client prompts for credentials to connect. **Workaround**: Need to provide credential to connect to Pulse client in this specific workflow.
PRS-395552	**Symptom**: Installation of Pulse Linux Client on Ubuntu is failing. **Condition**: Ubuntu 18.04.5 is installed. Required dependencies are not available in default repositories. **Workaround**: Download and install dependencies manually.
PRS-395399	**Symptom**: Initiating command line authentication results in crash of Pulse service. **Condition**: This happens only in Pulse Client installed on HP Thin Pro. **Workaround**: Kill any running instances of pulsesvc service and initiate command line authentication again.
PRS-395379	**Symptom**: If a SAML classic connection and PZTA connection of Pulse client both use same IdP and same user accounts, SAML Single Logout (SLO) will not happen during ZTA disconnect and credentials are not prompted in some scenarios. **Condition**: If a SAML classic connection with SAML SLO enabled and a PZTA connection are both part of the client connection list. **Workaround**: None.

Problem Report Number	Summary
PRS-395377	**Symptom**: If a SAML classic connection and PZTA connection of Pulse client both use same IdP but different user accounts, login fails during second connection. **Condition**: When using same IdP but different user accounts to login. **Workaround**: Clear all the cookies from the IE (Internet Explorer) and retry the connection.
PRS-395225	**Symptom**: On Windows server(2019), SAML Login fails when using Embedded browser. **Condition**: When using Embedded browser to login. **Workaround**: None
PRS-395071	**Symptom**: On windows, Pulse Client crashes when manually setting to future date and time and executing "Sync Now". **Condition**: Pulse client does not support "Sync Now" with future date and time. **Workaround**: None.
PRS-395024	**Symptom**: On Windows CredentialProvider UI, the keyboard shortcuts - Tab and Enter do not work as expected. **Condition**: SAML enabled along with Windows CredentialProvider. **Workaround**: Shift focus to other fields using Mouse pointer.
PRS-394952	**Symptom**: Default fallback time for ESP to SSL is 15 seconds in PCS, if this default time is changed to 1000 seconds ESP does not fallback to SSL mode. **Condition**: Modifying default ESP to SSL fallback time. **Workaround**: Retain the default values for ESP to SSL fallback.
PRS-394948	**Symptom**: ESP mode falls back to SSL if custom port is configured in ESP mode in PCS. **Condition**: Custom port is configured for ESP.

Problem Report Number	Summary
	Workaround: Retain default port configuration while selecting the ESP mode.
PRS-394909	**Symptom**: For a SAML connection with Single Logout (SLO) enabled, during a server initiated disconnect like session expiration or idle time out, the IdP session is not logged out. **Condition**: NA **Workaround**: None. Pulse client prompts for user credentials when the user tries to connect again.
PRS-394390	**Symptom**: PCS is not responding to ping with payload size larger than the MTU size. **Condition**: Issue occurs in 4in6 scenario , when we ping protected resource with large packet size. **Workaround**: None.
PRS-394166	**Symptom**: During SAML authentication using embedded browser, when user tries to login, the username field is not populated in the embedded browser by the IdP sometimes. **Condition**: When a connection with SAML Single Logout (SLO) and embedded browser enabled. **Workaround**: Re-enter the username.
PLD-879	**Symptom**: Unified Pulse Linux Client not installable on Ubuntu 20.04.1. **Condition**: Ubuntu 20.04.1 latest build does not provide the dependency net-tools which is required to install Unified Pulse Linux Client **Workaround**: Install net-tools dependency by manually downloading it from Ubuntu website. Then install Pulse Client.
PLD-874	**Symptom**: Unified Pulse Linux Client fails to install on Fedora 30 64 bit OS. **Condition**: Right version of dependency webkit2gtk3, namely 2.24.1 is not available in default repositories of Fedora 30 64 bit OS

Problem Report Number	Summary
	Workaround: Install dependencies along with webkit2gtk3, which installs version 2.24.1. Then update webkit2gtk3. This will upgrade to version 2.28.2. After this, install Pulse Client. This will result in successful installation
PLD-761	**Symptom**: Upgrade from old Pulse client to new Pulse client is not supported. **Condition**: Upgrade to new Pulse client. **Workaround**: None
PLD-756	**Symptom**: Host Checker remediation results in multiple connections to the PCS server, and multiple certificate prompts **Condition**: Pulse Client repeatedly prompts for certificate validation. **Workaround**: None
PLD-705	**Symptom**: Uninstalling the Pulse Client does not remove CEF browser and Connection store.dat file. **Condition**: Pulse Client retains the CEF browser and Connection store.dat file on uninstall. **Workaround**: None
PLD-659	**Symptom**: CEF returned PCS server Certificate validation failures are displayed to user **Condition**: Lists the PCS server Certificate validation failures. **Workaround**: User can decide to proceed the connection.
PLD-625	**Symptom**: Download of CEF runtime library takes place over HTTP instead of HTTPS **Condition**: When CEF runtime library is installed **Workaround**: None
PLD-623	**Symptom**: Pulse client fails to prompt any error message for SAML authentication.

Problem Report Number	Summary
	Condition: When "Enable Embedded Browser for Authentication" is disabled in the connection set. **Workaround**: Select "Enable Embedded Browser for Authentication" option in server then import the connect set.
PLD-622	**Symptom**: No shell script to install dependencies for Unified Pulse Linux client. **Condition**: Shell scripts to install dependencies for Unified Pulse Linux client. **Workaround**: Install dependencies manually
PLD-604	**Symptom**: Host Checker policy evaluation fails if multiple policies are configured to be only "evaluated" instead of "enforced" **Condition**: Host checker policy evaluation **Workaround**: None
Release 9.1R8.2	
PRS-394809	**Symptom**: Pulse system extension activation flow fails to kick-in until pulse client is relaunched if network is not available. **Condition**: When end-user system is not connected to network (WiFi/LAN). **Workaround**: Exit Pulse Client from Pulse tray and re-launch Pulse Client.
PRS-394790	**Symptom**: Host Checker evaluation error is shown when connecting to PCS through browser after 9.1R8.2 Host Checker components get installed. **Condition**: When end-user tries to connect to PCS servers with older versions over browser. **Workaround**: Click "try again" to solve the HC evaluation error.
PRS-394703	**Symptom**: Sometimes, on Chrome browser before re-directing to PSAL download page, a gibberish message is displayed in a popup. **Condition**: When connecting to a PCS on Chrome browser.

Problem Report Number	Summary
	Workaround: Refresh the Chrome Browser or use Safari.
PRS-394581	**Symptom**: IT administrators can upload the package but cannot install successfully. **Condition**: Latest PDC client version is distributed through PCS versions earlier than 9.1R8.2. **Workaround**: Manually install PSsetupClient.dmg, PSAL.dmg to patch installed version of Setup Client and PSAL on the machine.
PRS-394339	**Symptom**: Pulse System extension process is running upon reboot when Traffic Enforcement was previously activated for the user. **Condition**: Traffic Enforcement was previously activated for the user. **Workaround**: Unistall Pulse Client and reboot.
PRS-394150	**Symptom**: Lockdown Exceptions may not work as expected due to Process Path missing in certain conditions. **Condition**: Lockdown/Traffic Enforcement mode is active. **Workaround**: None.
PRS-393958	**Symptom**: Apple embedded browser pops up when pulse client uses captive portal environment. **Condition**: Lockdown mode or Captive Portal detection is enabled. **Workaround**: Manually close the Apple Embedded Browser.
PRS-393682	**Symptom**: Post installation of Pulse Client, user notices that the connection is established without ESP. **Condition**: If ESP mode is enabled with traffic enforcement. **Workaround**: If reconnect fails, manually disconnect from the server and reconnect.

Problem Report Number	Summary
PRS-393498	**Symptom**: Pulse System Extension is not fully uninstalled. "systemextensionsctl list**"** command shows state "uninstalling". **Condition**: Uninstall Pulse Client and reboot. **Workaround**: State "uninstalling" is always shown initially after the reboot. After some time, run the command "systemextensionsctl list" again and the item disappears from the list.
PRS-392323	**Symptom**: When a custom lockdown exception is configured on PCS, endpoint does not reflect the changes. **Condition**: The exceptions configured as Custom are omitted by the client. **Workaround**: None.
Release 9.1R8	
PRS-393346	**Symptom**: The in Sign-In Notification page shows the text underlined. **Condition**: Upgrade to Pulse Desktop Client 9.1R8. **Workaround**: None. For more information, refer to KB article KB44548.
PRS-393265	**Symptom**: Pulse client installation and upgrade is failing on Windows 8, 32-bit machine. **Condition**: Standalone as well as browser based Installation and upgrade is failing on Windows 8, 32-bit machine. **Workaround**: None.
PRS-393210	**Symptom**: On macOS, Pulse Client service crash observed while replacing the Connection-set through browser. **Condition**: During the new connection set replacement through browse. **Workaround**: None. Client recovers automatically.
PRS-393129	**Symptom**: Loading of PSAL and getting the PSAL launch prompt takes more than 15 minutes with FireFox web browser on Window10.

Problem Report Number	Summary
	Condition: This issue is observed with specific combination FireFox 68.10.0 ESR Version and Windows 10. **Workaround**: Get the latest Version for FireFox Web Browser 78.0 ESR Version.
PRS-393107	**Symptom**: Pulse client is not getting uninstalled completely. **Condition**: When client is uninstalled through msi. **Workaround**: Reboot the machine or end process (PulseSecureService.exe) from task manager.
PRS-393088	**Symptom**: PDC client prompts to enter AD login credentials even though the login details are already saved. **Condition**: Login details are already saved. **Workaround**: User has to re-enter the login details.
PRS-393055	**Symptom**: In Active Users Page does not display Windows version. **Condition**: When End user establishes a VPN connection from Windows endpoint. **Workaround**: None.
PRS-393007	**Symptom**: Pulse Client prompts for reboot after the successful upgrade and connections are not getting imported. **Condition**: When a client is upgraded through browser as non-admin user. **Workaround**: Close the Reboot prompt window and launch Pulse Client from the browser.
PRS-392954	**Symptom**: On macOS Pulse Client service crash is observed during log rotation. **Condition**: Occasionally, during log file rotation. **Workaround**: None. Client recovers automatically.

Problem Report Number	Summary
PRS-392904	**Symptom**: Intermittently PDC fails to establish tunnel during Host Checker evaluation. **Condition**: Host Checker evaluation fails at client side. **Workaround**: Reboot the machine.
PRS-392731	**Symptom**: Pulse Client UI temporarily becomes unresponsive or crash during freshly installation Or upgrade. End user may also observe this behavior during an active connection to Server. **Condition**: When using configurations such as SSL/FIPS or L3/L4 VPN connection. **Workaround**: None. When connected to Server, this issue is observed only with the Pulse Client UI and not with the Tunnel service. Pulse Client UI automatically restarts without disrupting existing connection or tunnel traffic.
PRS-392580	**Symptom**: 'Advanced Connection Details' translation string of Pulse client on non-english OS is not correct. **Condition**: During 'Advanced Connection Details' check. **Workaround**: None.
PRS-392444	**Symptom**: When accessing UDP traffic with Pulse SAM cause memory leak **Condition**: UDP Applications access in Pulse SAM tunnel. **Workaround**: Reboot the machine.
PRS-392171	**Symptom**: Multicast traffic is not tunneled through Pulse client. **Condition**: When Multicast is enabled for user role, the multicast applications cannot send multicast traffic to server. **Workaround**: None
PRS-390026	**Symptom**: macOS user may observe pulse client is connecting twice during dual authentication.

Problem Report Number	Summary
	Condition: Pulse client is connecting twice during dual authentication. **Workaround**: None
PRS-384976	**Symptom**: Host Checker installation error found Intermittently while installing Host Checker or Pulse Client [HC enabled] through browser [Chromium Edge/Chrome/Firefox] **Condition**: Fresh Installation of Host Checker or Pulse Client [Host Checker enabled] through browser [Chromium Edge/Chrome/Firefox] after uninstalling old Host Checker components. **Workaround**: Perform one of the following: Uninstall the Host Checker/Pulse Client components manually and reboot the system. Manually kill Host Checker process before installing Pulse Client/Host Checker Component.
Release 9.1R7.1	
PRS-392383	**Symptom**: Pulse Client gets stuck at Host Checker when endpoint has Pulse Secure Installer Service (PSIS) older than 9.1R7.1 installed. **Condition**: Issue occurs when Host Checker with SAML authentication is configured and external browser is used for SAML authentication. **Workaround**: Perform the actions when Pulse Client is launched in following ways: Through a browser: Disable HC SAML based Authentication: Use embedded browser or disable HC Directly: No issue If above workarounds cannot be implemented, use the new PSIS that is available separately.

Problem Report Number	Summary
PRS-389851	**Symptom**: Pulse Client UI reports "Pulse Secure service is not running". **Condition**: Issues occurs when Pulse9.1R7 Client is used with PSIS Older than 9.1R7.1 and HC configured on the Realm. **Workaround**: Perform the actions when Pulse Client is launched in following ways: Through a browser: Disable HC SAML based Authentication: Use embedded browser or disable HC Directly: No issue If above workarounds cannot be implemented, use the new PSIS that is available separately.
Release 9.1R7	
No new known issues for this release.	
Release 9.1R6	
No new known issues for this release.	
Release 9.1R5	
PRS-389504	**Symptom**: Slight increase in time may be observed in establishing tunnel. **Condition**: Users might observe slightly increased time to establish connection over VPN. **Workaround**: None.
PRS-389140	**Symptom**: PULSE Help on macOSX 10.15.3 Catalina does not open **Condition**: Impact on Help pages **Workaround**: PDC help pages are available online under Technical Publications.
PRS-388988	**Symptom**: When embedded browser is used, Pulse is not caching the IDP session cookie.

Problem Report Number	Summary
	Condition: The session on the IDP was still active and the user gets the prompt. **Workaround**: None.
PRS-388775	**Symptom**: Failing in DSID resumption after SAML auth from external browser. **Condition**: Client fails to establish connection with PCS. **Workaround**: Use embedded Browser.
PRS-388986	**Symptom**: After disconnecting SDP 2.5 connection. Classic connection prompts for multiple authentication. **Condition**: On connecting a SDP connection and then re-initiating classic connection. **Workaround**: None.
PRS-388403	**Symptom**: Pulse Collaboration (When launched from pulse client) functionality is broken with enabling of 'HTTP Only Cookie' for user role. **Condition**: When the user provides the credentials, Pulse connection disconnects and Pulse Collaboration launches. **Workaround**: Disable the 'HTTP Only Cookie' option.
Release 9.1R4.2	
No new known issues for this release.	
Release 9.1R4.1	
No new known issues for this release.	
Release 9.1R4	
PRS-387732	**Symptom**: Application type strings are not displaying properly in localized languages. **Condition**: For a few languages. **Workaround**: None

Problem Report Number	Summary
PRS-382268	**Symptom**: Pulse Desktop Client throws **Authentication rejected by server** error for SAML authentication. **Condition**: When attempts to connect to a Global URL. **Workaround**: None
PRS-382277	**Symptom**: PSAM WFP mode blocks local socket bind operations. **Condition**: When performing pass packet for the local IPs, the packet was blocked by the current framework. **Workaround**: None
PRS-384976	**Symptom**: Host checker error is found while installing Pulse Client via Chromium-based Edge browser. **Condition**: When Host Checker is configured. **Workaround**: Click **Ignore** button.
PRS-382162	**Symptom**: Pulse Desktop Client is unable to establish the tunnel. **Condition**: With non-PIV smart cards on Catalina. **Workaround**: None
PRS-386924	**Symptom**: FQDN split tunneling resource access is going through physical adapter instead of virtual adapter. **Condition**: CNAME support is not there for FQDN split tunneling. **Workaround**: None
PRS-386953	**Symptom**: User is unable to access the internet. **Condition**: When CAV feature is disabled. **Workaround**: User can change registry settings as advised below and remove proxy settings from Proxy setting dialogue of Windows.

Problem Report Number	Summary
	[HKEY_CURRENT_USER\Software\Policies\Microsoft\Internet Explorer\Control Panel] "Proxy"=dword:00000000 "Autoconfig"=dword:00000000
PRS-387174	**Symptom**: Connection set is not adding in the installed Pulse Desktop Client. **Condition**: When Pulse Desktop Client is launched through the browser. **Workaround**: None
PRS-387183	**Symptom**: Pulse Desktop Client hangs while adding connection. **Condition**: When the user attempts to add the Pulse Desktop Client connection. **Workaround**: Restart the machine.
PRS-387340	**Symptom**: Manual extend session is failing for the first time and prompts with error "Too many concurrent users". **Condition**: When the user selects the Extend session option. **Workaround**: Pulse Desktop Client automatically prompts for re-authentication, which will extend the session successfully.
PRS-387397	**Symptom**: Windows Hello for Business session is failing with (Missing Certificate) error. **Condition**: When the user attempts to establish Pulse Desktop Client connection Windows Hello for Business session for the first time. **Workaround**: Connection is established successfully after a few minutes.
Release 9.1R3.1	
There are no new known issues for this release.	
Release 9.1R3	

Problem Report Number	Summary
PRS-381992	**Symptom**: Intermittently PDC is prompting end-user to select the certificate when both Smart card plugged-in and user certificate presents. **Condition**: When PDC is upgraded from 9.XRY where X<= 1 and Y < 3 to 9.1R3. **Workaround**: Export/ import current config using Jamcommand to update connstore.
PRS-381825	**Symptom**: 9.1R3 PDC latest strings are not localized. **Condition**: If end-user has 9.1R3 PDC. **Workaround**: N/A
PRS-381819	**Symptom**: Pulse Desktop Client UI is fluctuating on one of the HP models. **Condition**: End user uses HP EliteBook 840 G5. **Workaround**: NA
PRS-381646	**Symptom**: Credential Provider feature does not work when there is no Tile present during user login. **Condition**: L3 and L2 CP feature will not work. **Workaround**: NA
PRS-381585	**Symptom**: Admin should allow to enable any one option either "Windows secure Application manager" or "VPN Tunneling". **Condition**: When WSAM is enabled, PSAM also gets enabled as WSAM is now deprecated. Along with this VPN Tunneling option is not to be chosen as Pulse Secure Client will be enabled. **Workaround**: Choose either WSAM or VPN Tunneling option.
PRS-381449	**Symptom**: Still Downloads of NC and WSAM were allowed. **Condition**: Only admin users can download using URL **Workaround**: NA

Problem Report Number	Summary
PRS-381388	**Symptom**: Network Connect client will be able to upgrade and connect. **Condition**: Since we need to support existing Network Connect client users, the binary is a part of package. **Workaround**: Since upgrade is done as part of initial connect, no action is needed.
PRS-381170	**Symptom**: Home button does not appear after upgrade. **Condition**: On upgrading the pulse client. **Workaround**: Disconnect and connect back to the controller.
PRS-381151	**Symptom**:5.2RX PDC clients are able to establish a successful tunnel in the absence of Client Auth EKU. **Condition**: When "Enable Automatic Client Certificate Selection" is enabled. **Workaround**: N/A
PRS-378109	**Symptom**: Unable to establish tunnel with smart card reader. **Condition**: When end-user has latest 10.15 Mac OS i.e. Catalina. **Workaround**: N/A
PRS-374068	**Symptom**: Un-installing of Pulse Desktop Client is asking for a reboot. **Condition**: Observed on Windows 10 OS RS6 i.e. 1903. **Workaround**: N/A
PRS-370025	**Symptom**: With the latest SRX OS UAC L3 connection is failing to establish. **Condition**: If SRX OS version is 15.X and above. **Workaround**: N/A
Release 9.1R2	
PRS-377549	**Symptom**: Older PSIS is not upgrading to 9.1R2 PSIS version.

Problem Report Number	Summary
	Condition: When Pulse Client is deployed from 9.1R2 on Windows endpoints, PSIS is not upgraded to the latest version. **Workaround**: Old PSIS will continue to work and no impact seen.
PRS-378873	**Symptom**: Pulse Client is getting disconnected frequently after connecting to PCS on macOS. **Condition**: The endpoint should be dual stack. PCS should be configured for FQDN based split tunneling with Route Monitor enabled. **Workaround**: Disable the option Route Monitor.
Release 9.1R1	
PRS-373432	**Symptom**: For launching from a URL, the following are the prescribed parameters: connect, name, server, userrealm, username. Launching using a URL might throw an error, if: The same parameter is included multiple times while crafting the URL. Any other non-prescribed parameter, other than above-mentioned five prescribed parameters are used. **Condition**: Entering multiple values for the five parameters (name, server, userrealm, username and store) or any additional parameter, For example, multiple values (USER1 and USER2) for the parameter username and multiple values (TRUE and FALSE) for the parameter store are entered. pulsesecureclient://connect?name=NAME&server=SERVERURL &userrealm=REALM&username= USER&store=TRUE&extra=TRUE&other=SOMETHING In this example, a non-prescribed parameter (other) is used. **Workaround**: None.
PRS-374076	**Symptom**: When launching using a URL, some characters in the username parameter might not get displayed in the UI as expected

Problem Report Number	Summary
	Condition: Entering the username parameter in the following URL: pulsesecureclient://connect?name=NAME&server=SERVERURL &userrealm=REALM&username=test&=user&store=TRUE In this example, username will be considered as "test" instead of "test&=user". **Workaround**: Use ASCII encoding values for special characters.In the above-mentioned example, for the username to be considered as "test&=user", use %26 for & and %3D for = in the URL.
PRS-373177	Symptom: Launching using a URL is not working as expected for differently worded values for the "server" parameter. Condition: Entering differently worded values for the "server" parameter. The following three URLs refer to the same connection, but server values are worded differently. Though the connections with the following three server URLs (https://pcsserver.com/sign-in/, https://pcsserver.com/sign-in, pcsserver.com/sign-in) would ideally be the same connection, these three connections are treated as different connections while launching from a URL. Workaround: None
PRS-374087	**Symptom**: L3 based FQDN Split Tunneling feature with PSAM coexistence is not supported. **Condition**: Dual Stack is enabled on a Pulse Client machine. **Workaround**: None
PRS-374384	**Symptom**: A user is not able to download the Pulse Client from any package. **Condition**: The Pulse Client package is uploaded before the PCS upgrade. **Workaround**: Upload the junosepulse.pkg and download the installers.
PRS-374876	**Symptom**: Unable to connect to a PCS Server from Pulse Client for Linux. **Condition**: Primary network card of a machine has multiple aliased IP addresses set.

Problem Report Number	Summary
	Workaround: Ensure that the primary network card does not have multiple aliased IP addresses.
PRS-374627	**Symptom**: Wireless LAN L2 connection disconnects immediately when the LAN L2 connection is established. **Condition**: When FIPS is enabled for L2 wireless connection. **Workaround**: Disable the FIPS in wireless connection.
PRS-375458	**Symptom**: Pre-9.0R3 Pulse Client fails to establish the Pulse SAM connection with PCS 9.1R1. **Condition**: A Pulse SAM connection fails when a pre-9.0R3 Pulse Client tries to establish the Pulse SAM connection with PCS 9.1R1. **Workaround**: To upgrade Pulse Client to 9.1R1, launch Pulse Client through a browser. Pulse SAM connection fails to connect due to the following error: "Failed to set dns name query event, err:87" or "Failed to set netbios query event " or "Failed to set tcp/udp samize event" or "Failed to set tcpConnect event" or "Failed to set dns srv query event".
PRS-375900	**Symptom**: Shutting down the client PC will trigger the machine tunnel. **Condition**: Credential Provider option is enabled, and the user shuts down the client PC. **Workaround**: None
PRS-375897	**Symptom**: Pulse Client will take few seconds to show as connected when the client PC goes from sleep mode to awake mode. **Condition**: Credential Provider option is enabled, and the client PC goes to sleep mode. **Workaround**: None
PRS-373995	**Symptom**: Pulse Client fails to trigger the Credential Provider.

Problem Report Number	Summary
	Condition: When the Windows machine gets restarted. **Workaround**: None
PRS-375916	**Symptom**: While launching Pulse Client from a URL, it prompts for the realm name information, even if the realm name is mentioned in the URL. **Condition**: When **Allow saving logon information** option is not enabled in connection profile. **Workaround**: Enable Allow saving logon information option in connection profile.
PRS-375956	**Symptom**: In case of an upgrade triggered from Pulse Client from version 9.0R3 to 9.1R1 and after the upgrade process is completed, the user is unable to connect, and a network error is displayed in the connection status of the Pulse Client UI. **Condition**: Upgrade using Pulse Client on Windows 10 (x64) Redstone 5. **Workaround**: Reboot the machine after the upgrade or restart the Ivanti service.
PRS-376021	**Symptom**: User attempts to log in to a browser-based session fail with the error message "Detected an Internal Error" sometimes. **Condition**: When accessing Mac via Safari. **Workaround**: Restart the machine.
PRS-375766	**Symptom**: Pulse Client fails to add the route in case of FQDN based split tunneling. **Condition**: While adding the route in the local system. **Workaround**: None
PRS-376174	**Symptom**: Upgrading Pulse Client for Linux displays the following warnings: In: failed to create symbolic link '/usr/local/pulse/libjavascriptcoregtk-1.0.so': File exists

Problem Report Number	Summary
	ln: failed to create symbolic link '/usr/local/pulse/libjavascriptcoregtk-1.0.so.0': File exists ln: failed to create symbolic link '/usr/local/pulse/libwebkitgtk-1.0.so': File exists ln: failed to create symbolic link '/usr/local/pulse/libwebkitgtk-1.0.so.0': File exists **Condition**: While adding the route in the local system. **Workaround**: None
PRS-376205	**Symptom**: Advanced connection details are not displaying as expected for SAML embedded browser-based authentication. **Condition**: When Enable Session Extended option is enabled. **Workaround**: None
PRS-376209	**Symptom**: FQDN resource is going through the tunnel, even though it is configured in split tunneling excluded policy. **Condition**: When FQDN based split tunneling is enabled. **Workaround**: None
PRS-376071	**Symptom**: L2 Wireless suppression fails to re-enable the wireless NIC. **Condition**: Unplugging the wired USB network adapter from Surface Pro. **Workaround**: None
PRS-376034	**Symptom**: For stealth mode connection Use Desktop Credentials option should not be enabled while creating the connection. **Condition**: When stealth tunnel is configured for "Machine only" mode. **Workaround**: None
PRS-376235	**Symptom**: Pulse Client will be in connect state after replacing the connection set with the manually added connection.

Problem Report Number	Summary
	Condition: When added Sign-In URL is configured with VPN Only Access/Always-on VPN and Lock-down option is enabled. **Workaround**: Click on cancel instead of retry and try to establish the connection after one minute.
PRS-376278	**Symptom**: Unable to establish Pulse SAM connection on Windows 7 machine using Pulse Client 9.1R1 connecting to pre-9.1R1 PCS. **Condition**: 9.1R1 will not able to establish Pulse SAM connection with pre-9.1R1. **Workaround**: Use 9.1R1 PCS build.
PRS-372921	**Symptom**: TFTP connection is getting a timeout error. **Condition**: When Pulse SAM connection is established. **Workaround**: None
PRS-376378	**Symptom**: Delay is observed while accessing FQDN resources. **Condition**: When Split Tunneling with route monitor is enabled. **Workaround**: None

Product Codes (GUIDs) for SCCM Deployments

If you deploy Pulse Clientusing Microsoft System Center Configuration Manager (SCCM, formerly SMS), it can be helpful to know the Product Codes (GUIDs) of Pulse Client installation bundles. SCCM uses these codes to determine whether products are already installed. The table below gives the product codes for the corresponding release of Pulse Client for the given the architecture (32-bit or 64-bit) and locale (language environment).

Language	Product Codes (GUIDs)
Release 9.1R15	
PulseSecure.x86.msi	
English	{7C3BE0D1-573A-44FF-BD4F-33E9EFEF9B4B}
Chinese (Taiwan)	{D00788C2-4E4F-40B7-B9CC-619AD4F4F99C}
German	{43CE78E1-481B-485A-9C91-F74E83F25DC9}
Spanish	{8B68F85F-39D4-451D-83D0-F08FF66E241A}
French	{C963931D-02B2-44D5-BB52-91F0D2C7B5B4}
Italian	{134321F8-04C1-405D-B0A9-AEA2B5618EC4}
Japanese	{783B6497-5159-40F1-8729-F9BEDE8FDB9A}
Korean	{E5693B36-10C6-42B8-BED0-D6AC463346D8}
Polish	{1F98EB58-CD4E-4E6B-A8A2-CA1EFEF11D4A}
Chinese (China)	{7C8D48CB-B1AD-4CCB-9D32-7F0C375B2895}
PulseSecure.x64.msi	
English	{AE37A01E-0FF7-4A70-853B-37A85F2ADA5C}
Chinese (Taiwan)	{DCC5864B-223A-44A4-A1B5-4D6454C2DB87}
German	{9A869627-B0E8-4952-8CBB-2178FE1F060A}
Spanish	{65105F13-3E92-49DB-9D83-84A4C2B16E35}

Language	Product Codes (GUIDs)
French	{1AE08475-49A3-4607-A399-AF0FDBD2974B}
Italian	{CCA66DD9-414F-469D-8B83-2A21959713E9}
Japanese	{4E2D3278-21ED-4899-A1D4-D93E763FD18F}
Korean	{EB0ECDE6-BAAE-48D4-83F7-3B604A8E601A}
Polish	{BE0929E7-6D90-4F4E-ABD8-59C3CEE0701A}
Chinese (China)	{D396F90F-3A50-49B8-98EF-7439FE85C6C8}
Release 9.1R14	
PulseSecure.x86.msi	
English	{1953DEDC-2AB6-4074-A9D1-3071E76290B1}
Chinese (Taiwan)	{D997A03B-9D63-489D-B2CA-DCAF89C1258D}
German	{5B79C5C8-2C6B-4A66-8F82-6715DDC9018C}
Spanish	{50808141-409E-4965-9952-EB1ED06E63EF}
French	{4ADBAB12-FCC9-4811-82A9-B2B8202EC11C}
Italian	{3D52C14B-62F4-40D1-ABD0-EB56A342C1FC}
Japanese	{F8E4FBD9-7E22-4C92-B29E-3BCC626382C8}
Korean	{ABA4A89A-A829-4B03-8D42-1F4DE37C6490}
Polish	{746ED90F-9D17-4200-9DC2-E8FB591EF4FD}
Chinese (China)	{FD913134-58BF-4F95-8E4B-D1DB9612A7AA}
PulseSecure.x64.msi	
English	{F7210907-3261-4147-8357-E1080071AE0D}
Chinese (Taiwan)	{18650E84-1D4C-4EFD-BAE8-4B7130BBD628}
German	{A82FD7A5-B57F-44B1-B6C5-0481ABB9B69F}
Spanish	{25579C48-079C-47B4-9ADB-CE0A3D4961BB}
French	{3D479204-A491-4CE2-9DAE-3E27249A0127}

Language	Product Codes (GUIDs)
Italian	{AD864BCF-F83F-4CD3-8AAA-49C394B41115}
Japanese	{6BEE2A3C-C499-44EF-8579-F28F3C1B0373}
Korean	{98BEEDD0-3CB3-4A85-B54E-64A1F0D476B9}
Polish	{BF60046D-F312-4699-884E-741A1BDCDDF6}
Chinese (China)	{A91FAD8B-3443-45CB-91EE-16FF5CD5D1AE}
Release 9.1R13.1	
PulseSecure.x86.msi	
English	{B611C7C5-A86D-4566-A567-BC5DF5A11215}
Chinese (Taiwan)	{0F54FC5F-D860-4F1C-A3BC-CD75149E5A49}
German	{71687742-4428-4BB2-904E-C2EE292123D0}
Spanish	{77776F62-6540-485D-9F25-50ABBAD1E641}
French	{23AAE242-1282-434B-9F20-EE5F4E2393E9}
Italian	{97A43EBF-28A5-40FE-BF75-A3FA38EF1DD5}
Japanese	{A38B0DB3-4E4F-4438-8E85-B26F5187DD6A}
Korean	{28111FD3-DBC3-4B37-98FD-456A56B2F5AC}
Polish	{E668DD49-0991-4D39-839B-1E0ECEEEFD23}
Chinese (China)	{E34A3BFC-92F7-4456-BDBC-5E910E57B9CB}
Release 9.1R13.1	
PulseSecure.x64.msi	
English	{65988A2A-C8AF-43FC-B415-488069C9C2A5}
Chinese (Taiwan)	{7C6820B7-8B70-4FE2-B211-033A5EBDE732}
German	{CBB07B8A-34C1-4921-AD76-4AB299CF566F}
Spanish	{C84551EE-B84F-4A0E-B4D5-4B57130189A4}
French	{FEC69636-ABCE-4E4F-B427-B80F3361FB64}

Language	Product Codes (GUIDs)
Italian	{BA0F0B2A-8001-4FAA-A426-D3B4239EF7C9}
Japanese	{F493AD1F-9F0A-4CE4-BA6F-A042E1F81219}
Korean	{0DAC6E85-DB5A-4F13-8BFF-B01320830E6D}
Polish	{504A21AC-7939-4042-BAC7-4A893F62750A}
Chinese (China)	{65D1A48C-7BED-4F7E-9318-87DF4D90DDCE}
Release 9.1R13	
PulseSecure.x86.msi	
English	{7D9DAACB-F66D-4B3D-AAAA-1A3C55529814}
Chinese (Taiwan)	{23A8A478-5EA2-42BA-82D9-761513348BAC}
German	{A74F8471-C8EE-4778-90A6-4D6079677812}
Spanish	{CF584CEB-7703-4495-BAC2-8BE29EDB62A3}
French	{E74FF44F-F42B-4BDB-8ADC-AD29BCDABD9D}
Italian	{46AD1CAB-A3F4-4A62-A13C-274CF49B7E3D}
Japanese	{11164CB3-8793-4C2F-A53A-357F9F46EB3C}
Korean	{527C2749-68FB-41EC-8BD8-ACD8DE1EA8A2}
Polish	{F2B34611-A6CA-4EAD-88F2-550F66DF2A46}
Chinese (China)	{8907C452-2B94-4594-BD29-E00E3F19E9B6}
PulseSecure.x64.msi	
English	{7152E765-502E-4205-AE3C-CF905C2D48B8}
Chinese (Taiwan)	{B461B227-C0AB-4F03-B076-FBFE0EC2BEF9}
German	{4927F578-864B-4B9E-BA74-FE3A1E5534AD}
Spanish	{8EF5F59D-5D74-47AE-B393-B3637EE80039}
French	{F114ED73-DC07-4B2F-8D4B-925EBF0BB763}
Italian	{4D51D2CF-E90A-4DC8-9EF3-95808296E1A7}

Language	Product Codes (GUIDs)
Japanese	{0047AE46-3A7F-4607-B3FA-B671F6592306}
Korean	{A80A434D-8028-46F3-AEE6-DE1406A8228A}
Polish	{DC44BD9A-7435-4A11-9921-4D52A981CA36}
Chinese (China)	{714BC9B6-51D6-40E0-82AB-847796370D03}
Release 9.1R12	
PulseSecure.x86.msi	
English	{93E44421-5ADB-4D23-AB58-7E059F857BB7}
Chinese (Taiwan)	{BE4EE61A-2991-4ABA-98B8-FF1BC5822AD4}
German	{F04E1547-E164-461D-9F03-B72D283E5879}
Spanish	{FA10C59A-D9F1-4685-8297-5296571890FD}
French	{E5DB6063-AAF2-4979-B72A-9B256D695742}
Italian	{FB345306-930D-446C-9CB0-F54FFF811DF9}
Japanese	{089C29D2-933E-49B4-BCAD-277830FF4B15}
Korean	{6FCDF9C4-9162-4072-AB50-804AB6182BE3}
Polish	{519F7FB5-C91F-42A8-B99A-AF742B82187B}
Chinese (China)	{B7E48AA7-D159-488F-BC81-C62BE8D9E27D}
PulseSecure.x64.msi	
English	{5AD0680E-A398-42E0-B935-661FCB285B66}
Chinese (Taiwan)	{A476AADB-0F8C-40D4-8B5F-FA2518CE6468}
German	{BA05F2A0-1404-43AF-9036-D1DED52CA928}
Spanish	{463650A7-38AB-4762-B31D-C95F206AAB67}
French	{DA589C50-7F3B-45C2-8479-F14AA32B31DA}
Italian	{5E8D0B4F-9A2A-4B9F-A859-266B9FB53429}
Japanese	{31C71957-3DCF-47DC-BA70-DF8DF06CDCED}

Language	Product Codes (GUIDs)
Korean	{90CA7EBE-317A-44AD-9C99-B3EDF1FAD523}
Polish	{0E11E2D3-C1FD-4502-A665-EDFCB234E71E}
Chinese (China)	{E58D6267-5197-44C3-80F8-43708471D353}
Release 9.1R11.5	
PulseSecure.x86.msi	
English	{2E6BF62C-0A9C-4AE1-A582-F54DA0D3574E}
Chinese (Taiwan)	{AE1856A3-D851-4266-9F99-4394F94868EB}
German	{A37EDF69-EBB3-4A23-950C-4852905942C5}
Spanish	{8A1A4F5F-A214-458E-8B55-EF8AD83E9956}
French	{CD06D7FE-CF74-4D8A-AE5B-915D4121C8FB}
Italian	{42154E8D-2AAC-40CC-A81C-442CE4084765}
Japanese	{F646F09E-BB9E-419F-81A9-0EA8E4A60F79}
Korean	{B31C3908-73C2-40C4-BD27-6595092018EA}
Polish	{6A225FE9-8404-4EB2-8A46-646FD5B88FD1}
Chinese (China)	{E06EF5EE-39E5-4F90-9F75-C7954647F0A9}
PulseSecure.x64.msi	
English	{DF894007-8BB3-42E4-83EA-5D05969C2517}
Chinese (Taiwan)	{38AF5310-AAB2-43A9-8BA7-FD888D765C0E}
German	{E7482D91-1E67-4727-A11D-007632768CC8}
Spanish	{E6EA24F2-29B1-49B8-A2D5-79F7EC46D46D}
French	{53B6B72C-FB1A-4641-BE1A-58654E9E9BA6}
Italian	{6DB95E00-1D7F-4BF3-B013-5E5EA38F88FC}
Japanese	{C1E5D58F-DA86-48E7-A1C1-EC23FE988804}
Korean	{753F0AED-80C2-4105-A62C-EF2C8FBCC445}

Language	Product Codes (GUIDs)
Polish	{DEDFCB9C-BE02-4654-B37C-A7BB75000931}
Chinese (China)	{9A54E91A-7BDA-4508-99B6-9278A29DDB8F}
Release 9.1R11.4	
PulseSecure.x86.msi	
English	{9CA361F0-4451-43F7-9A7B-AB4DD8BEA1C8}
Chinese (Taiwan)	{68E58771-6AC3-4F09-8A82-69421AE41BB8}
German	{71CC3F6E-2B2C-46B4-BBF9-74C3E6F3E786}
Spanish	{BBAECE01-7428-4EED-9729-704B3B190907}
French	{6EC651CE-6A75-49DF-BC19-F68E69EFED87}
Italian	{4AAC2BD7-29F7-4F8E-8397-0B293FE1D0A5}
Japanese	{234B5FF1-133E-442F-AA2A-64EAB7DF68FA}
Korean	{2BC27A7B-0188-4A15-969D-C6E8D2C53B7F}
Polish	{7E5A6490-1DA1-4E1D-8D42-10007D7A201F}
Chinese (China)	{3F4D8764-F511-44CC-8D56-F1279E24BC2C}
PulseSecure.x64.msi	
English	{CC570C5D-27C5-4F3E-BE40-88A771EB4028}
Chinese (Taiwan)	{A00F41BB-51FC-413C-AA8C-3C23F1EB475F}
German	{25697EB4-1860-48D8-9DD6-7E7F3701A9A2}
Spanish	{2849BDE4-DFD8-4142-A12F-E12A1BA10424}
French	{D2F9A3D0-B5BC-48A6-8701-1C2C1AF70A5F}
Italian	{A2696B31-E17E-4132-A638-CAE1D5216F43}
Japanese	{D06D85E4-2D6F-4CF4-8F83-6CFBEB0AFEF3}
Korean	{BAB640FB-99D8-4DC9-B4CE-0C99C90C266C}
Polish	{DD294199-C60B-402D-BBF4-8A49153EF0E8}

Language	Product Codes (GUIDs)
Chinese (China)	{D8C59222-23B6-4D57-8DE0-81401610BECF}
Release 9.1R11	
PulseSecure.x86.msi	
English	{B58F40DB-C578-4118-BE53-BF09EA291DEA}
Chinese (Taiwan)	{254E610F-C4F6-4873-A205-E84DEA071556}
German	{92CF208E-5C10-4C13-B732-7D53994918C4}
Spanish	{6A4FF38B-89BA-4D93-915E-689DB9F4563A}
French	{A3F6F2BF-5A65-44BA-9B07-8F338B72B30E}
Italian	{937B3FB2-4CFF-4E1B-ADF7-B41D0753397F}
Japanese	{D8781F0A-E6B0-4238-9DE9-8486CD3BEA0E}
Korean	{B871C704-DDDA-4736-AD8A-9CB33486D38E}
Polish	{EA652305-89D0-459F-8B41-710479FE72DC}
Chinese (China)	{0A473017-FD20-4E36-AB27-7E44325C6B1B}
PulseSecure.x64.msi	
English	{6331BE50-5CB4-46A4-997A-08ED3AE3CC7F}
Chinese (Taiwan)	{616351E1-244F-48FB-93AE-5178A53D05D0}
German	{04AA48A9-41C9-469C-8C19-33A8DFD2E4EF}
Spanish	{36212CF9-494B-457C-B09A-943FD27D3334}
French	{BE871128-4D1A-4C0C-891A-996E3B34D597}
Italian	{99D13289-CE3A-4FB3-9F18-7E4008AFE204}
Japanese	{A4DCF5D3-5CD8-4D17-9EA0-110437BE66ED}
Korean	{B61171D7-C3BE-48FB-BA63-CAC8CE81ED51}
Polish	{38CC2E34-9D4B-407C-96A0-3501CB4C616E}
Chinese (China)	{C0192028-CD2B-4331-A74C-4B85AC10551C}

Language	Product Codes (GUIDs)
Release 9.1R10	
PulseSecure.x86.msi	
English	{DB3024D8-B724-4132-864D-A820C5DBEBA6}
Chinese (Taiwan)	{DE98A675-D186-4C7E-9F21-96886E84A508}
German	{807A6F22-A96D-455B-A05A-6998F0B31272}
Spanish	{D0DEEE13-842C-4498-957C-6B2F6D0E7993}
French	{7683AE40-F708-475B-9EC9-13D8226D3A17}
Italian	{670417F8-4CA4-4604-B59D-3E446C68FB01}
Japanese	{039B2049-9F42-4F85-BA50-374782F8D0EF}
Korean	{E9539338-5A23-4A4E-8272-2FAA5622662F}
Polish	{ACEAE742-8867-4DF7-98B6-31D7BEF674C0}
Chinese (China)	{0285F81D-D252-40D3-BA88-720E7F548812}
PulseSecure.x64.msi	
English	{6F3A3EA5-8BD4-4B9D-B37D-BB8B904027BF}
Chinese (Taiwan)	{4AA3DE5A-5AAE-4041-A46E-D2BE75A0A8EA}
German	{B3E99BBE-E42D-4C70-B32F-307945B43A4F}
Spanish	{8A789A50-4D62-432C-A2CD-E97637C635BA}
French	{29B7F72F-2F65-4964-A238-9772F9213615}
Italian	{FED243CB-FA9D-4C66-AE37-278223ABFED5}
Japanese	{B1E95D40-4DBD-413E-99B0-5DAB02359914}
Korean	{F967CCB4-55F6-441B-B4AC-93217FD17103}
Polish	{7CF251AF-ED2E-4A99-97CD-83AF252752F6}
Chinese (China)	{E760ADD1-157A-40B1-8821-E8CE1424C084}
Release 9.1R9	

Language	Product Codes (GUIDs)
PulseSecure.x86.msi	
English	{88986BC6-3591-48E3-B821-5B268FBF67AA}
Chinese (Taiwan)	{46A8F0D0-2EEB-4191-A9FB-9409F88034FC}
German	{5773B283-D874-4121-84C7-DBBFCED1A03D}
Spanish	{A6660F0E-3636-4A10-9CCF-FBB83E2A7371}
French	{0D7C41BC-0FF2-4ABB-B323-F53CCC828351}
Italian	{672E6D05-FE63-48F7-BD53-297B1719BD1E}
Japanese	{6876C5F9-1BA5-4647-B9C2-28D0C6BD7DFE}
Korean	{531E93E1-9349-4399-AA69-A065C023436F}
Polish	{6052F580-260C-4057-846C-DD946FE343AB}
Chinese (China)	{95C0C369-F8EB-4C4A-A368-9962D51EAE8A}
PulseSecure.x64.msi	
English	{A98AA52D-A5F8-4CB2-A122-67F31D04F2E0}
Chinese (Taiwan)	{F94793A5-93A6-48F0-8E07-3F7BA3128C1F}
German	{ABAEAD38-AD9E-4444-B587-9284A22F877E}
Spanish	{B157875E-8663-4DFF-98E5-438611BC5D3A}
French	{5368E5BA-C66F-4074-902A-61AF14F01528}
Italian	{7EAA49D3-855D-4552-9FB3-828FBD613936}
Japanese	{68D89783-9B06-4352-8351-6A36BBE3A89D}
Korean	{F65838DE-0E1B-42C5-A043-608391253224}
Polish	{3B41A1C4-98BB-443B-A17F-E5BA3C75C6F6}
Chinese (China)	{2B304B5E-B243-4196-999D-EDCD05DEF1C0}
Release 9.1R8.2	
PulseSecure.x86.msi	

Language	Product Codes (GUIDs)
English	{CA8EA9AC-A485-4EA4-8FB5-A9F556B4891E}
Chinese (Taiwan)	{E1E968E5-0236-4B32-B1D0-9401013E29CF}
German	{DF6EBF33-7404-4F30-9E35-2E30666F6A35}
Spanish	{629B45C7-2AD8-4C0F-9780-A7FC9C3533B5}
French	{64385380-CCAD-4B90-92B7-4DB7D8E6AAB9}
Italian	{EBEBC1F4-1810-4BA9-BA8B-250C52A8C34A}
Japanese	{CC1D3228-9F7D-478F-BF3D-CD8E332E26C2}
Korean	{8196D479-0CCE-4BBF-B7FB-74E499620DBE}
Polish	{F27D7A79-EE95-4361-A55D-98E7D45CFCF3}
Chinese (China)	{7073DB94-FEA4-4F55-B0C9-4CBE45A25823}
PulseSecure.x64.msi	
English	{C9B45FE9-3A5D-4F2B-8D8C-AA0F07D95664}
Chinese (Taiwan)	{465D85D4-71FB-4958-90A6-BFBCCF79A846}
German	{B21FD4FD-E326-4421-9C04-C885D957CF7B}
Spanish	{50626AA4-F8DF-4612-8EDC-665B2F7165C4}
French	{D85444F8-31E5-486E-8C04-DCFD9B481F8C}
Italian	{0867CD09-891C-4E0D-A67D-CEFFF763B0A1}
Japanese	{064D3451-C19C-41A4-9422-32C2937D05B7}
Korean	{3A67302F-AADB-4019-9AE8-6AE49256AF68}
Polish	{B9D4042A-1BBF-4989-93C4-293F39F90C2B}
Chinese (China)	{B70EBCEC-DC41-43E3-B2F1-22B880A2F02E}
Release 9.1R8	
PulseSecure.x86.msi	
English	{BE3759C9-ED1B-4534-9992-D33FEB06DC1A}

Language	Product Codes (GUIDs)
Chinese (Taiwan)	{5A420BBB-5145-4DE5-A390-50BBCB4C35F1}
German	{391F069C-1C2E-458E-B981-6B5B7B4393B1}
Spanish	{0079948F-7812-48F3-BC2E-85A7A9B76559}
French	{E9576348-B518-42D1-9A2C-4F0BE1F34537}
Italian	{8AEE0E80-AA4D-4529-B389-83E861BC63DA}
Japanese	{4313B8B1-B5FC-4FA9-BC2E-CD7F96D2946D}
Korean	{DBAE8ABB-EA78-4DFE-9F78-878B097C80CC}
Polish	{A0CF51E4-77A0-47CB-B843-ADDBA42A8C27}
Chinese (China)	{02ECCB67-9889-448F-B260-6BF5A1C9D5EB}
PulseSecure.x64.msi	
English	{9BF8BF6A-F051-42CE-A8D1-FB12C9F7ADB1}
Chinese (Taiwan)	{3F4E0A87-B489-456D-931D-907092B77CAF}
German	{C56CBFB9-3A1C-4EFF-9B80-B4018F6FBACB}
Spanish	{432AE064-FD9A-4456-BA47-C514F01217D2}
French	{0529AF68-52B7-4C9E-A5A7-C249189EB1E5}
Italian	{63F55DFF-B3BE-448B-BA12-65736CAADB9D}
Japanese	{B6D7E60E-2A28-47A4-89A4-EB7576B7877E}
Korean	{10FBC69B-34C0-4530-8309-4C7B7D64A6F0}
Polish	{D42E9418-5F4E-4362-8EE1-2F454086893F}
Chinese (China)	{665CB68E-143F-4CB8-8A70-3A1448616452}
Release 9.1R7.1	
PulseSecure.x86.msi	
English	{DC4BBFAB-D6C1-4DD0-AEBA-9553D4F8B141}
Chinese (Taiwan)	{0D6EE522-D7AA-43EB-ACE6-D9FD57658C6E}

Language	Product Codes (GUIDs)
German	{EB6FE65C-D398-4DE1-9BA9-E98D91A7D010}
Spanish	{66D77BCC-1F52-4D5B-AE50-5B5651A10FDE}
French	{2C3FB174-1800-452C-822B-B5669DAB7AC0}
Italian	{E10C8587-4CA1-40A8-8F04-B963CF87B169}
Japanese	{B683865A-8832-4F98-9481-1634F6D3B27E}
Korean	{9BF14E8C-A0AB-49A3-86C9-E1BA8041D748}
Polish	{0753C63E-6CF7-4387-A54A-415FD55ACEAD}
Chinese (China)	{597304A5-59EF-4B4E-818F-621DCAC2BEFB}
PulseSecure.x64.msi	
English	{A5ED1CBD-5B4A-4F92-BA10-2F8E16FC90C4}
Chinese (Taiwan)	{5D23C591-6A61-424C-8574-2CAA44095868}
German	{50427461-43BD-4F68-A6AD-4C848B9201EF}
Spanish	{2F1AE891-D676-472C-A278-238E0FC9D98A}
French	{FDD1E92A-10D9-46B1-8E2F-7754E8451F38}
Italian	{AC887AAE-075C-4D11-BE71-4EC672F06174}
Japanese	{06CA5969-C489-4DCA-8219-47C6DB3AE05F}
Korean	{7D048840-D4F8-4FD3-90EE-61247D4F5A94}
Polish	{03764A58-DC0C-4261-B266-8F4FAA9E56D6}
Chinese (China)	{ADFB6D58-605F-4F64-B651-2748827CA13E}
Release 9.1R7	
PulseSecure.x86.msi	
English	{DAB2AFAC-A351-431D-884A-7F7B988DB38E}
Chinese (Taiwan)	{FF20FF98-4A25-4A9E-A2D9-06FCD25949A9}
German	{2F4D28BB-846A-46B1-8749-0F4373B0711E}

Language	Product Codes (GUIDs)
Spanish	{AF643664-5AA1-4254-B5E7-F8E975200825}
French	{FEB2FE8F-823C-4E49-A62C-6B1D3D0E466A}
Italian	{8A4C6CF3-DB8A-4D70-8223-A38DC2BFE427}
Japanese	{4A250D5C-AE13-4803-89F2-75EB818BAD63}
Korean	{05EE7BFD-DE86-409C-999A-478DF7FE6FFB}
Polish	{D88940BF-6564-4C18-9843-5087BD136D4D}
Chinese (China)	{EFB90E22-CEEB-4AD8-9638-ADEF7F6B16CC}
PulseSecure.x64.msi	
English	{6D8DF24A-085C-4C75-9D40-55D26259529E}
Chinese (Taiwan)	{AEB43E95-F73B-4032-90EE-76F0D7784C60}
German	{A2E1922C-23F7-4C14-8571-72915286D983}
Spanish	{CBB7C2BA-1474-41EC-9B7D-9ABF3984DF47}
French	{A9FC219F-4A2C-416B-93A7-4C07801CFFD4}
Italian	{56AB7498-9FCE-4F8E-ADE0-B7B566EBDABD}
Japanese	{6EC2A780-A552-4237-A0C3-C1254833065D}
Korean	{CF3913AA-CD4E-408E-A566-AC911A1AE956}
Polish	{574F5439-085F-46C7-B0D7-8A929E440A9D}
Chinese (China)	{7B29B591-915D-4CB0-B257-E6511EE2C7D6}
Release 9.1R6	
PulseSecure.x86.msi	
English	{424F8FE1-6CA7-46C6-8A35-D279CE19C43A}
Chinese (Taiwan)	{568779E8-AAFC-448F-8361-2BA2B0B72FE8}
German	{FCE0DFAC-97CB-47E2-A99B-8E077D3C0B4D}
Spanish	{59C41788-E875-4E03-8532-525DA5A33D19}

Language	Product Codes (GUIDs)
French	{0499ABB7-D466-49EA-80C2-4FFB127D37D8}
Italian	{761E3307-CA98-4146-AEA2-6EFDE07E121E}
Japanese	{931C3646-6519-4E73-8CE8-834A56D90828}
Korean	{A71EC037-6E92-4257-ACA1-5AC7A892A28E}
Polish	{846C5357-F550-48D3-B1F7-481AF9A7F23C}
Chinese (China)	{3A1D28C7-4982-4109-ABDF-45E4B355CDCA}
PulseSecure.x64.msi	
English	{BDD725A4-DA50-4B7E-A113-B902731D76C0}
Chinese (Taiwan)	{AAF03B12-5519-4E08-84E0-3ACB11843DC7}
German	{AA3D63C5-3F00-4FDE-8642-F4BFE56D23E4}
Spanish	{09A38197-CA58-46BE-899F-58FBB9747C4B}
French	{75657019-5C90-41EC-8173-2736FFC1C194}
Italian	{35F2522D-5E54-4AE9-8892-E39C1A1ABCB8}
Japanese	{4F7D0985-2366-4A51-B90C-5CCB263D98C8}
Korean	{B8D52E92-97A4-4A9A-8412-52C3EDD53FB0}
Polish	{5C24EA6E-A6AE-47CD-90AE-8952F9D9A66E}
Chinese (China)	{1CCF54B2-B717-4564-8736-18E01A4253A1}
Release 9.1R5	
PulseSecure.x86.msi	
English	{5E729506-4089-423C-8872-0B53B16DF741}
Chinese (Taiwan)	{145EAFB5-EFED-4CFC-8082-EEDB15428BF7}
German	{D6F6A0CB-8A7D-436E-B661-C4994A98F8E9}
Spanish	{6E1C2DEE-BFF9-413A-873C-5F6A250D8F8E}
French	{FA759476-7C38-4CF4-9812-628B22FCACE7}

Language	Product Codes (GUIDs)
Italian	{290613FA-1B79-4888-88AE-BE50D4735D97}
Japanese	{CA6C6BCF-7F56-442A-9D8F-844178E062A8}
Korean	{1ECDE1C9-B867-4383-9183-5D7D4CA04EDD}
Polish	{5B310EDE-9A25-4D7A-BCF4-ED73D27D3F97}
Chinese (China)	{4C5E699B-C3FF-409C-B532-577AB544E499}
PulseSecure.x64.msi	
English	{2941886A-F921-4B37-BA74-399B5B5F8D62}
Chinese (Taiwan)	{9468EE4F-1137-4BD6-B515-1DAC6670BA01}
German	{2941886A-F921-4B37-BA74-399B5B5F8D62}
Spanish	{D6C7F8EB-7A3A-48FE-9E5F-77A04058DACE}
French	{CA3C027A-7DAB-4987-8311-32EC6D4FC7D2}
Italian	{E2202B9B-0B89-40FA-8F15-4B843570ECC9}
Japanese	{C6626313-EF36-4E38-908C-586C35DF825E}
Korean	{89CE23AA-9311-47AB-B8D8-04E51A7AD0F8}
Polish	{DF8D95A9-76B6-42F4-9C57-DF05B501458A}
Chinese (China)	{512C5BFC-D540-4D38-AA15-DA41E46542D8}
Release 9.1R4.2	
PulseSecure.x86.msi	
English	{F67FEB7F-BBED-47B9-891D-D85B50F89113}
Chinese (Taiwan)	{DF626C9F-B2D9-4B54-BA65-91A81F8A6C1F}
German	{9C04AF20-14D4-4ECC-9E62-903EAD921B8F}
Spanish	{5E2FA19A-2D94-417D-A1E1-EC2A8F21D191}
French	{DA743680-3198-4F10-BD0A-BB86B59B96BF}
Italian	{06A590C5-26F8-4F32-9869-6AC47211A60F}

Language	Product Codes (GUIDs)
Japanese	{29F7327D-AFD5-41A2-9E08-E0DAC918525C}
Korean	{249E83EB-2F6D-4AFD-87FE-9710BB6B3EBE}
Polish	{952E3C4E-CE44-4130-A7A5-5A95A707D564}
Chinese (China)	{0B60857A-DA9C-47A0-A5FF-037E8AF1C5AD}
PulseSecure.x64.msi	
English	{A5C9D703-23B4-4960-A239-E057444C1584}
Chinese (Taiwan)	{F34311D7-6DC0-4E2F-8D19-6465FC6D569D}
German	{60FAD516-82F6-4F2A-8D3E-162CC65E7DA9}
Spanish	{B1D5B1D9-F4DE-4FAF-938D-015E1976B0A6}
French	{2B92CD3E-160B-458F-8D25-3908146E1499}
Italian	{E9686D5E-5480-4686-AC1E-84643708D705}
Japanese	{894224A8-A2D1-46DE-9079-8DEC76971B3C}
Korean	{66828680-84B7-4BB4-A809-8EC2B4DE89C4}
Polish	{2F9A1BF3-8CC7-4A0B-BD8E-791D6C5A94DF}
Chinese (China)	{742FC3BC-E2E4-4954-9C2C-1DF103CD8F87}
Release 9.1R4.1	
PulseSecure.x86.msi	
English	{5215E6A1-3933-49EB-ADA9-0871C19C128D}
Chinese (Taiwan)	{02D42712-5827-4659-B364-7243B3A0FE97}
German	{C4BA215F-620B-4100-A637-5CF82E9EDD16}
Spanish	{0700E2D2-974E-4E1C-8E67-C955049FCC5E}
French	{589F0E50-0EAD-4D0E-ADD4-55DDED20F883}
Italian	{4A4AADDD-C2E0-4193-B42D-97CF217FB9F0}
Japanese	{5F6A8768-94E1-447E-B431-3F82378501FE}

Language	Product Codes (GUIDs)
Korean	{2EE3C13E-052C-4BF3-B45B-F04C9DC05917}
Polish	{9E26AED6-47CA-4C90-84D0-78F7BE277421}
Chinese (China)	{A0115293-A7C9-48F3-8268-49A5526F3A86}
PulseSecure.x64.msi	
English	{3085498A-262B-4C9A-B875-BB967DA16C99}
Chinese (Taiwan)	{CD484040-E805-4308-85E3-6CBF5281BA27}
German	{ED6ABAAB-875B-47D8-8BA8-CD5CCA266E22}
Spanish	{D8389068-3D3F-4296-8E24-B5E36C94C19F}
French	{8F3F686B-BA2F-42FC-8C4D-B8A6FBB0739F}
Italian	{4F5F2807-BBCF-4F96-87E9-93F23C998679}
Japanese	{38DC6C8B-F8D0-40D1-ABAC-1EA2EA07F3AF}
Korean	{BDF8860C-9DD4-4C01-BC7C-A15943DAE3A6}
Polish	{759E346B-E4E5-4F7A-AA11-67AD8DC8B82E}
Chinese (China)	{C69095E0-59A8-478F-AA12-00A34B14BE51}
Release 9.1R4	
PulseSecure.x86.msi	
English	{BC8FCC72-3ED8-4014-8837-1AD01DD3C899}
Chinese (Taiwan)	{9A4FDB33-1313-45EA-980D-88A59F0C6648}
German	{FB9CD619-2A1F-450A-B8A4-7956FE971466}
Spanish	{9C77B28E-B36D-40A9-88CA-0B8624CB7AF3}
French	{8EAD2B6D-B140-45F6-BD34-A722A17CC260}
Italian	{119503CE-8FC9-4426-A092-4D6D13DE4C10}
Japanese	{7E90E833-AD58-4848-A930-3FF2CCFBACED}
Korean	{8A6DC402-F46B-4CC2-A7B8-41E2D7564802}

Language	Product Codes (GUIDs)
Polish	{C111FAE0-0E6B-44E9-989B-F662922A0D91}
Chinese (China)	{77392EFE-680A-42FE-BB7F-639E19EEFC2F}
PulseSecure.x64.msi	
English	{91C2C98E-84B4-4164-876F-810F13609E8D}
Chinese (Taiwan)	{11BAE0AD-EE6F-420E-B34D-E90411C95A9D}
German	{F6B0DC67-11F1-4114-BF14-155699114D0A}
Spanish	{AE1B864E-0853-4783-BB59-3C1664DE190B}
French	{542572B0-AFD9-4AFC-B180-26007892C817}
Italian	{F968BA03-C078-4270-91DB-94A550F78186}
Japanese	{276E4EDD-E771-4173-B4CB-6AA285E62ACE}
Korean	{CF86FFC8-4116-49FE-8C51-0E397BF7C49A}
Polish	{820E1F6B-41E7-43F3-9D47-15940421E2F8}
Chinese (China)	{00513CFC-8662-4C1A-AB4B-E2B4D20CFAD8}
Release 9.1R3.1	
PulseSecure.x86.msi	
English	{453B9DF8-C824-4FF7-A30A-45057FC47B38}
Chinese (Taiwan)	{73A29004-6079-4054-B4E2-A142590E855F}
German	{B157C347-F8EC-4837-9C31-2747E5BFAF0B}
Spanish	{1866AD3F-7A86-472D-B697-22ACFE701F54}
French	{C6365279-9237-432D-AF50-0A9227DCE90A}
Italian	{ACC29DE3-2F20-4AD7-8690-F571050F7352}
Japanese	{16EB3D51-06BC-4FCE-AD72-473BEB2DE687}
Korean	{991527D4-6ECE-428E-9904-5CACDCF44CB7}
Polish	{4A10143C-AA40-4F06-BF17-7A82E4705D55}

Language	Product Codes (GUIDs)
Chinese (China)	{3F935EFF-8628-4683-B0FB-469BD03E97A2}
PulseSecure.x64.msi	
English	{3F935EFF-8628-4683-B0FB-469BD03E97A2}
Chinese (Taiwan)	{099ABAB5-2FE7-4612-BAAD-E5AA89FDF3AB}
German	{3857ED90-67DA-4735-B3B8-834366F69AC0}
Spanish	{15425246-47A4-4C2E-BEE7-A7AA34B46B87}
French	{C8684A61-2DFF-4D38-AE89-2657FBEEEEBC}
Italian	{4831DCC6-89B3-4264-ABC6-B20F283ADB4B}
Japanese	{B6D4B748-AB1A-41DC-8943-69A6E7E2A60D}
Korean	{05013BE1-5DF4-484E-B1F5-E5CDFC639B32}
Polish	{8316156F-50CD-483D-B3E3-47A2387AF4E2}
Chinese (China)	{89ACC5BA-F2C5-479F-A61C-1701A1796431}
Release 9.1R3	
PulseSecure.x86.msi	
English	{82E5EEF6-4D31-481D-802D-EC1FCBFB04D8}
Chinese (Taiwan)	{B42F3689-2448-4D4D-AB07-FA54E2F3DBC6}
German	{D55F048A-1397-4C7B-9582-D3B215B6E855}
Spanish	{DF6CFDDE-ECA0-4A40-BA04-E1CAD05D2BF0}
French	{921F5395-76A1-4366-8C66-05F5776BC512}
Italian	{8D71216C-5DAA-4FE8-9F15-5C2BE52FA820}
Japanese	{6A2FD259-FF21-433B-ADFA-7FADB31DC194}
Korean	{A52117D6-5E2C-4FA1-BDF9-D074E294E93C}
Polish	{6FA8BC6F-506A-4136-AF5C-6F62F034CED1}
Chinese (China)	{8A7C2CEF-43A6-4D5F-A8BC-D494EE01AAE2}

Language	Product Codes (GUIDs)
PulseSecure.x64.msi	
English	{3F1271DA-D808-41BA-B070-6522FF9D4C23}
Chinese (Taiwan)	{C509C6DE-B335-4E4D-82CA-495720594205}
German	{E8110F78-82A8-48E4-815C-6F60562DD753}
Spanish	{58ECBD03-AC3C-479C-A6AA-F0CFE725A469}
French	{D8449807-3489-49E4-9F59-EC71AA68F083}
Italian	{2FC48975-5904-4387-ADD0-3D51D4E44DE9}
Japanese	{FD4BC5BB-9E07-44C8-ACBA-63C98C863920}
Korean	{2D8E7DF8-C23B-42F5-95E4-FF22EDE9106D}
Polish	{B2DB488A-8102-4A9D-B1BE-4B26388E5B99}
Chinese (China)	{73E9D64F-A5F7-4792-807B-7BB67D627F2D}
Release 9.1R2	
PulseSecure.x86.msi	
English	{25CFACD8-CAAC-4FA5-9054-34C58140B1D3}
Chinese (Taiwan)	{DD6DA542-4D51-4182-98CD-7F73A0B15B81}
German	{AA83EB42-3662-49DB-A6B9-7F70AA74E439}
Spanish	{605BC1B9-FF40-4073-A3D0-C943CC668DAF}
French	{7740527C-A2E4-42FD-8A12-F4337AB3DA17}
Italian	{B1ABE9F2-1C59-45B9-BB7F-EA1F4689A0FA}
Japanese	{32285458-FE60-481C-B618-0E50285C2C91}
Korean	{AEDDC0C0-756A-4DEC-9862-A88083535CA7}
Polish	{A549BAFC-D6D7-4A54-A147-3D72D7C082FB}
Chinese (China)	{4E8E635F-9443-4250-89F3-9D5F046AEA45}
PulseSecure.x64.msi	

Language	Product Codes (GUIDs)
English	{DDFE22C2-8C81-45D6-8C95-932C1EDAD5EF}
Chinese (Taiwan)	{7031AF51-BC44-4C6D-8649-AC8D5F3FC796}
German	{F1133159-3AC3-41D1-A5BE-49958C4E3AA1}
Spanish	{A73D39F3-AE14-4BE5-823E-F42A79557956}
French	{C6B0EC3E-F8C1-4001-A2AF-8E23968460B4}
Italian	{B515EF30-FDB1-4200-A468-7BE0DEABED51}
Japanese	{0B5AB9AA-5639-4DB9-B429-D9E491B995CB}
Korean	{678B1E92-9DFC-4D6C-B6E8-AA6117249E55}
Polish	{198BB78A-1907-45BD-8DBC-36C2FC73AA95}
Chinese (China)	{8F7E1898-6918-4929-BCCB-55E259DD4364}
Release 9.1R1	
PulseSecure.x86.msi	
English	{D9BD510B-2DC6-4A20-8B26-D07C799C41FC}
Chinese (Taiwan)	{174C857C-11BE-45D8-9063-37B02C1508B8}
German	{BE7A60AA-3FF5-4D35-9CA7-461851369C4A}
Spanish	{F3F3B743-BCF2-4601-BF6B-1078C0CE0704}
French	{488CE0C8-77B0-4A2C-B3BA-D0A5CE2BDAC4}
Italian	{376E943E-958C-47CD-9EE5-A40CBE6483B7}
Japanese	{63B578ED-BD3E-40A6-B3F7-166708E49BA4}
Korean	{972FA217-F5B6-4715-917F-BC0EF7407EFC}
Polish	{C38E6C1E-9BA6-44C5-8E9B-16C8445AF457}
Chinese (China)	
PulseSecure.x64.msi	
English	{AB8FE63C-3C46-4F5E-96AE-ED50CAF74723}

Language	Product Codes (GUIDs)
Chinese (Taiwan)	{63EDC13F-9910-429A-AB79-0CA61FFB2CF1}
German	{AA936E6F-A772-4974-9856-EBD778381786}
Spanish	{F14E4340-BDC5-433E-A3AC-D822B84746B6}
French	{F83F8C27-DAB0-4E6D-9DB0-EDAEA0EED12A}
Italian	{F5492346-A562-4FD9-9F3D-E2A1A9A7B2CA}
Japanese	{70F811F4-4269-4F3C-BB89-AE4AC46EA3ED}
Korean	{9BA77365-3010-41EA-B35B-9FFFD3D9989C}
Polish	{4D41B4DD-A16F-41B6-A38E-D9C19BD02CDE}
Chinese (China)	{26D8FD5B-7B82-458C-8F61-C783E6F8619B}

Product Compatibility

See the latest *Ivanti Supported Platforms Guide* (available at https://www.ivanti.com/support/product-documentation) for supported versions of operating systems, browsers, and servers in this release.

Upgrade Instructions

Upgrade Paths

The following table describes the tested upgrade paths.

Release	Description
9.1Rx	You can upgrade directly to 9.1R15.

- For a Pulse SAM connection, you cannot upgrade to 9.1Rx from a pre-9.0R3 build. To upgrade, use a web browser. Also, on a Windows 7 machine, you cannot establish the Pulse SAM connection with pre-9.1R1 PCS.

- From 9.1R3 release onwards, Network Connect (NC) client and Windows Secure Application Manager (WSAM) client are not supported.

- Client upgrades are not supported to or from beta releases.

PCS Installer List

The **Maintenance** --> **System** --> **Installers** page displays the list of installers including the Unified Pulse Linux Client on the page.

- Uploading 9.1R9 and later versions of Unified Pulse Linux client on 9.1R9 and later PCS version displays the 64-bit 9.1R9 Unified Pulse Linux Client installer; When upgraded to 9.1R9 PCS, 9.1R9 Unified Pulse Linux client is uploaded by default.

- Uploading 9.1R9 Unified Pulse Linux Client on earlier PCS version displays 64-bit 9.1R9 Unified Pulse Linux Client and 32-bit older Pulse Linux Client.

- Uploading earlier Pulse Linux Client on 9.1R9 PCS version displays 32-bit and 64-bit older Pulse Linux Client.

> From Release 9.1R11onwards, if there is no change to the older Pulse Linux Client version and the user uploads latest client package to older PCS version, the installers page does not allow to download the old Pulse Linux Client.

General Notes

Security-related issues are not normally covered in release notes. To learn more about security advisories affecting Ivanti products, see the Ivanti security advisory page (https://kb.pulsesecure.net/?atype=sa).

Technical Support

When you need additional information or assistance, you can contact "Ivanti Global Support Center:

- https://www.pulsesecure.net/support

- support@pulsesecure.net

Call us at 1- 844-751-7629 (toll-free USA)

For more technical support resources, browse the support website https://www.pulsesecure.net/support.