



## **Ivanti Connect Secure Release Notes**

**21.12R1**

**ICS 21.12R1 Build 145**

**ICS 9.1R13.1 nSA GW Build 16857**

**PDC 9.1R13.1 Build 12971**

**Default ESAP Version: ESAP 3.4.8**

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# Revision History

The following table lists the revision history for this document:

Document Revision	Date	Description
2.0	January 2022	Updated Known Issues
1.0	October 2021	Initial Publication 21.9R1

# Introduction

Ivanti Connect Secure is a next generation Secure access product, which offers fast and secure connection between remote users and their organization's wider network. Ivanti Connect Secure modernizes VPN deployments and is loaded with features such as new end user experience, increased overall throughput and simplified appliance management.

This document is the release notes for Ivanti Connect Secure Release 21.12R1. This document contains information about what is included in this software release known issues. If the information in the release notes differs from the information found in the documentation set, follow the release notes.

## Caveats

The following feature is not supported in 21.12R1 gateway release:

- Multicast with IGMP v3



The features listed in [https://kb.pulsesecure.net/articles/Pulse\\_Secure\\_Article/KB44747](https://kb.pulsesecure.net/articles/Pulse_Secure_Article/KB44747) are not supported with 21.x GW release. In addition, Pulse Collaboration, HOB Java RDP, Basic HTML5 and Pulse One are not supported in 21.x Gateway.

## Virtual Appliance Editions

The following table lists the virtual appliance systems qualified with this release:

Platform	Qualified System
VMware	<ul style="list-style-type: none"><li>• ESXi 7.0.2 (17867351)</li><li>• ESXi 6.7.0</li></ul>
Azure-V	<ul style="list-style-type: none"><li>• Standard DS2 V2 (2 Core, 2 NICs)</li><li>• Standard DS3 V2 (4 vCPUs, 14 GB memory) 3NICs</li><li>• Standard DS4 V2 (8 Core, 3 NICs)</li><li>• Standard DS8 V3 (8 vCPUs, 32 GB memory)</li><li>• Standard_DS16 V3 (16 vCPUs, 64 GB memory)</li></ul>

Platform	Qualified System
AWS-V	<ul style="list-style-type: none"><li>• M5.xlarge (4 vCPUs 32 GB memory, 3NICs)</li><li>• M5.2xlarge (8 vCPUs 32 GB memory, 3NICs)</li><li>• M5.4xlarge (16 vCPUs 64 GB memory, 3NICs)</li></ul>
GCP	<ul style="list-style-type: none"><li>• n2-standard-4 ( 4 vCPU 16 GB, 3NICs)</li><li>• n2-standard-8 ( 8 vCPU 32 GB, 3NICs)</li><li>• n1-standard-4 ( 4 vCPU 15GB, 3NICs)</li></ul>

To download the virtual appliance software, go to: <https://support.pulsesecure.net/>

# Fixed Issues

The following table lists release numbers and the PRS numbers with the summary of the issue fixed during that release:

Problem Report Number	Summary
<b>Release 21.12R1 PRs</b>	
PRS-405611	Login to PDC to get authentication twice one before HC and one after HC when using DUO-LDAP.
PCS-31464	On Gateway "watchdog: BUG: soft lockup - CPU#1 stuck" error messages is displayed.

# Known Issues

The following table lists the known issues presented in 21.12 and 21.9:

Problem Report Number	Release Note
<b>Release 21.12R1 PRs</b>	
PCS-32765	<p><b>Symptom:</b>Intermediate file bookmark page is shown when end user tries to access file bookmark.</p> <p><b>Conditions:</b>Happens when end user tries to access Windows file bookmark.</p> <p><b>Workaround:</b> After end user provides credentials to access windows file bookmark, if he gets a list of same file bookmark again, then once again end user needs to select the desired file bookmark.</p>
PCS-32717	<p><b>Symptom:</b> XML import is failing for UserRecordSync configuration.</p> <p><b>Condition:</b> When UserRecordSync is enabled.</p> <p><b>Workaround:</b> NA</p>
PCS-32594	<p><b>Symptom:</b> Bookmarks are not getting Synced for end user.</p> <p><b>Condition:</b> When UserRecordSync is enabled.</p> <p><b>Workaround:</b> NA</p>
PCS-32543	<p><b>Symptom:</b> Pushing sign-in URLs, notifications and pages not supported.</p> <p><b>Condition:</b> Create any sign-in settings with URL.</p> <p><b>Workaround:</b> NA</p>
PCS-32467	<p><b>Symptom:</b> Latest syslog Server will be displayed if entire cluster is selected.</p> <p><b>Condition:</b> Multiple syslog servers needs to be added in the cluster mode.</p> <p><b>Workaround:</b> NA</p>
PCS-32324	<p><b>Symptom:</b> Error messages related to upgrading cache are seen under event logs.</p> <p><b>Condition:</b> After the ICS upgrade.</p> <p><b>Workaround:</b> NA</p>
PCS-31168	<p><b>Symptom :</b> Sometimes WSAM resources being accessed through PCS even though resources has denied is PSAM policy.</p> <p><b>Condition:</b> when changing PSAM/WSAM policy from allow to deny.</p> <p><b>Workaround:</b> NA</p>
PCS-30489	<p><b>Symptom:</b>Bandwidth is not restricted even though minimum and maximum levels are configured.</p>



Problem Report Number	Release Note
	<p><b>Condition:</b>When Admission Privilege Level is configured for bandwidth management in esp and ssl mode.</p> <p><b>Workaround:</b>NA</p>
PCS-30439	<p><b>Symptoms :</b> End user login fails for users created in Local authentication server with clear text password enabled.</p> <p><b>Condition:</b> creating local authentication server with clear text enabled.</p> <p><b>Workaround:</b> for Non IKE use cases use without enabling clear text password.</p>
PCS-30280	<p><b>Symptom:</b> Not able to launch windows/citrix terminal services through IPv6 address.</p> <p><b>Condition:</b> when end user used IPv6 address to launch WTS/CTS</p> <p><b>Workaround:</b> launch with IPv4 address.</p>
PCS-29121	<p><b>Symptom :</b> Toolbar not visible for bookmarks in PTP mode when using Chrome and Edge browsers.</p> <p><b>Condition :</b> When web bookmark is configured to be accessed over PTP mode instead of rewriter mode.</p> <p><b>Workaround :</b> User can open another tab and open PCS home page URL to see the toolbars again, or while clicking on bookmarks from PCS home page, select to open in new tab by doing right click.</p>
PCS-32836	<p><b>Symptom:</b> Pulse Client copyright date is not updated with 2022 year.</p> <p><b>Condition:</b> Pulse client copyrights year on still pointing as 2021.</p> <p><b>Workaround:</b> NA</p>
PCS-32596	<p><b>Symptom:</b> Upgrade from 9.1R13 and 9.1R12 GA to 9.1R13.1 is failing at the upload step with Access restricted error.</p> <p><b>Condition:</b> When we keep the Administrator session to default settings and we initiate upgrade using the package file the upgrade process fails with the Access error and the upgrade process is not initiated.</p> <p><b>Workaround:</b> The Admin session timeout needs to be increased while performing the upgrade so that the session does not time out before the package upload process finishes.</p> <p>It can be done from the <b>Administrators -&gt; Delegated Admin Roles -&gt; Administrators -&gt; session timeout</b> .</p> <p>Increase idle timeout to 400 and Max Session Length to 600 before starting the upgrade.</p>

Problem Report Number	Release Note
PCS-32374	<p><b>Symptom:</b> AD authentication not happening when we have Role based vlan configured.</p> <p><b>Condition:</b> When AD authentication selected.</p> <p><b>Workaround:</b> NA</p>
PCS-30917	<p><b>Symptom:</b> During session extension from pulse client or automatic session extension for the end user portal. New session count getting incremented for the gateway, old session not at all getting deleted from the Controller/NSA</p> <p><b>Condition:</b> During session extension from pulse client or automatic session extension for the end user portal. and license count has exhausted.</p> <p><b>Workaround:</b> NA</p>
PCS-32833	<p><b>Symptom:</b> The status info like cluster reboot/ICT/cluster upgrades are not synced between GWs in nSA cluster.</p> <p><b>Condition:</b> In any cluster ,the cluster wide actions status are not synced.</p> <p><b>Workaround:</b> This is only status information, the actually tasks are already performed.</p>
PCS-32906	<p><b>Symptom:</b> ISA VM machine ID getting changed.</p> <p><b>Conditions:</b> Navigate to <b>System&gt;Maintenance&gt;Options</b> and Check/Uncheck the "Enable Virtual Terminal console" check box and then click "save changes" .</p> <p><b>Workaround:</b> NA</p>
PCS-32354	<p><b>Symptom:</b> Registration status of PCS is in green color.</p> <p><b>Condition:</b> When we import binary config of existing registered PCS system config.</p> <p><b>Workaround:</b> clearing and re-registration of NSA registration will solve this.</p>
PCS-32834	<p><b>Symptom:</b> Test connection for AWS/Azure archival server is showing as "Failed to connect to S3 bucket, WrongBucketLocation".</p> <p><b>Condition:</b> When configuring AWS or Azure as archival server location.</p> <p><b>Workaround :</b> Admin can configure SCP or FTP Server for archiving.</p>
PCS-28777	<p><b>Symptom:</b> End User is not able to launch Apps listed in MS RDweb console.</p> <p><b>Condition:</b> End User is using Google Chrome Browser to login.</p> <p><b>Workaround:</b> End User can use MS Edge or Firefox browser to login and launch Apps.</p>

Problem Report Number	Release Note
PCS-31245	<p><b>Symptom:</b> Logs from 9.x hlgw setup is not sent to nSA</p> <p><b>Condition:</b> When DNS preferred settings has configured with IPv6 in network overview page.</p> <p><b>Workaround :</b> Admin can configure DNS preferred settings as IPv4 in network overview page.</p>
PCS-32404	<p><b>Symptom:</b> AP Cluster VIP migration is taking around 2 minutes when cluster VIP configured with IPv6 address</p> <p><b>Condition:</b> When cluster VIP configured with IPv6 address.</p> <p><b>Workaround :</b> None, time is a time delay in cluster VIP migration and cluster VIP will migrate to other node.</p>
PCS-33249	<p><b>Symptom:</b> Error message "ERROR: ld.so. object '/home/lib/libdspreload.so' from /etc/ld.so/preload cannot be preloaded:" appears at the end of successful completion of ICS boot</p> <p><b>Condition:</b> After the completion of ICS installation &amp; boot</p> <p><b>Workaround:</b> None. This does not affect the ICS functionality. This will be fixed in future release.</p>
<b>Release 21.9R1 PRs</b>	
PCS-30626	<p><b>Symptom:</b> Failed to update profile for user error is seen in user access logs for every user.</p> <p><b>Condition:</b> Importing system and user binary configs from 9.x where UEBA was configured and working fine.</p> <p><b>Solution:</b> The UEBA package has to be imported manually for the Adaptive Authentication feature to continue to work fine and stop getting these messages for every user.</p>
PCS-31165	<p><b>Symptom:</b> ESP to SSL session fallback happens randomly on L3 session.</p> <p><b>Conditions:</b> In AA Cluster setup, when VPN Tunneling connection profile is configured with ESP to SSL fallback, sometimes L3-VPN session can fallback to SSL mode after a node leaves and joins the Cluster.</p> <p><b>Workaround:</b> Restarting Services on the Cluster resumes all users VPN session to ESP mode.</p>
PCS-30694	<p><b>Symptom:</b> Number of concurrent users (xx) exceeded the system limit (2) seen in user access logs.</p>

Problem Report Number	Release Note
	<p><b>Conditions:</b> When nSA Named User Mode is enabled in System &gt; Configuration &gt; Licensing</p> <p><b>Workaround:</b> None. End-user does not see any warning and logins will work.</p>
PCS-31051	<p><b>Symptom:</b> Max Concurrent Users do not get updated immediately.</p> <p><b>Conditions:</b> After installing ICS-EVAL license.</p> <p><b>Workaround:</b>None. System takes around 3-4 minutes for the page to get updated.</p>
PCS-30919	<p><b>Symptom:</b> In Advanced HTML5 session, Copy paste functionality does not work after a while</p> <p><b>Conditions:</b>When connected to backend windows machines through Advanced HTML5 session</p> <p><b>Workaround:</b>Disconnect and Reconnect to Advanced HTML5 session</p>
PCS-31161	<p><b>Symptom:</b></p> <ul style="list-style-type: none"> <li>Error updating data for chart cloud_secure_roles seen in Admin logs</li> <li>Dashboard charts are not getting updated</li> </ul> <p><b>Conditions:</b> After upgrading to 21.9R1 gateway build</p> <p><b>Workaround:</b> None. Dashboard charts get updated after a while.</p>
PCS-30280	<p><b>Symptom:</b> Not able to launch windows/citrix terminal services through IPv6 address.</p> <p><b>Condition:</b> when end user uses IPv6 address to launch WTS/CTS</p> <p><b>Workaround:</b> launch with IPv4 address.</p>
PCS-31156	<p><b>Symptom:</b> Sessions are not synced between nodes on an AA/AP cluster.</p> <p><b>Condition:</b> PCS failover because of reboot/power cycle.</p> <p><b>Workaround:</b> New sessions after node recovery will be synced across both nodes and data on insights will be accurate.</p>
PCS-31234	<p><b>Symptom:</b> html5 graph shows incorrect value for RDP sessions.</p> <p><b>Condition:</b> RDP sessions created on PCS.</p> <p><b>Workaround:</b> No workaround.</p>
PCS-31046	<p><b>Symptom:</b> XML import from 9.x PCS GW to 21.x GW fails with a directory-server attribute error in a corner condition.</p>

Problem Report Number	Release Note
	<p><b>Condition:</b> When exported XML from 9.x gateway has a authentication server as system local server and attribute server set to "same as above".</p> <p><b>Workaround:</b>In the XML file either:</p> <ol style="list-style-type: none"> <li>1. Set &lt;directory-server&gt; attribute value as None: &lt;directory-server&gt;None&lt;/directory-server&gt;.</li> <li>2. Or remove the &lt;directory-server&gt; attribute, save file, XML import will be successful after that.</li> </ol>
PCS-31168	<p><b>Symptom :</b> WSAM resources being accessed through PCS even though resources are denied in PSAM policy.</p> <p><b>Condition:</b> when changing PSAM/WSAM policy from allow to deny.</p> <p><b>Workaround:</b> NA</p>
PCS-30652	<p><b>Symptom:</b> Antivirus host checker policy will be failed with error server has not received any information on mac os big surr.</p> <p><b>Condition:</b> when Host checker policy with antivirus is configured on mac os big surr for pre-auth/post-auth.</p> <p><b>Workaround:</b> NA</p>
PCS-31058	<p><b>Symptom:</b> On ISA-V or PSA-v VMware platform, spikes in dashboard throughput graph are seen every 5 minutes, when NTP server is configured.</p> <p><b>Condition:</b> If NTP server is configured and there is time drift on gateway.</p> <p><b>Workaround:</b> Change view of graph to 2 days or more. Or use "Sync time with ESX host" in VMware tools and remove NTP server configuration on gateway.</p>
PCS-31213	<p><b>Symtom:</b> Multicast traffic does not flow thru ICS GW when using IGMPv3.</p> <p><b>Condition:</b> Only when 3rd party tool send multicast traffic with IGMPv3.</p> <p><b>Workaround:</b> For multicast to work, IGMPv2 should be configured on 3rd party tool.</p>
PCS-30439	<p><b>Symptoms :</b> End user login fails for users created in Local authentication server with clear text password enabled.</p> <p><b>Condition:</b> creating local authentication server with clear text enabled.</p> <p><b>Workaround:</b> For Non IKEv2 use cases, use without enabling clear text password.</p>
PCS-31193	<p><b>Symptom:</b>HealthCheck REST API /api/v1/system/healthcheck?status=all returns Security gateway is inaccessible error.</p> <p><b>Conditions:</b> When the default gateway of internal port is NOT reachable.</p> <p><b>Workaround:</b> Make the internal gateway as reachable.</p>

Problem Report Number	Release Note
PCS-30658	<p><b>Symptom:</b> Run Gateway Diagnostics option does not return any output.</p> <p><b>Conditions:</b> When triggering Run Gateway Diagnostics option from System Maintenance.</p> <p><b>Workaround:</b> None. This command is not supported on ICS.</p>
PCS-29657	<p><b>Symptom:</b> Kill command is seen on ISA-V virtual console.</p> <p><b>Condition:</b> On a fresh deploy of ISA-V on VMware ESXi, AWS or Azure.</p> <p><b>Workaround:</b> No functionality is affected. The message can be safely ignored.</p>
PCS-30629	<p><b>Symptom:</b> End-user sees old sign-in page instead of modernised sign-in page.</p> <p><b>Conditions:</b></p> <ol style="list-style-type: none"><li>1. ICS is configured to use Remote TOTP for Secondary Auth</li><li>2. Remote TOTP server is NOT reachable</li></ol> <p><b>Workaround:</b> None. If the Remote TOTP server is reachable, this page would NOT be seen.</p>
PCS-30854	<p><b>Symptom:</b> XML Import or Push Config fails with /users/user-roles/user-role[name=xyz-role]/html5-access/sessions</p> <p><b>Conditions:</b> When trying to do XML import or Push Config of Selective Config.</p> <p><b>Workaround:</b></p> <ul style="list-style-type: none"><li>• XML Import: Remove sessions block under html5-access from XML file and then do XML import.</li><li>• Push Config: There is no workaround.</li></ul>

# Documentation

Pulse documentation is available at <https://www.ivanti.com/support/product-documentation>.

## Technical Support

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

- <https://support.pulsesecure.net/>
- [support@pulsesecure.net](mailto:support@pulsesecure.net)

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

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