ivanti

Pulse Client for Desktop Release Notes 9.1R13

Build 11723

FIPS Version Build 11725

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Overview

This is the release-notes document for Pulse Secure Desktop Client (Pulse Client) version 9.1R13. This document provides a cumulative list of all enhancements, fixes and known issues for 9.1R13. 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 Pulse Secure gateway (either Pulse Connect Secure or Pulse Policy Secure). For a complete description of the capabilities of Pulse Client, see online help within Pulse Client itself, or *Pulse Secure Desktop Client Administration Guide* available at https://www.ivanti.com/support/product-documentation.

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://my.pulsesecure.net.

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://my.pulsesecure.net. 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 9.1R13			
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	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.		

Features	Description
FQDN based split tunnel support for Linux	FQDN based split tunnel support is now extended to Linux platforms.
Release 9.1R11.5	
No new features in this releas	se.
Release 9.1R11.4	
No new features in this releas	se.
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 relea	ase.
Release 9.1R9	

Features	Description
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.
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	ase.
Release 9.1R7.1	
No new features for this release	ase.
Release 9.1R7	

Features	Description		
No new features for this rele	No new features for this release.		
Release 9.1R6			
No new features for this rele	ase.		
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 <i>HTTPOnly</i> 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.		

Features	Description
Windows Hello for Business	Pulse Desktop Client will now support Windows Hello for business using certificate trust.
Release 9.1R3.1	
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.

Features	Description
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. Apple.
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 Pulse Connect Secure server settings to use the Launching Pulse Desktop Client using URL feature. (Enable Allow saving logon information > Users > Pulse Secure Client > Connections > <connection name="">).</connection>
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 9.1R13	
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.
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.

Problem Report Number	Summary
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.
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.

Problem Report Number	Summary
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
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.

Problem Report Number	Summary
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
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.

Problem Report Number	Summary
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 <u>KB44699</u> .
PRS-397072	Host Check fails on macOS 11.1 when the policy is enforced. For more information on fix, refer <u>KB44663</u> .
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.

Problem Report Number	Summary
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.
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".

Problem Report Number	Summary
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 :
110 334343	https://support.microsoft.com/en-us/help/4550028/firewall-profile-does-not-switch-to-domain-when-using-third-party-vpn
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.

Problem Report Number	Summary
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.
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.

Problem Report Number	Summary
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.
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_ https://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 .

Problem Report Number	Summary
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).
	Pulse client installation may fail on native foreign Windows 10 operating system.
PRS-391241	For more information, refer to KB article https://kb.pulsesecure.net/articles/Pulse_Secure_ Article/KB44485/?kA13Z000000L3IN.
Release 9.1R6	
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.

Problem Report Number	Summary
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).
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.

Problem Report Number	Summary
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.
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.

Problem Report Number	Summary
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.
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	

Problem Report Number	Summary
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).
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.

Problem Report Number	Summary
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.
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 9.1R13	
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.
	Symptom : The "This Site can't be Reached" error message displays for few seconds during SAML Authentication
PRS-403801	Condition : When untrusted certificate is configured on the PCS.
	Workaround: Use the trusted certificate on PCS.
	Symptom : A Warning Icon displays on the top left corner of the CEF browser.
PRS-403799	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.

Problem Report Number	Summary
	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.
DDC 402725	Symptom : For SAML authentication using embedded browser, user is prompted for credentials every time even when SLO is not enabled.
PRS-403725	Condition : When the FIDO2 CEF Browser is enabled for embedded browser
	Workaround: None
	Symptom : Pulse Client Firewall System Extension logs are written to the old debuglog.log filename
PRS-403654	Condition : When Lockdown or Traffic Enforcement is enabled.
	Workaround: None
	Symptom : When user clicks Disconnect, the connection is stuck in Disconnecting state for 120 seconds.
PRS-403625	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
	Symptom : DNS Alias Name are not added to proxy.pac file.
PRS-403510	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.

Problem Report Number	Summary
Release 9.1R12 (Windows 11 updates)
	Symptom : End users see disconnects and reconnects on the PDC UI.
PRS-403519	Condition : When connected to PCS that resolves to IPv6.
	Workaround: PCS resolves to IPv4 address.
	Symptom : (Host Checker) OS check pass on Windows 11 systems.
PRS-403498	Condition: Policy is configured for "Windows 10-64-Bit".
	Workaround: None.
	Symptom : Pulse Desktop Client continuously changes between connected and connecting states.
PRS-402861	Condition : When connected to PCS that is configured in SSL Transport mode.
	Workaround: Configure ESP Transport Mode.
	Symptom : Not able to connect the resource from WSL on windows 11 through PSAM.
PRS-403002	Condition : Install Ubuntu 20 with WSL 2 on Windows11 and try to connect to resource behind PCS server through PSAM.
	Workaround: None.
	Symptom : SAML, Custom Sign-in pages and Pulse Collaboration features do not work with External Browser on Windows 11.
PRS-402871	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.

Problem Report Number	Summary	
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.	
	Symptom: Telnet/SSH bookmarks are not working on Windows 11	
PRS-403270	Condition : When using Windows 11 as client machine.	
	Workaround: None.	
Release 9.1R12	Release 9.1R12	
	Symptom : PCS Active users page displays Non-FIPS build as FIPS build for Mac client.	
PRS-402802	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.	

Problem Report Number	Summary
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.
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.
	Symptom : On Windows server 2019, upon client upgrade, the connection list keeps getting reloaded again and again.
PRS-402413	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.

Problem Report Number	Summary
	Condition: None.
	Workaround: None. The Client recovers automatically.
	Symptom : On rare occasions, observed the dsAccess service crash.
PRS-402289	Condition: None.
	Workaround: None. The client recovers automatically.
	Symptom : FIDO2 Yubikey Authentication is failing on Windows8.1.
PRS-402266	Condition: When Azure AD is used as IDP.
	Workaround: None.
	Symptom : FIDO2 Yubikey Authentication is failing on macOS.
PRS-402182	Condition: When Azure AD is used as IDP.
	Workaround: None.
	Symptom : FIDO2 Yubikey Authentication is failing to prompt the pin.
PRS-402089	Condition: During the Credential Provide use case.
	Workaround: None.
	Symptom : With SLO enabled, during client Disconnect untrusted cert prompt will come twice for user to accept.
PRS-402080	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.

Problem Report Number	Summary
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.
	Symptom: Traffic not routed as per the FQDN rules.
PLD-1103	Condition: FQDN based split tunneling is configured.
	Workaround: None.
	Symptom: Connection stays in connect requested state.
PLD-1102	Condition: After fresh installation.
	Workaround: Need to restart the system.
Release 9.1R11.5	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.
	Symptom : End-user gets prompted to re-enter credentials after upgrading the Pulse client.
PRS-401630	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.

Problem Report Number	Summary
	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).
	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 <u>KB44792</u> .
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.

Problem Report Number	Summary
	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.
	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.

Problem Report Number	Summary
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.
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.

Problem Report Number	Summary
	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.
	Symptom : Host Checker fails to launch with the latest PCS build on Safari browser.
PRS-396800	Condition : When IPv6 address is used instead of FQDN.
	Workaround: Recommended to use FQDN.
	Symptom : Active user page "Agent Type" shows "Mac OS 10.15" and it should be "Mac OS 11.0.1".
PRS-396726	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 <u>KB44646</u> .
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.

Problem Report Number	Summary
	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:
PRS-396868	deb http://cz.archive.ubuntu.com/ubuntu bionic main
110 330000	Execute the following commands to install the dependency:
	apt-get update
	apt-get install libgtkmm-3.0-1v5
	Install Pulse Client using the below command:
	dpkg -i /path/to/pulsesecure-version.deb
	Symptom : Pulse Unified Linux Client does not save logging level information across multiple launches.
PLD-931	Condition : Pulse Unified Linux Client is installed in Linux Operating System.
	Workaround: None.
	Symptom : Pulse Unified Linux Client fails to kill processes as part of host checker remediation.
PLD-916	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.
11/3-330113	Condition: Big Sur is configured as part of OS Check for MAC.

Problem Report Number	Summary
	Workaround: None.
	Symptom : Web process crashes observed on Pulse Connect Secure Appliance.
PRS-396149	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.
	Symptom : Invalid server message appears during browser based PDC installation.
PRS-395994	Condition: During fresh browser based PDC installation
	Workaround: N/A
	Symptom : Pulse client prompts for credentials when client is installed or invoked through browser.
PDC 205650	Condition : When Pulse Client is installed or invoked from browser with FIPS option enabled in PCS.
PRS-395658	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.
	Symptom: Installation of Pulse Linux Client on Ubuntu is failing.
PRS-395552	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.

Problem Report Number	Summary
	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.
11.6 333373	Condition : If a SAML classic connection with SAML SLO enabled and a PZTA connection are both part of the client connection list.
	Workaround: None.
	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.
PRS-395377	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.
	Symptom : On Windows server(2019), SAML Login fails when using Embedded browser.
PRS-395225	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.

Problem Report Number	Summary
	Workaround: Shift focus to other fields using Mouse pointer.
	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.
PRS-394952	Condition: Modifying default ESP to SSL fallback time.
	Workaround : Retain the default values for ESP to SSL fallback.
	Symptom : ESP mode falls back to SSL if custom port is configured in ESP mode in PCS.
PRS-394948	Condition: Custom port is configured for ESP.
	Workaround : Retain default port configuration while selecting the ESP mode.
	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.
PRS-394909	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.

Problem Report Number	Summary
	Workaround: Re-enter the username.
	Symptom : Unified Pulse Linux Client not installable on Ubuntu 20.04.1.
PLD-879	Condition : Ubuntu 20.04.1 latest build does not provide the dependency nettools 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.
	Symptom : Unified Pulse Linux Client fails to install on Fedora 30 64 bit OS.
PLD-874	Condition : Right version of dependency webkit2gtk3, namely 2.24.1 is not available in default repositories of Fedora 30 64 bit OS
TED-074	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
	Symptom : Upgrade from old Pulse client to new Pulse client is not supported.
PLD-761	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

Problem Report Number	Summary
	Symptom : CEF returned PCS server Certificate validation failures are displayed to user
PLD-659	Condition : Lists the PCS server Certificate validation failures.
	Workaround: User can decide to proceed the connection.
	Symptom : Download of CEF runtime library takes place over HTTP instead of HTTPS
PLD-625	Condition: When CEF runtime library is installed
	Workaround: None
	Symptom : Pulse client fails to prompt any error message for SAML authentication.
PLD-623	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.
	Symptom : No shell script to install dependencies for Unified Pulse Linux client.
PLD-622	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.

Problem Report Number	Summary
	Condition: When end-user system is not connected to network (WiFi/LAN).
	Workaround: Exit Pulse Client from Pulse tray and re-launch Pulse Client.
	Symptom : Host Checker evaluation error is shown when connecting to PCS through browser after 9.1R8.2 Host Checker components get installed.
PRS-394790	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.
	Symptom : Sometimes, on Chrome browser before re-directing to PSAL download page, a gibberish message is displayed in a popup.
PRS-394703	Condition : When connecting to a PCS on Chrome browser.
	Workaround: Refresh the Chrome Browser or use Safari.
	Symptom : IT administrators can upload the package but cannot install successfully.
PRS-394581	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.
	Symptom : Pulse System extension process is running upon reboot when Traffic Enforcement was previously activated for the user.
PRS-394339	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.

Problem Report Number	Summary	
	Symptom : Apple embedded browser pops up when pulse client uses captive portal environment.	
PRS-393958	Condition : Lockdown mode or Captive Portal detection is enabled.	
	Workaround: Manually close the Apple Embedded Browser.	
	Symptom : Post installation of Pulse Client, user notices that the connection is established without ESP.	
PRS-393682	Condition: If ESP mode is enabled with traffic enforcement.	
	Workaround : If reconnect fails, manually disconnect from the server and reconnect.	
	Symptom : Pulse System Extension is not fully uninstalled. "systemextensionsctl list" command shows state "uninstalling".	
PRS-393498	Condition: Uninstall Pulse Client and reboot.	
PKS-393496	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.	
	Symptom : When a custom lockdown exception is configured on PCS, endpoint does not reflect the changes.	
PRS-392323	Condition : The exceptions configured as Custom are omitted by the client.	
	Workaround: None.	
Release 9.1R8		
	Symptom : The in Sign-In Notification page shows the text underlined.	
PRS-393346	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.	

Problem Report Number	Summary
	Condition : Standalone as well as browser based Installation and upgrade is failing on Windows 8, 32-bit machine.
	Workaround: None.
	Symptom : On macOS, Pulse Client service crash observed while replacing the Connection-set through browser.
PRS-393210	Condition : During the new connection set replacement through browse.
	Workaround: None. Client recovers automatically.
	Symptom : Loading of PSAL and getting the PSAL launch prompt takes more than 15 minutes with FireFox web browser on Window10.
PRS-393129	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.
	Symptom: Pulse client is not getting uninstalled completely.
PRS-393107	Condition: When client is uninstalled through msi.
110-333107	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.

Problem Report Number	Summary
	Symptom : Pulse Client prompts for reboot after the successful upgrade and connections are not getting imported.
PRS-393007	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.
	Symptom : On macOS Pulse Client service crash is observed during log rotation.
PRS-392954	Condition: Occasionally, during log file rotation.
	Workaround: None. Client recovers automatically.
	Symptom : Intermittently PDC fails to establish tunnel during Host Checker evaluation.
PRS-392904	Condition: Host Checker evaluation fails at client side.
	Workaround: Reboot the machine.
	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.
PRS-392731	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

Problem Report Number	Summary
	Condition: UDP Applications access in Pulse SAM tunnel.
	Workaround: Reboot the machine.
	Symptom : Multicast traffic is not tunneled through Pulse client.
PRS-392171	Condition : When Multicast is enabled for user role, the multicast applications cannot send multicast traffic to server.
	Workaround: None
	Symptom : macOS user may observe pulse client is connecting twice during dual authentication.
PRS-390026	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.
1113 30 137 0	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.

Problem Report Number	Summary
	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.
	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:
PRS-389851	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	

Problem Report Number	Summary
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.
	Symptom : PULSE Help on macOSX 10.15.3 Catalina does not open
PRS-389140	Condition: Impact on Help pages
	Workaround : PDC help pages are available online under Technical Publications.
	Symptom : When embedded browser is used, Pulse is not caching the IDP session cookie.
PRS-388988	Condition : The session on the IDP was still active and the user gets the prompt.
	Workaround: None.
	Symptom : Failing in DSID resumption after SAML auth from external browser.
PRS-388775	Condition : Client fails to establish connection with PCS.
	Workaround: Use embedded Browser.
	Symptom : After disconnecting SDP 2.5 connection. Classic connection prompts for multiple authentication.
PRS-388986	Condition : On connecting a SDP connection and then re-initiating classic connection.
	Workaround: None.
	Symptom : Pulse Collaboration (When launched from pulse client) functionality is broken with enabling of 'HTTP Only Cookie' for user role.
PRS-388403	Condition : When the user provides the credentials, Pulse connection disconnects and Pulse Collaboration launches.
	Workaround: Disable the 'HTTP Only Cookie' option.

Problem Report Number	Summary
Release 9.1R4.2	
No new known iss	sues for this release.
Release 9.1R4.1	
No new known iss	sues for this release.
Release 9.1R4	
	Symptom : Application type strings are not displaying properly in localized languages.
PRS-387732	Condition: For a few languages.
	Workaround: None
	Symptom : Pulse Desktop Client throws Authentication rejected by server error for SAML authentication.
PRS-382268	Condition : When attempts to connect to a Global URL.
	Workaround: None
	Symptom : PSAM WFP mode blocks local socket bind operations.
PRS-382277	Condition : When performing pass packet for the local IPs, the packet was blocked by the current framework.
	Workaround: None
	Symptom : Host checker error is found while installing Pulse Client via Chromium-based Edge browser.
PRS-384976	Condition: When Host Checker is configured.
	Workaround: Click Ignore button.
	Symptom : Pulse Desktop Client is unable to establish the tunnel.
PRS-382162	Condition: With non-PIV smart cards on Catalina.

Problem Report Number	Summary
	Workaround: None
	Symptom : FQDN split tunneling resource access is going through physical adapter instead of virtual adapter.
PRS-386924	Condition : CNAME support is not there for FQDN split tunneling.
	Workaround: None
	Symptom: User is unable to access the internet.
	Condition : When CAV feature is disabled.
PDG 205052	Workaround : User can change registry settings as advised below and remove proxy settings from Proxy setting dialogue of Windows.
PRS-386953	[HKEY_CURRENT_USER\Software\Policies\Microsoft\Internet Explorer\Control Panel]
	"Proxy"=dword:00000000
	"Autoconfig"=dword:0000000
	Symptom : Connection set is not adding in the installed Pulse Desktop Client.
PRS-387174	Condition : When Pulse Desktop Client is launched through the browser.
	Workaround: None
	Symptom : Pulse Desktop Client hangs while adding connection.
PRS-387183	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.

Problem Report Number	Summary	
	Workaround : Pulse Desktop Client automatically prompts for re-authentication, which will extend the session successfully.	
	Symptom : Windows Hello for Business session is failing with (Missing Certificate) error.	
PRS-387397	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	Release 9.1R3	
	Symptom : Intermittently PDC is prompting end-user to select the certificate when both Smart card plugged-in and user certificate presents.	
PRS-381992	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.	
	Symptom : 9.1R3 PDC latest strings are not localized.	
PRS-381825	Condition: If end-user has 9.1R3 PDC.	
	Workaround: N/A	
	Symptom : Pulse Desktop Client UI is fluctuating on one of the HP models.	
PRS-381819	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.	

Problem Report Number	Summary
	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.
	Symptom : Still Downloads of NC and WSAM were allowed.
PRS-381449	Condition: Only admin users can download using URL
	Workaround: NA
	Symptom : Network Connect client will be able to upgrade and connect.
PRS-381388	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.
	Symptom: Home button does not appear after upgrade.
PRS-381170	Condition: On upgrading the pulse client.
	Workaround: Disconnect and connect back to the controller.
	Symptom :5.2RX PDC clients are able to establish a successful tunnel in the absence of Client Auth EKU.
PRS-381151	Condition : When "Enable Automatic Client Certificate Selection" is enabled.
	Workaround: N/A
PDG 076105	Symptom : Unable to establish tunnel with smart card reader.
PRS-378109	Condition : When end-user has latest 10.15 Mac OS i.e. Catalina.

Problem Report Number	Summary
	Workaround: N/A
	Symptom : Un-installing of Pulse Desktop Client is asking for a reboot.
PRS-374068	Condition : Observed on Windows 10 OS RS6 i.e. 1903.
	Workaround: N/A
	Symptom : With the latest SRX OS UAC L3 connection is failing to establish.
PRS-370025	Condition : If SRX OS version is 15.X and above.
	Workaround: N/A
Release 9.1R2	
	Symptom : Older PSIS is not upgrading to 9.1R2 PSIS version.
PRS-377549	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 abovementioned five prescribed parameters are used.
	Condition : Entering multiple values for the five parameters (name, server, userrealm, username and store) or any additional parameter,

Problem Report Number	Summary
	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 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 abovementioned 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.

Problem Report Number	Summary
	Condition: Dual Stack is enabled on a Pulse Client machine.
	Workaround: None
	Symptom : A user is not able to download the Pulse Client from any package.
PRS-374384	Condition : The Pulse Client package is uploaded before the PCS upgrade.
	Workaround : Upload the junosepulse.pkg and download the installers.
	Symptom : Unable to connect to a PCS Server from Pulse Client for Linux.
PRS-374876	Condition : Primary network card of a machine has multiple aliased IP addresses set.
	Workaround : Ensure that the primary network card does not have multiple aliased IP addresses.
	Symptom : Wireless LAN L2 connection disconnects immediately when the LAN L2 connection is established.
PRS-374627	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.

Problem Report Number	Summary
	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
	Symptom : Pulse Client fails to trigger the Credential Provider.
PRS-373995	Condition: When the Windows machine gets restarted.
	Workaround: None
	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.
PRS-375916	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 Pulse Secure service.
PRS-376021	Symptom : User attempts to log in to a browser-based session fail with the error message "Detected an Internal Error" sometimes.

Problem Report Number	Summary
	Condition: When accessing Mac via Safari.
	Workaround: Restart the machine.
	Symptom : Pulse Client fails to add the route in case of FQDN based split tunneling.
PRS-375766	Condition : While adding the route in the local system.
	Workaround: None
	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
	In: failed to create symbolic link '/usr/local/pulse/libjavascriptcoregtk-1.0.so.0': File exists
PRS-376174	In: failed to create symbolic link '/usr/local/pulse/libwebkitgtk-1.0.so': File exists
	In: 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

Problem Report Number	Summary
	Symptom : L2 Wireless suppression fails to re-enable the wireless NIC.
PRS-376071	Condition : Unplugging the wired USB network adapter from Surface Pro.
	Workaround: None
	Symptom : For stealth mode connection Use Desktop Credentials option should not be enabled while creating the connection.
PRS-376034	Condition : When stealth tunnel is configured for "Machine only" mode.
	Workaround: None
	Symptom : Pulse Client will be in connect state after replacing the connection set with the manually added connection.
PRS-376235	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.
	Symptom : Unable to establish Pulse SAM connection on Windows 7 machine using Pulse Client 9.1R1 connecting to pre-9.1R1 PCS.
PRS-376278	Condition : 9.1R1 will not able to establish Pulse SAM connection with pre-9.1R1.
	Workaround: Use 9.1R1 PCS build.
	Symptom: TFTP connection is getting a timeout error.
PRS-372921	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 9.1R13		
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	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}	

Language	Product Codes (GUIDs)	
French	{F114ED73-DC07-4B2F-8D4B-925EBF0BB763}	
Italian	{4D51D2CF-E90A-4DC8-9EF3-95808296E1A7}	
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	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}	

Product Codes (GUIDs)
{5E8D0B4F-9A2A-4B9F-A859-266B9FB53429}
{31C71957-3DCF-47DC-BA70-DF8DF06CDCED}
{90CA7EBE-317A-44AD-9C99-B3EDF1FAD523}
{0E11E2D3-C1FD-4502-A665-EDFCB234E71E}
{E58D6267-5197-44C3-80F8-43708471D353}
{2E6BF62C-0A9C-4AE1-A582-F54DA0D3574E}
{AE1856A3-D851-4266-9F99-4394F94868EB}
{A37EDF69-EBB3-4A23-950C-4852905942C5}
{8A1A4F5F-A214-458E-8B55-EF8AD83E9956}
{CD06D7FE-CF74-4D8A-AE5B-915D4121C8FB}
{42154E8D-2AAC-40CC-A81C-442CE4084765}
{F646F09E-BB9E-419F-81A9-0EA8E4A60F79}
{B31C3908-73C2-40C4-BD27-6595092018EA}
{6A225FE9-8404-4EB2-8A46-646FD5B88FD1}
{E06EF5EE-39E5-4F90-9F75-C7954647F0A9}
{DF894007-8BB3-42E4-83EA-5D05969C2517}
{38AF5310-AAB2-43A9-8BA7-FD888D765C0E}
{E7482D91-1E67-4727-A11D-007632768CC8}
{E6EA24F2-29B1-49B8-A2D5-79F7EC46D46D}
{53B6B72C-FB1A-4641-BE1A-58654E9E9BA6}
{6DB95E00-1D7F-4BF3-B013-5E5EA38F88FC}

Language	Product Codes (GUIDs)
Japanese	{C1E5D58F-DA86-48E7-A1C1-EC23FE988804}
Korean	{753F0AED-80C2-4105-A62C-EF2C8FBCC445}
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}

Product Codes (GUIDs)		
{BAB640FB-99D8-4DC9-B4CE-0C99C90C266C}		
{DD294199-C60B-402D-BBF4-8A49153EF0E8}		
{D8C59222-23B6-4D57-8DE0-81401610BECF}		
{B58F40DB-C578-4118-BE53-BF09EA291DEA}		
{254E610F-C4F6-4873-A205-E84DEA071556}		
{92CF208E-5C10-4C13-B732-7D53994918C4}		
{6A4FF38B-89BA-4D93-915E-689DB9F4563A}		
{A3F6F2BF-5A65-44BA-9B07-8F338B72B30E}		
{937B3FB2-4CFF-4E1B-ADF7-B41D0753397F}		
{D8781F0A-E6B0-4238-9DE9-8486CD3BEA0E}		
{B871C704-DDDA-4736-AD8A-9CB33486D38E}		
{EA652305-89D0-459F-8B41-710479FE72DC}		
{0A473017-FD20-4E36-AB27-7E44325C6B1B}		
PulseSecure.x64.msi		
{6331BE50-5CB4-46A4-997A-08ED3AE3CC7F}		
{616351E1-244F-48FB-93AE-5178A53D05D0}		
{04AA48A9-41C9-469C-8C19-33A8DFD2E4EF}		
{36212CF9-494B-457C-B09A-943FD27D3334}		
{BE871128-4D1A-4C0C-891A-996E3B34D597}		
{99D13289-CE3A-4FB3-9F18-7E4008AFE204}		
{A4DCF5D3-5CD8-4D17-9EA0-110437BE66ED}		
{B61171D7-C3BE-48FB-BA63-CAC8CE81ED51}		

Language	Product Codes (GUIDs)	
Polish	{38CC2E34-9D4B-407C-96A0-3501CB4C616E}	
Chinese (China)	{C0192028-CD2B-4331-A74C-4B85AC10551C}	
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}	

Language	Product Codes (GUIDs)
Chinese (China)	{E760ADD1-157A-40B1-8821-E8CE1424C084}
Release 9.1R9	
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}

Language	Product Codes (GUIDs)
Release 9.1R8.2	
PulseSecure.x86.msi	
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	

Language	Product Codes (GUIDs)
PulseSecure.x86.msi	
English	{BE3759C9-ED1B-4534-9992-D33FEB06DC1A}
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	

Language	Product Codes (GUIDs)
English	{DC4BBFAB-D6C1-4DD0-AEBA-9553D4F8B141}
Chinese (Taiwan)	{0D6EE522-D7AA-43EB-ACE6-D9FD57658C6E}
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}

Language	Product Codes (GUIDs)
Chinese (Taiwan)	{FF20FF98-4A25-4A9E-A2D9-06FCD25949A9}
German	{2F4D28BB-846A-46B1-8749-0F4373B0711E}
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}

Language	Product Codes (GUIDs)
German	{FCE0DFAC-97CB-47E2-A99B-8E077D3C0B4D}
Spanish	{59C41788-E875-4E03-8532-525DA5A33D19}
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}

Language	Product Codes (GUIDs)
Spanish	{6E1C2DEE-BFF9-413A-873C-5F6A250D8F8E}
French	{FA759476-7C38-4CF4-9812-628B22FCACE7}
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}

Language	Product Codes (GUIDs)
French	{DA743680-3198-4F10-BD0A-BB86B59B96BF}
Italian	{06A590C5-26F8-4F32-9869-6AC47211A60F}
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}

Language	Product Codes (GUIDs)
Italian	{4A4AADDD-C2E0-4193-B42D-97CF217FB9F0}
Japanese	{5F6A8768-94E1-447E-B431-3F82378501FE}
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}

Language		
Korean {8A6DC402-F46B-4CC2-A7B8-41E2D7564802} Polish {C111FAE0-0E6B-44E9-989B-F662922A0D91} Chinese (China) {77392EFE-680A-42FE-BB7F-639E19EEFC2F} PulseSecure.x64.msi Finglish 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}	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}	Japanese	{7E90E833-AD58-4848-A930-3FF2CCFBACED}
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	{8A6DC402-F46B-4CC2-A7B8-41E2D7564802}
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}	Polish	{C111FAE0-0E6B-44E9-989B-F662922A0D91}
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}	Chinese (China)	{77392EFE-680A-42FE-BB7F-639E19EEFC2F}
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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}	English	{91C2C98E-84B4-4164-876F-810F13609E8D}
Spanish {AE1B864E-0853-4783-BB59-3C1664DE190B} French {542572B0-AFD9-4AFC-B180-26007892C817} Italian {F968BA03-C078-4270-91DB-94A550F78186} Japanese {276E4EDD-E771-4173-B4CB-6AA285E62ACE}	Chinese (Taiwan)	{11BAE0AD-EE6F-420E-B34D-E90411C95A9D}
French {542572B0-AFD9-4AFC-B180-26007892C817} Italian {F968BA03-C078-4270-91DB-94A550F78186} Japanese {276E4EDD-E771-4173-B4CB-6AA285E62ACE}	German	{F6B0DC67-11F1-4114-BF14-155699114D0A}
Italian {F968BA03-C078-4270-91DB-94A550F78186} Japanese {276E4EDD-E771-4173-B4CB-6AA285E62ACE}	Spanish	{AE1B864E-0853-4783-BB59-3C1664DE190B}
Japanese {276E4EDD-E771-4173-B4CB-6AA285E62ACE}	French	{542572B0-AFD9-4AFC-B180-26007892C817}
	Italian	{F968BA03-C078-4270-91DB-94A550F78186}
Korean {CF86FFC8-4116-49FF-8C51-0F397RF7C49Δ}	Japanese	{276E4EDD-E771-4173-B4CB-6AA285E62ACE}
(cross co 4110 4512 0C51 0C55101 1C45A)	Korean	{CF86FFC8-4116-49FE-8C51-0E397BF7C49A}
Polish {820E1F6B-41E7-43F3-9D47-15940421E2F8}	Polish	{820E1F6B-41E7-43F3-9D47-15940421E2F8}
Chinese (China) {00513CFC-8662-4C1A-AB4B-E2B4D20CFAD8}	Chinese (China)	{00513CFC-8662-4C1A-AB4B-E2B4D20CFAD8}
Release 9.1R3.1	Release 9.1R3.1	
PulseSecure.x86.msi	PulseSecure.x86.msi	
English {453B9DF8-C824-4FF7-A30A-45057FC47B38}	English	{453B9DF8-C824-4FF7-A30A-45057FC47B38}
Chinese (Taiwan) {73A29004-6079-4054-B4E2-A142590E855F}	Chinese (Taiwan)	{73A29004-6079-4054-B4E2-A142590E855F}
German {B157C347-F8EC-4837-9C31-2747E5BFAF0B}	German	{B157C347-F8EC-4837-9C31-2747E5BFAF0B}
Spanish {1866AD3F-7A86-472D-B697-22ACFE701F54}	Spanish	{1866AD3F-7A86-472D-B697-22ACFE701F54}
French {C6365279-9237-432D-AF50-0A9227DCE90A}	French	{C6365279-9237-432D-AF50-0A9227DCE90A}
Italian {ACC29DE3-2F20-4AD7-8690-F571050F7352}	Italian	{ACC29DE3-2F20-4AD7-8690-F571050F7352}
Japanese {16EB3D51-06BC-4FCE-AD72-473BEB2DE687}	Japanese	{16EB3D51-06BC-4FCE-AD72-473BEB2DE687}

Language	Product Codes (GUIDs)
Korean	{991527D4-6ECE-428E-9904-5CACDCF44CB7}
Polish	{4A10143C-AA40-4F06-BF17-7A82E4705D55}
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}

Language	Product Codes (GUIDs)
Polish	{6FA8BC6F-506A-4136-AF5C-6F62F034CED1}
Chinese (China)	{8A7C2CEF-43A6-4D5F-A8BC-D494EE01AAE2}
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}

Language	Product Codes (GUIDs)
Chinese (China)	{4E8E635F-9443-4250-89F3-9D5F046AEA45}
PulseSecure.x64.msi	
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)	

Language	Product Codes (GUIDs)
PulseSecure.x64.msi	
English	{AB8FE63C-3C46-4F5E-96AE-ED50CAF74723}
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 *Pulse Secure 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 9.1R13.

- 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 Pulse Secure products, see the Pulse Secure security advisory page (https://kb.pulsesecure.net/?atype=sa).

Technical Support

When you need additional information or assistance, you can contact "Pulse Secure Global Support Center (PSGSC):

- https://www.pulsesecure.net/support
- <u>support@pulsesecure.net</u>

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

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