# ivanti

Ivanti Connect Secure Release Notes 22.7R2.8

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# **Revision History**

The following table lists the revision history for this document:

Document Revision	Date	Description
9.0	May 2025	Updated "Known Issues" on page 38, "Resolved Issues" on page 24, "Noteworthy Information " on page 14, version and build number, "Upgrade and Migration" on page 19 for 22.7R2.8
8.0	April 2025	Updated "Resolved Issues" on page 24, "Noteworthy Information " on page 14, version and build number,"Upgrade and Migration" on page 19 for 22.7R2.7
7.0	February 2025	Updated "What's New" on page 6, "Resolved Issues" on page 24, "Known Issues" on page 38, "Noteworthy Information " on page 14, version and build number, "Upgrade and Migration" on page 19 for 22.7R2.6
6.0	January 2025	Updated "What's New" on page 6, "Resolved Issues" on page 24, "Known Issues" on page 38, version and build number, "Upgrade and Migration" on page 19 for 22.7R2.5
5.0	December 2024	Updated "Resolved Issues" on page 24, version and build number, "Upgrade and Migration" on page 19, for 22.7R2.4
4.0	October 2024	Updated "What's New" on page 6, "Resolved Issues" on page 24, "Known Issues" on page 38, version and build number, "Upgrade and Migration" on page 19 for 22.7R2.3
3.0	September 2024	Updated "Resolved Issues" on page 24, version and build number, "Upgrade and Migration" on page 19, for 22.7R2.2

Document Revision	Date	Description
2.0	July 2024	Updated with "What's New" on the next page, "Resolved Issues" on page 24, "Known Issues" on page 38, version and build number, "Upgrade and Migration" on page 19, and <u>Noteworthy Information</u> for 22.7R2.1
1.0	May 2024	Updated with what's new, known and fixed issues, version and build number, migration and upgrade path for 22.7R2

### What's New

Release 22.7R2.8

Product Version	Build
ICS 22.7R2.8	4471
ISAC 22.8R2	33497
Default ESAP	4.3.8

### **New Features**

- **End User Portal**: Enhancements to the appearance and interface in the end-user portal, which includes:
  - Shows Snackbar (popups) when a bookmark is added or removed from Favorites.
  - Collapsible notification message with "Read more" and "Read less" option on the end user interface in landing page".
  - The "welcome message" input text box in the admin UI is expandable for better usability. This aids admins in a flexible way to add and edit welcome messages of varying lengths
- **Rest API Support for External ICT**: Supports external Integrity Checker Tool (ICT) Automation using Rest API, which allows the admin to run scans and download the snapshot generated by the ICT tool. The API response include anomaly information too, see <u>Run External ICT Scan</u>.

Only one External ICT scan can run at a time, whether triggered via Admin UI or API.

It is mandatory to see "Noteworthy Information " on page 14

#### Release 22.7R2.7

Product Version	Build
ICS 22.7R2.7	4377
ISAC 22.8R1	31437

Product Version	Build
Default ESAP	4.3.8

#### **New Features**

This release includes bug fixes. There are no new features.

#### Version 22.7R2.6

Product Version	Build
ICS 22.7R2.6	3981
ISAC 22.8R1	31437
Default ESAP	4.3.8

### **New Features**

- Debug Log Size: The debug log file size in Virtual Appliances has been increased to 1024 MB for HDDs, which are 80 GB or larger, see <u>Using the Debug Log</u> and <u>Supported Virtual</u>
   Appliances. Hardware devices already have this capability.
- **End User Portal**: Enhancements to the appearance and interface in the end-user portal, which includes:
  - Option to enable a background color, see <u>Configuring Sign-In Pages</u>.
  - Confirmation dialog box, which is displayed before the deletion of a bookmark.
  - Increased Logo height on the landing page for better visibility.
  - In file browsing after uploading five files, the file upload button is disabled. Only five files can be uploaded at a time.
  - For file browsing SSO, when the user enters invalid credentials, an error message is shown.
- **Logging Enhancement**: The user access log displays the country name for geo-location based restriction rules within the user realm, see <u>Logs</u>.

#### Release 22.7R2.5

Product Version	Build
ICS 22.7R2.5	3793
ISAC 22.7R4	30859
Default ESAP	4.3.8

### **New Features**

This release includes bug fixes and security fixes. There are no new features.

### Release 22.7R2.4

Product Version	Build
ICS 22.7R2.4	3597
ISAC 22.7R4	30859
Default ESAP	4.3.8

### **New Features**

This release includes only bug fixes and there are no new features.

#### Release 22.7R2.3

Product Version	Build
ICS 22.7R2.3	3431
ISAC 22.7R4	30859
Default ESAP	4.3.8

### **New Features**

- **TOTP Server**: Strengthening the TOTP server by adding password authentication checks for importing and exporting a configuration file, with corresponding changes made to the Rest APIs, see Exporting/Importing TOTP Users and APIs.
- **Hard Disk Monitoring**: Implementing new REST APIs to retrieve disk usage information and perform disk cleaning, see <u>Disk Usage Monitoring</u> and <u>Disk Cleanup</u>.
- **XML Import/Export**: Strengthening the XML config file import/export process with password authentication checks, and updating Rest APIs accordingly, see <u>Exporting an XML Configuration</u> File and Importing an XML Configuration File.
- **SNMP Polling**: Improved SNMP functionality to monitor the status of the Power Supply and Fan in ISA 8000 and ISA 6000 devices, see Displaying Hardware Status.
- **SNMP**: Improvements have been made to SNMP to retrieve results showing the current VPN ACL count, see Configuring SNMP.
- End User Portal: Enhancements to the appearance and interface in the end-user portal include:
  - Collapsible welcome note on the end user UI.
  - List view for bookmarks, see Customizing the Welcome Page.
  - Option to enable/disable a background image in the Sign-In Page, see <u>Configuring Sign-In</u> <u>Pages</u>.

Release 22.7R2.2

Product Version	Build
ICS 22.7R2.2	3221
ISAC 22.7R3	30227
Default ESAP	4.3.8

### **New Features**

This release includes only bug fixes and there are no new features.

#### Release 22.7R2.1

Product Version	Build
ICS 22.7R2 .1	3191
ISAC 22.7R3	30227
Default ESAP	4.3.8

### **New Features**

- Play Integrity API Checks: Helps to check that interactions and server requests are coming from the genuine app binary running on a genuine Android device, see <u>Using the Mobile</u> <u>Options</u>.
- **Health Check**: Ensures that the configured NTP and AD in ICS are reachable and also reduces involvement of support and engineering in addressing the customer environment issues, see <u>Health Check</u>.
- Log Size: The Maximum Log size is increased to 200MB for VMs and 1GB for ISA hardware devices, see Configuring Events to Log.
- **Read-Only Admin**: On Traffic Segregation, Administrative Network support is removed for Read-Only Admin, see Traffic Segregation Feature Overview.
- Rest API Auth: Removal of support for /api/v1/auth API which does not help in enforcing
   RBAC on REST endpoints. Instead use /api/v1/realm\_auth API for authentication, see <u>Realm-based</u> Authentication.
- **FDQN Support**: Lockdown Mode Exception Rule is added with Remote FDQN Resources to support FDQN, see <u>Custom-based Resource Access</u>.
- **End User Portal**: Bookmark panel on end user portal is enhanced with expand and collapse accordion.
- **Rewriter**: Enhanced Rewriter parser to support Super keyword and Triple dot.

#### Release 22.7R2

Product Version	Build
ICS 22.7R2	2615
ISAC 22.7R2	29103
Default ESAP	4.3.8

### **New Features**

- Remote Debugging: Now support center can access system over a secure connection using Remote Debugging server via internal, external, or management port, see <u>Using Remote</u> Debugging.
- Licensing Server: ICS Gateway can connect to license server using IPv6 address, from 22.7R2 release onwards, see License Server.
- **Delegated Admin**: From this release onwards, Delegated admin user can login via rest API.
- **Content Security Policy**: CSP is implemented to harden the security by detecting and mitigating certain types of attacks, see <u>Security Hardening</u>.
- **Configuring Administrator Roles**: You can customize the number of records to be displayed per page in a table, see <u>Creating and Configuring Administrator Roles</u>.
- Integrity Check: Booting Options on Integrity Check Failure is newly introduced to check integrity check failures during boot up (Disabled by default). Options are added to Reboot, rollback or continue booting if integrity check fails, see <u>Configuring Miscellaneous Security</u> <u>Options</u>.
- **Additional Client package(s)**: Now, only the active client package will get exported/carry forwarded, see <u>Software Upgrade Page</u>.
- **MDM Auth Server**: New option is added with interface selection for MDM connections to enable outgoing interface, see <u>Configuring an MDM Server</u>.
- **SAML/ Web Server**: New setting is added to monitor the SAML/Web server, see <u>Configuring</u> System Maintenance Options.
- **TLSv1.3**: Support for Browser based TLSv1.3 certificate authentication using Port Redirection, see Enabling Inbound SSL Options.

- Mobile Options: IF-T/TLS NCP knob option is newly added for Mobile, see <u>Using the Mobile</u>
   <u>Options</u>.
- **Host checker Policy**: Enhancement of Predefined OS Host Check rule for Windows with Service packs/version number.
- **IPv6 support**: New IPv6 Provisioning Parameters added that are required during the deployment of a virtual appliance, see deployment guides <u>KVM</u>, <u>Hyper-V</u>, <u>VM</u>, <u>Nutanix</u>.
- **OpenSSL 3.0**: Upgrading OpenSSL stack with OpenSSL 3.0 which includes a cryptographic module that can be FIPS validated, see Enabling Inbound SSL Options.

# Introduction

Ivanti Connect Secure (ICS) 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 contains information about what is included in this software release: supported features, fixed Issues, upgrade path, and known issues. If the information in the release notes differs from the information found in the documentation set, follow the release notes.

These are cumulative release notes. If a release does not appear in this section, then there is no associated information for that release.

# **Noteworthy Information**

### Version 22.7R2.8

• List of countries for geolocation purposes has been updated to match ISO 3166. Existing rules or role mapping are to be updated to reflect any name changes.

### HTTP Only Device Cookie Behavioral Changes

- In previous ICS releases, the HTTP Only Device Cookie was enabled for all new user roles. However, there can be some of the older user roles on the system which are not enabled with this option. The fix in this version will secure this behavior by default.
- Default behavior of "HTTP Only Device Cookie" option will be as follows for all user roles on the system:
  - There is no change during fresh installation of the ICS. A fresh installation of the ICS will enable "HTTP Only Device Cookie" by default.
  - During an upgrade, ICS will enable the "HTTP Only Device Cookie" checkbox, overriding its previous state if unchecked.
  - During a Config import, ICS will enable the "HTTP Only Device Cookie" checkbox, overriding any previous unchecked state.
  - API and XML import workflows will remain unchanged.

In case of, any changes to the application behavior, the change can be reverted back at User Roles > Default Options for User Roles > General > Session Options.

### **Push Configuration Behavioral Changes**

- Push config fails if MFA is enabled on the admin account of the target ICS server.
- There is change in default behavior of Push Configuration. The change is as follows:
  - A fresh installation of the ICS will enable "validate target server certificate" by default.

- During an upgrade, ICS will enable the "validate target server certificate" checkbox, overriding its previous state if unchecked. A log message will note this change.
- During a Config import, ICS will enable the "validate target server certificate" checkbox, overriding any previous unchecked state. A log message will indicate if this override occurs.
- API and XML import workflows will remain unchanged.

The Push Configuration feature will not work if the target server certificate validation fails. Ivanti recommends all customers use trusted certificates on their ICS servers.



If you need more time to install valid digital certificates, you can override the option by disable the "validate target server certificate" checkbox after an upgrade, fresh installation, or configuration import. However, this is a temporary fix as this option will be deprecated in a future release.

#### Vesrion 22.7R2.7

 Smart card agent requires to be updated on the client machine to support HTML5 login using smart card authentication. For updating, you must uninstall the older version of Smart card agent on your system and reinstall it by downloading the latest version form ICS End user portal.

### Version 22.7R2.6

- PSAM has been updated to improve security. As a result, the server will validate that the IP address and FQDN being used by the client match the results that the ICS server gets for the same FQDN. If the IP and FQDN do not match, access will be denied. This is most likely to occur with large cloud resources, which are traditionally not handled via PSAM. If access is denied an entry will appear in the access log. Log message: "*Deny connect request to www.xyz.com port 7000. FQDN matched but IP 23.1.3.7 didn't match any resolved IP(s)*".
- With latest changes by default RADIUS sends the Access Request packet with the Message-Authenticator (80) attribute and does a strict check for the same attribute on the Response packet. If the ICS does not receive the same in response packet, then the connection terminates. Refer the forum article for more Information.



# Verify your RADIUS Server's capability to handle the above scenario before upgrading.

- The IF MAP feature is not supported starting from Release 22.7R2.6.
- Beginning with ICS 22.7R2.6 onwards, thumbprint must be used as identifier instead of the serial number in the certificate APIs, see <u>API Sample</u>.

### Version 22.7R2.3

• Functionality provided by the IF-MAP feature has reached a final state. Refer the <u>forum article</u> for more information.

#### Version 22.7R2.1

Q

Ivanti Connect Secure 22.7R2.1 will disable the DMI (**System > Configuration > DMI**) feature during upgrade. New installations of this version will also have this disabled by default. This is in line with proactive measures outlined in <u>KB</u>. Enabling this feature in ICS 22.7R2.1 will reintroduce risk associated with the related vulnerability.

- Dashboard warning message is implemented in 22.7R2.1 referencing the "Security Certificate validation being enabled or not for the below features"
  - License Server
  - Push Config clients
  - Trusted server enforcement for Ivanti Secure mobile app
  - LDAP Server
  - Trusted Client CA's with CRLs

#### Version 22.7R2

- After upgrade , the default ESAP version will be set to 4.3.8.
- Ivanti recommends using api/v1/realm\_auth instead of api/v1/auth as it will not be supported in future release. Update/Modify your REST based scripts to make use of /api/v1/realm\_auth.
- For advance HTML5 RDP access via smart card, the smart card driver version at client side and RDP Host should be same

# **Unsupported Features**

- Enterprise onboarding is not supported starting from release 22.4R2.
- The IF MAP feature is not supported starting from release 22.7R2.6.

### Caveats

Dynamic Disk Size Allocation:

- Admin can modify or increase existing disk size only once.
- In case of an upgrade, increased disk size (40 GB to 80 GB) is applicable only on upgraded ICS images not on rollback and factory reset images.
- If the users are upgrading to 22.6R2 or later, then the disk size change have to be done prior to upgrade on the respective platforms.

The following feature is not supported in this gateway release:

- Analytics Dashboard and Gateway logs are not synchronized with nSA when using an ICS gateway on the cloud running version 22.5R2 or above.
- Users upgrading to 22.6R2 with AD servers 2016 or older could see AD domain join failures after upgrade. Refer to the <u>KB link</u> for details and work around before upgrading.
- Multicast with IGMP
- Upgrade from any R2 versions to R1 versions is not supported. Refer the <u>supported upgrade</u> <u>path forum link</u> for more details.
- Browser based Certificate authentication gets impacted when enforcing TLS 1.3 on 22.4R2. Refer the forum link for more details.
- Kernel rate limiting cannot be configured from nSA in Release 22.4R2.



The features listed in <u>KB44747</u> are not supported with 22.x Gateway release. In addition, Pulse Collaboration, HOB Java RDP, and Basic HTML5 are not supported in 22.x Gateway.

# **Upgrade and Migration**

### **Upgrade Path**

The following table describes the tested upgrade paths, in addition to fresh installation of 22.x for ICS Product.



Follow the mandatory steps listed in the <u>KB</u> before staging or upgrading to prevent upgrade related issues.

Upgrade to	Upgrade From (Supported Versions)
22.7R2.8	22.7R2.7, 22.7R2.6, 22.7R2.5
22.7R2.7	22.7R2.6, 22.7R2.5
22.7R2.6	22.7R2.5, 22.7R2.4, 22.6R2.3
22.7R2.5	22.7R2.4, 22.7R2.3, 22.6R2.3
22.7R2.4	22.7R2.3, 22.7R2.2, 22.6R2.3
22.7R2.3	22.7R2.2, 22.7R2.1, 22.6R2.3
22.7R2.2	22.7R2.1, 22.7R2, 22.6R2.3
22.7R2.1	22.7R2, 22.6R2.3, 22.6R1.2, 22.2R4.2
22.7R2	22.6R2.3, 22.6R1.2, 22.5R2.4, 22.2R4.2
22.7R2.6	22.7R2.5, 22.7R2.4, 22.6R2.3

### **Configuration Migration Path**

The following table describes the tested migration paths. See <u>PSA-ISA-Migration-Guide</u> and it is mandatory to follow the instructions.



Before upgrading or config import from 9.x release where deprecated Auth servers is present, it is recommended to delete the deprecated Auth server before upgrade or config-imports. For Siteminder/Netegrity Auth Server, the XML config import and deletion of auth server fails post migration.

Migrate to	Migrate From (Supported Versions)
22.7R2.8	9.1R18.9, 9.1R18.8, and 9.1R14.6
22.7R2.7	9.1R18.9, 9.1R18.8, and 9.1R14.6
22.7R2.6	9.1R18.9, 9.1R18.8, and 9.1R14.6
22.7R2.5	9.1R18.9, 9.1R18.8, and 9.1R14.6
22.7R2.4	9.1R18.9, 9.1R18.8, and 9.1R14.6
22.7R2.3	9.1R18.9, 9.1R18.8, and 9.1R14.6
22.7R2.2	9.1R18.8, 9.1R18.7, and 9.1R14.6
22.7R2.1	9.1R18.8, 9.1R18.7, and 9.1R14.6
22.7R2	9.1R18.6, 9.1R18.4, 9.1R14.6 and nSA supported 9.1R17.4



Upgrade the servers to the nearest matching version per the table to proceed with Migration if the exact versions are not listed.

# **Support and Compatibility**

### **Hardware Platforms**

You can install and use the software version on the following hardware platforms.

- ISA6000
- ISA8000

### **Virtual Appliance Editions**

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

### Virtual appliance qualified in Platforms for 22.7R2.8

Limitations:

- Admin can modify or increase existing disk size only once, Admin can create an extra 2 physical disk partitions, which can be added to existing logical volume groups of rollback and currently only for the first time.
- As part of dynamic disk size allocation feature, Increase disk size is applicable only on upgraded ICS image and not on rollback and factory reset image.

Variant	Platform	vCPU	RAM	Disk Space
VMware ESXi 8.0.2 (23305546) ESXi 7.0.3 (23307199)	ISA4000-V	4	8 GB	80 GB
	ISA6000-V	8	16 GB	80 GB
	ISA8000-V	12	32 GB	80 GB

Variant	Platform v		RAM	Disk Space
Azure-V	ISA4000-V (Standard DS3 V2 - 3NICs)	4	14 GB	80 GB
	ISA4000-V (Standard_D4s_v3 - 2NICs)	4	14 GB	80 GB
	ISA6000-V (Standard DS4 V2 -3 NICs )	8	28 GB	80 GB
	ISA6000-V (Standard D8s V3)	8	32 GB	80 GB
	ISA8000-V (Standard D16s V3)	16	64 GB	80 GB
	ISA4000-V (F4s_v2)	4	8 GB	80 GB
	ISA6000-V (F8s_v2)	8	16 GB	80 GB
	ISA8000-V (F16s_v2)	16	32 GB	80 GB
	ISA4000-V (M5.xlarge - 3 NICs)	4	16 GB	80 GB
AWS-V	ISA6000-V (M5.2xlarge - 3 NICs)	8	32 GB	80 GB
	ISA8000-V (M5.4xlarge - 3 NICs)	16	64 GB	80 GB
	ISA4000-V (t3.xlarge - 3 NICs)	4	16 GB	80 GB
	ISA6000-V (t3.2xlarge - 3 NICs)	8	32 GB	80 GB
GCP	ISA4000-V (n2-standard-4 - 3 NICs)	4	16 GB	80 GB
	ISA4000-V (n1-standard-4 - 3 NICs)	4	16 GB	80 GB
	ISA6000-V (n2-standard-8 - 3 NICs)	8	32 GB	80 GB
	ISA6000-V (c2-standard-8 - 3 NICs)	8	32 GB	80 GB
	ISA 8000-V(n2-standard-16 - 3 NICs)	16	64 GB	80 GB

Variant	Platform	vCPU	RAM	Disk Space
OpenStack KVM	ISA4000-V	4	8 GB	80 GB
OpenStack Dalmatian on Ubuntu 24.04.2 LTS	ISA6000-V	8	16 GB	80 GB
	ISA8000-V	12	32 GB	80 GB
Hyper-V	ISA4000-V	4	8 GB	80 GB
Microsoft Hyper-V Server 2022	ISA6000-V	8	16 GB	80 GB
	ISA8000-V	12	32 GB	80 GB

To download the virtual appliance software, go to: <u>https://forums.ivanti.com/s/contactsupport</u>

For more information see <u>Support Platform Guide</u>.

### **Licensing Types**

License Type	Gateway Licensing Mode	nSA named user Licensing Mode
Platform/Core license	Install license locally or lease license for license server	Register the ICS Gateway with nSA and if the ICS Gateway is using nSA named user licensing mode then the Platform/Core license is not required.
User licensing	Install license locally or lease license for license server	Register ICS Gateway with nSA
Feature licenses (Adv HTML5 etc)	Install license locally or lease license for license server	Install license locally on ISA-V

For more information see the Licensing Management Guide

# **Resolved Issues**

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

Problem Report Number	Summary
Release 22.7R2.8	
1535402	Not able to edit a file bookmark name when the configured URL contains <username> syntax.</username>
1523736	Spaces being added to a Mac Host Checker NetBIOS custom rule.
1477241	Improved ICS clock and NTP stability.
1512784 1530648 1530257	NTP timezone setting not handled correctly during upgrade or configuration import.
1531383	Problems getting certificate information via API.
1547167 1538700	Radius authentication fails when using the secondary server after the upgrade to 22.7R2.6.
1520413	Temporary unavailability of Ivanti Secure Access extension for Google Chrome.
1477079	Graph gaps appear when there is an NTP event restart with time corrections. NTP stability improvements will limit the impact.
1509138	dsradiusacct may crash when Radius accounting port is not reachable.
1532226	Server on 22.7R2.6, fails to assign clients an IPv6 address from a /64 pool.
1515082 1467859 1518184 1535351	Rewrite-server or proxy-server may crash under specific conditions
1527068	After upgrade to 22.7R2.6, Web bookmark shows error"The URL is invalid" when mask button is enabled.

Problem Report Number	Summary
1504395	Improved handling and logging of watchdog when it encounters high FD values.
1499531	Geolocation names have been updated to match current ISO-3166 values.
	1 This may require manual adjustment of some Geolocation rules.
1525944	Bookmark created for downloading the installer file is not working in ICS 22.7R2.3 and above versions.
1468976	Offer Home/Reconnect prompt upon session end in Advanced HTML5.
1512004	SAML process crashes during internal ICT scans on ICS Versions 22.7R2.3 and 22.7R2.5.
1515996	AD authentication server gives troubleshooting error post-migration to ISA- 6000-V.
1508236	Unable to save SSO policy on 22.x with user attribute values in file bookmarks.
1498583	After upgrading to 22.7R2.1 or later, the logs before upgrade gets deleted.
1499585 1532079	License Server shows newly created ICS licensing client's platform as ISA-V (Policy Secure) instead of Connect Secure.
1504906	ICS shows DNS server as responding even when it does not exist.
1495424 1531178	Custom Sign IN page not working for Android and IOS users on latest ISA - 22.7R2.3.
1466572	After upgrading to 22.7R2.3, the iveVPNTunnels SNMP data is displaying as zero.
1495149	Failing to configure "Attribute based bookmark " with Advance HTML5.
1491473	Upload Custom Page and XML failure on 22.7R2.3.
1455633	Archive setting is removed after server is upgrade from 22.7R2 to 22.7R2.2.
1480173	Issue with Custom Sign-In Page Unable to Modify Secondary Credential Labels.

Problem Report Number	Summary
1426769 1529914	System Time is drifting when the Time is set Manually from Browser
1464747	Validation is missing for Network Connect ACLs when modified through REST/XML.
1453431	Multiple login sessions are seen when using custom sign-in page.
1486036	"Enable IPv4 Address Assignment to Clients" option is Disabled upon upgrading to 22.7R2.3.
1343190	Not able to add file share path as user bookmark.
1490114	Unable to go back to previous folder.
1518444	VDI bookmark is not shown in the End user page and works fine in Admin UI page.
Release 22.7R2.7	
1561342	Web Process stops randomly, generating crashes.
1568828	Smart Card authentication detection failure during advanced HTML5 RDP login.
1558371 1565101 1544108 1544950	One or more web processes get stuck in infinite loop during SSL handshake resulting in High CPU.
1550503	Web process crash leading the user disconnections in ICS 22.7R2.6.
1518863	SMBCONF process crash during AD reset join issue.
1554025	Web Radius EAP crash issues.
1541825	ESP falls back to SSL and after some time the node freezes completely causing all connections to drop.
1535628	Virtual VMWare server running 22.7R2.5 with multiple web process crashes and certain users get disconnected
1527209	Kernel panic is noticed on ICS Version 22.7R2.6 when ESP transport mode is used.

Problem Report Number	Summary
1529008 1527209	After upgrading to 22.7R2.6 many users are unable to establish their VPN connection.
1529324	After the upgrade to 22.7R2.6, users started getting error 1132.
Release 22.7R2.6	
1511765	Unable to change background color on Sign-In Page 22.7R2.5.
1498609 1507670 1508201 1505423	Enable Setting view for Role showing unchecked option, when the features ( HTML5,VPN and other option ) for role is enabled.
1486110	Unable to change background color on Sign-In Page 22.7R2.3.
1477394	ICS kernel panic during upgrade.
1476344	With nSA license, few users are not reflecting in users page in the controller.
1427503	PSAM Ivanti Secure access client is not Launching automatically or connecting Automatically.
1384112	Advanced HTML5 Session Recording is Not Working From ICS 22.6R2.3 and Above.
1501125	FQDN based PSAM resources become inaccessible in ICS 22.7R2.4 due to PSAM DNS cache lacking the response for FQDN's.
1503495	PSAM issues in accessing FQDN resources with uppercase letters in ICS 22.7R2.4.
1503731	PSAM FQDN resource access denied despite IP Addresses being present in DNS cache in ICS 22.7R2.4.
1504947	Accessing the Sign-In URL redirects to PSAL helper page with upgrade helper installation prompt In ICS 22.7R2.4.
1302425	Inability to configure custom Radius login Page due to missing Defender.thtml file on 22.x versions.

Problem Report Number	Summary
1436751	Unable to Create Active Directory Server on ICS 22.7R2 and Above When Domain Field Contains '_' Character.
1413083	Issues with SSO and Credential Parsing for Adv HTML5 and unable to access RDP Connection.
1401709	Advanced HTML5 W/ NLA bookmarks overrides settings for the additional NLA bookmarks.
1500990	Special Characters are not allowing in 22.x for selective pushConfig/ ImportExport
1450950	Issue with SSH Access to HTML5 Resource on Debian 11: Scrollbar and Mouse Wheel Unresponsive.
1438431	RemoteDir paths containing spaces causing NullPointerException in 22.7R2.1 Advanced HTML5 Bookmark Access.
1428904	File upload in 22.x server allows users to submit more than 5 files but, they can add only 5. If the user adds the 5 files they should be prompted and not given the option to add more than 5.
1456283	Content-Length Header (HTTP) in Health check status full response on loadbalancer shows value as "Zero".
1416037	Unable to delete Staged package starting from 22.7R2 from the UI.
1457548	Unable To Browse the FileShare Resource When a Folder Name has Special Character "&" on ICS 22.7R2.3.
1444327	Kernel Panic is observed on the ICS deployed in Azure running on 22.7R2.
1379005	ICS server running 22.6R2.3 is seeing License Server Low Level Protocol Errors in the event logs.
1433652	REST API for resource throttling providing incorrect response in 22.7R2 and above.
1425143	Interacting with File Share Shortcuts Redirects to Downloading .Ink Files Instead of Folder Browsing on ICS Version 22.7R2.1.
1424576	Issues with SAML-Authentication Server config sync from nSA controller.

Problem Report Number	Summary
1417915	Application Access via Terminal Services Significantly Slower After Migration from PSA Server (9.1R17) to ISA Server (22.6r2.3) despite with same Configuration.
1413166	VPN ACL filtering by port is not working as expected.
1486083	Computer ICON is missing on the browser toolbar after upgrading to 22.7R2.3.
1415379	Cluster Node Hang and Recovery during Active Sync with IKEv2 VPN after migrating to 22.7R2.
Release 22.7R2.5	
1478647	PSAM users experience intermittent disconnections in ICS 22.7R2.3 with the 22.7R3 client version.
1352638	Memory usage increases linearly over time to 100%, causing the device to become unresponsive until it is rebooted.
Release 22.7R2.4	·
1474116	Special characters are not permitted in version 22.x for selective pushConfig and ImportExport operations.
1465146	SPI count in debug logs and system snapshot to track memory issues.
Release 22.7R2.3	·
1397724	Upgrade of ICS from 22.7R2.1 or later is failing through REST API
1393255	Session Management( idle timeout, max session lifetime, session extension, etc) are not working.
1414793	Intermittent failures in Push Config due to login failure
1394301	End-user certificate (containing UPN name) verification fails when intermediate certificates contains a UPN Name Constraint
1414857	Different users could be assigned the same IPv6 address from DHCP when very specific conditions are met.
1302526	Errors when multiple intermediate CA certificates had the same name

Problem Report Number	Summary
1378157	Sign In Page Localization
1390101	File browser shows black screen when tried to refresh or open in new window.
1366376	File browser shows blank white screen when accessing file share bookmarks through the browser.
1302196	Login Syntax Change Impact on Syslog Agents After Device Upgrade
1352015	Misleading SYS30912 errors appears under user access logs
1376910	Remove postgreSQL log files when CLI cleanup option 31 is selected.
1379602	Error Invalid Profile Type 1 when configuring SSH Advanced HTML5 resource
1386705	Session ID not showing as expected in User Access log
1391194	"Custom Settings" for Delegated Admin Role is not working as expected
1355032	Internal ICT scan failure (false positive) with a file nohup.out
1356278	External Integrity Scan and showing pyc files as new (false positive)
1354977	External Integrity Checker showing cert.pem.bak and key.pem.bak(false positive). Also flagging a file name pkgversion.3 (false positive)
1395490	Unable to configure Variable Attributes under Host Details in Terminal Services Configuration
1397105	Improve Watchdog log message to capture the command being executed by /bin/bash
1379860	Unable to enter characters when Chinese Traditional Taiwan language is enabled on local PC and html5 RDP resource.
1413440	Advanced HTML5 : improve pop up messages
1368090	ICS SNMP Unresponsive to 'get' queries
1375437	FTP Archiving failing for user logs
1414845	Program DSWSD recently failed when using certificate authentication
1416142	Process snapshots generated for unityConfigSpli & unityConfigNetc after

Problem Report Number	Summary
	registering ICS with Pulse One
1413774	License leasing not working correctly for appliances on 22.7Rx when the reserved license is configured as Zero
1411563	UI Issue with Radius Custom Rule Configuration with 22.7R2 and later
1302207	When the Active node shutdown from Active node the Passive node is not taking the VIP.
1429771	PSA7000 generating "First failure for a power supply reading" in the event logs
1428971	Implement log rotation for ive-ec2connect.log AWS deployments.
1383587	AD domain join takes 15 mins to join.
Release 22.7R2.2	
1418051	Improved handling of CA/intermediate certificates that do not have a CN value
1418054	Addressed issues when using two different CA/intermediate certificates that have the same CN and issuer.
1418042	Addressed an issue with swap memory management on ISA8k
1418049	Addressed an issue with swap memory management on VM devices
1395150	UAL license not working for EU region
Release 22.7R2.1	
PRS-418942	Users are having failed realm restrictions even when the location is allowed.
PRS-418576	User access logs displays the wrong Username, when ending a Terminal Session
1379870	Traffic Segregation in Hyper-V is not saving the VLAN ID under available Interface.
1302171	Users session gets disconnected on Windows 10 systems due to the Host Checker time out. For more see <u>KB</u> .

Problem Report Number	Summary
1353427	IPTable rules default policy set to "ACCEPT" allowing all ports.
1302246	User access logs provides 127.0.0.1 address for source IP when an attempt with wrong credentials fails.
1302272	Session ID is not displayed in the "Closed connection" logs consistently.
1350553	Staging user summary table entries are being appended
1355655	JSAM Certificate is expired in 22.7R2
1352719	External Integrity Scan is Failing on the 22.7R2 server showing 85 mismatched files this occurred in Azure deployment only
1373106	Issue in displaying Special Characters when using French text in Welcome Message on ISA-6000.
1373377	ICS devices deployed in Azure are becoming unresponsive with "No space left on device" errors.
1348873	iveConcurrentUsers count is 0 in SNMP Traps.
1341262	Sometimes, Advanced HTML5 session does not respond to mouse clicks.
1341797	Cluster creation with IPV6 and default VLAN Id is not supported.
Release 22.7R2	
Refer to <u>Security Ad</u>	visory and Patch Release section to see CVEs fixed.
PRS-418027	Sending iveMaxConcurrentUsersSignedIn SNMP alert for Leased licenses from License Server.
PRS-419899	Keyboard input is printed twice when host and PC language is Chinese.
PRS-419817	Geolocation based realm restriction failing for user login.
PRS-418576	User access logs Shows wrong Username ,when ending a Terminal Session.
PRS-419357	System State storage size has reached max limit.
PRS-419198	Automatic detection with "unknown Keyboard" as keyboard layout does not work in Advance HTML5 pre-Login
PRS-419162	Wildcard Device certificate deletion with REST API is not working Properly.

Problem Report Number	Summary
PRS-419394	Difficulty in Joining Device to Domain Using Only Reset Join option with AD Authentication.
PRS-419159 PRS-419954 PRS-420242	VPN users dropped suddenly on gateway due to reboot.
PRS-419107	Avoid False Positives in ICT
PRS-419098	High CPU usage is noticed in all of the 12 nodes deployed.
PRS-419086	Import of System config/XML config related to bandwidth Management fails on ICS
PRS-418969	Certificate Auth failing is due to Missing Authority Key Identifier.
PRS-418954	Mitigating login issues through reboot or failover.
PRS-418930 PRS-419505	Certificate Host checker is failing after upgrading to 22.6R2.
PRS-418849	Unable to authenticate user using certificate with "Wrong Certificate::unsupported name constraint type".
PRS-416861	"Dropping the duplicate tunnel session from client" is seen in User Access Logs.
PRS-418161	SNMP Traps are not being generated when the redundant power supply is turned off.
PRS-418682	Singpass (SAML) Authentication fails when Load balancer URL is configured under the "Host FQDN for SAML".
PRS-418443	Not able to update ICS server appliance from 22.4R2 to 22.6R2.
PRS-418434	SSO stoped working for the FileShare Bookmarks after upgrading ICS to 22.6R2 version.
PRS-418392	Rewrite getting blank page via Host-based PTP.
PRS-418219	MDM Setup Issues with Microsoft Intune with Authentication and Authorization Challenges.

Problem Report Number	Summary
PRS-417969	AD join fails with ISA when Domain name has a special character '&'
PRS-418134	SID is not being displayed completely.
PRS-417750	iOS 17 has introduced a change in the IKE code, to make it stricter in compliance with RFC7296
PRS-417300	Ikev2 error messages seen in the User Access logs.
PRS-417319	High CPU usage at 100 % for ICS due to 64K size DNS response.
PRS-417668	Scrolling Bar Accessibility Issue on welcome page in Multiple Browsers.
PRS-417152	Upgrade to 9.1 R18.1 fails due to SSH/Telnet deprecation check.
PRS-417355	Inactivity reminder timeout, when users are using web session post migrating to 22.3R1.
PRS-417140	Failing to get Intune MDM Attribute Intermittently.
PRS-416968 PRS-417276	Chinese characters in file share bookmarks are garbled.
PRS-416896	After migration to ICS the Disk Space is showing as full on the active node in A/P cluster.
PRS-416479	Website loading slow after the upgrade with PassThroughProxy.
PRS-416169 PRS-420178 PRS-419764	Unable to connect to VPN, SAML authentication fails after upgrading the appliance to 22.4R2.
PRS-418524	Unexplained reboots on ISA 8000c A/A Cluster.
PRS-417756	DFS Share access is not working with 22.5R2.1.
PRS-418105	Web process crash on PSA 7000c due to memory leak.
PRS-417933	ICS Azure VM Virtual Wagent showing status not ready and impacting in taking Azure level VM backup in 22.x.
PRS-417302	Database percentage = 99, shard 3 operation above threshold.
PRS-417816	ICS Realm limits are not honored when nSA Named User Licensing mode is used.

Problem Report Number	Summary
PRS-417665	REST-based configuration updates may fail with an HTTP 500 error.
PZT-45037	SNMP trap messages under Event log to be removed.
PZT-44342	Config sync rule on the nSA shows Failed and Pending status.
PZT-44321	Readiness failures observed in Gateway.
PZT-44103	Single node cluster to support config sync and Report generation.
PCS-44875	Event logs are filled with certificate expired error message.
PCS-44362	Failed to save package, cannot copy UEBA package.

# **Security Advisory and Patch Update**

Ivanti has released security advisories and mitigations for critical vulnerabilities in the Ivanti Connect Secure gateways. These vulnerabilities impacts all supported versions of ICS (22.x).

The following CVE's have been fixed:

### 22.7R2.6

This release includes important security fixes as part of our ongoing commitment to secure-by-design. There has been no evidence of exploitation in the wild of anything fixed in the release and full details of these security fixes will be available in our next <u>security advisory</u>, scheduled for release on February 11, 2025.

### 22.7R2.5

This release includes important security fixes as part of our ongoing commitment to security. The details of these security fixes can be found in <u>security advisory blog</u>, dated January 8th, 2025.

CVE's	Security Advisory Blog
CVE-2025-0282	For more details, see <u>security advisory</u> blog.
CVE-2025-0283	For more details, see <u>security advisory</u> blog.

### 22.7R2.4

This release includes important security fixes as part of our ongoing commitment to secure-by-design. There has been no evidence of exploitation in the wild of anything fixed in the release and full details of these security fixes will be available in our next <u>security advisory</u>, scheduled for release on December 11, 2024.

### 22.7R2.3

This release includes important security fixes as part of our ongoing commitment to secure-by-design. There has been no evidence of exploitation in the wild of anything fixed in the release and full details of these security fixes will be available in our next <u>security advisory</u>, scheduled for release on November 12, 2024.

### 22.7R2

CVE's	Ivanti Forum links
CVE-2023-38551	For more details, see <u>Ivanti forum</u> .
CVE-2024-6387	For more details, see <u>Ivanti forum</u> .

### **Known Issues**

The following table lists the known issues in respective releases:

Problem Report Number	Release Note
Release 22.7R	2.8
1570700	<b>Symptom</b> : Not able to launch jsam <b>Condition</b> : When the platform used is ubuntu24 version <b>Workaround</b> : None
1534672	<b>Symptom</b> : HTML5 external storage will not work. <b>Condition</b> : When admin configures domain joined machines. <b>Workaround</b> : Admin can use non domain joined machines as external storage.
1562404	<b>Symptom</b> : Citrix Default ICA & custom ICA will not work. <b>Condition</b> : When Citrix workspace client 2409 is used in client machine. <b>Workaround</b> : Use Citrix workspace client 2405.
1551511	<b>Symptom</b> : Kernel panic is observed with RIP:xfrm_state_delete <b>Condition</b> : During Tunnel deletion <b>Workaround</b> : None
1563977	Symptom: Kernel panic is observed with RIP: ip_forward_finish Condition: During IP packet routing Workaround: None
Release 22.7R	2.6
1343190	<b>Symptom</b> : Not able to add file share path as user bookmark. <b>Condition</b> : When file share path contains special characters. <b>Workaround</b> : Access via root share path.
1490114	<b>Symptom</b> : Unable to go back to previous folder. <b>Condition</b> : When folder name contains special characters like #. <b>Workaround</b> : Create the folder without special characters.
1518444	<b>Symptom</b> : VDI bookmark is not shown in the End user page and works fine in Admin UI page. <b>Condition</b> : When the Admin imports 9.x XML/user configuration on ICS 22.7R2.6.

Problem Report Number	Release Note
	Workaround: Select the Role and click Save Changes in the UI options page.
1521559	<ul> <li>Symptom: Joining node is showing enabled and unreachable when node joins in AP cluster.</li> <li>Condition : When a Node joins a new cluster and switches to AP mode, it receives the cluster VIP.</li> <li>Workaround: Join node in AA cluster mode and then convert into AP cluster mode or reboot the setup.</li> </ul>
Release 22.7	R2.3
1383188	<b>Symptom</b> : AD domain join is failing for Windows Server 2025 <b>Condition</b> : AD domain join is failing for Windows Server 2025 with default windows server config. <b>Workaround</b> : None
1435999	<ul> <li>Symptom: Cluster Upgrade: Device gets stuck in "started all services" when upgrading to 22.7R2.3 image</li> <li>Conditions: Under rare scenarios, when the vApp options got disabled for the VM on ESXi, and the backup valVEConfig is not in sync with the current config.</li> <li>Workaround: None. Need to do rollback and do RDC, and then remove the backup valVEconfig file.</li> </ul>
1428554	<ul> <li>Symptom: When a full config export is triggered, xml download progress is not seen.</li> <li>Condition: When full config export is triggered the progress bar of the xml download is not seen some times</li> <li>Workaround: XML download happens in the background, the progress bar is not visible</li> </ul>
1442736	<b>Symptom</b> : Folder view is missing in 22.X <b>Conditions</b> : For Citrix listed applications. <b>Workaround</b> : Currently we support block/list view.
Release 22.7	R2.1
1397724	<b>Symptom</b> : ICS upgrade from 22.7R2.1 or later fails through REST API. <b>Conditions</b> : Occurs during upgrades from 22.7R2.1 to newer versions. <b>Workaround</b> : None. Use Admin UI for upgrades instead.

Problem Report Number	Release Note
1387167	<b>Symptom</b> : Citrix Storefront web bookmark over HTML5 is not working with 2203/2402 LTSR version. <b>Condition</b> : When ICS client access is selected with HTML5. <b>Workaround</b> : User can use ICS client access as CTS/WSAM.
1371885	<ul> <li>Symptoms: Importing mTLS Client Certificates and Keys/bin/tar: tlscerts/cert.pem: Not found in archive message seen on ICS console after upgrade to 22.7R2.1</li> <li>Condition: On an upgrade to 22.7R2.1</li> <li>Workaround: None. Functionality is not affected. These message can be ignored.</li> </ul>
1369802	<ul> <li>Symptom: Under rare conditions, CPU utilization goes to an average of 30 percent</li> <li>Condition: When Adaptive Auth is enabled on the ICS cluster.</li> <li>Work around: <ul> <li>Disable UEBA from System &gt; Configuration &gt; Behavioural Analytics.</li> <li>Wait for 15 mins</li> <li>Re-enable UEBA.</li> </ul> </li> </ul>
1380280	<ul> <li>Symptom: Invalid Domain name error seen when AD domain name is having "0"</li> <li>Condition: Domain name containing 0 fails to save with error "Invalid Domain name".</li> <li>Workaround: Upgrade of ICS from older release will work but need to Reset join. New AD configuration should be without 0 in domain name.</li> </ul>
1383587	<b>Symptom</b> : AD domain join takes 15 mins to join. <b>Condition</b> : Upgrade to 22.7r2 or later. <b>Workaround</b> : Save changes of AD config does a AD domain join
1367931	<ul> <li>Symptom: GCP - Adding management port details of other in cluster is returning with invalid IPv6 gateway error message.</li> <li>Condition : When adding the details of management port for another node in cluster environment.</li> <li>Workaround: Create cluster with two interfaces (device deployed with internal and external port only).</li> </ul>

Problem Report Number	Release Note
Release 22.7R2	
PCS-45286	<b>Symptom</b> : VDI desktop client launch fails. <b>Condition</b> : When user uses latest VDI horizon client 2309. <b>Workaround</b> : User must use VDI horizon client 2103.
PCS-47033	<b>Symptom</b> : iveConcurrentUsers count is 0 in SNMP Traps. <b>Conditions</b> : When max users are signed in to ICS and tries to send iveMaxConcurrentUsersSignedIn SNMP trap. This SNMP trap has the iveConcurrentUsers set to 0. <b>Workaround</b> : None.
PCS-47017	<b>Symptom</b> : HTML5 RDP login via smart card will not work. <b>Conditions</b> : When Windows client machine is configured with windows Hello PIN and Gemalto smart card is used to login via RDP <b>Workaround</b> : Disable Windows Hello will work
PCS-47022	<ul> <li>Symptom : "Total Maximum Bandwidth" configuration is taking more value than interface limit in hyper-v platform</li> <li>Condition: In Hyper-V platform when configuring "Total Maximum Bandwidth" in Network overview page</li> <li>Work Around: Admin can configure the "Total Maximum Bandwidth" lesser than interface speed limit.</li> </ul>
PCS-46998	<b>Symptom</b> : Kernel stack trace is seen on ICS console. <b>Conditions</b> : Under rare conditions, Kernel stack trace is seen on ICS console. <b>Workaround</b> : None. ICS has to be power cycled.

### **Documentation**

Ivanti documentation is available at https://www.ivanti.com/support/product-documentation.

### **Technical Support**

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

- https://forums.ivanti.com/s/contactsupport
- support@ivanti.com

For more technical support resources, browse the support website <a href="https://forums.ivanti.com/s/contactsupport">https://forums.ivanti.com/s/contactsupport</a>