



Ivanti Connect Secure Release Notes
22.7R2.13

Copyright Notice

This document is provided strictly as a guide. No guarantees can be provided or expected. This document contains the confidential information and/or proprietary property of Ivanti, Inc. and its affiliates (referred to collectively as "Ivanti") and may not be disclosed or copied without prior written consent of Ivanti.

Ivanti retains the right to make changes to this document or related product specifications and descriptions, at any time, without notice. Ivanti makes no warranty for the use of this document and assumes no responsibility for any errors that can appear in the document nor does it make a commitment to update the information contained herein. For the most current product information, please visit www.lvanti.com.

Copyright © 2026, Ivanti, Inc. All rights reserved.

Protected by patents, see <https://www.ivanti.com/patents>.

Contents

Revision History	4
What's New	6
Introduction	16
Noteworthy Information	17
Unsupported Features	23
Caveats	24
Upgrade and Migration	25
Upgrade Path	25
Configuration Migration Path	25
Support and Compatibility	26
Hardware Platforms	26
Virtual Appliance Editions	26
Licensing Types	30
Resolved Issues	31
Security Advisory and Patch Update	51
Known Issues	53
Documentation	59
Technical Support	59

Revision History

The following table lists the revision history for this document:

Document Revision	Date	Description
14.0	May 2026	Update What's new and Resolved Issue for 22.7R2.13.
13.0	February 2026	Update What's new and Resolved Issue .
12.0	January 2026	Updated What's New , "Known Issues" on page 53, "Resolved Issues" on page 31, version and build number, "Upgrade and Migration" on page 25 for 22.7R2.11
11.0	October 2025	Updated "Known Issues" on page 53, "Resolved Issues" on page 31, version and build number, "Upgrade and Migration" on page 25 for 22.7R2.10
10.0	September 2025	Updated "Known Issues" on page 53, "Resolved Issues" on page 31, "Noteworthy Information " on page 17, version and build number, "Upgrade and Migration" on page 25 for 22.7R2.9
9.0	May 2025	Updated "Known Issues" on page 53, "Resolved Issues" on page 31, "Noteworthy Information " on page 17, version and build number, "Upgrade and Migration" on page 25 for 22.7R2.8
8.0	April 2025	Updated "Resolved Issues" on page 31, "Noteworthy Information " on page 17, version and build number, "Upgrade and Migration" on page 25 for 22.7R2.7
7.0	February 2025	Updated "What's New" on page 6, "Resolved Issues" on page 31, "Known Issues" on page 53, "Noteworthy Information " on page 17, version and build number, "Upgrade and Migration" on page 25 for 22.7R2.6

Document Revision	Date	Description
6.0	January 2025	Updated "What's New" on the next page, "Resolved Issues" on page 31, "Known Issues" on page 53, version and build number, "Upgrade and Migration" on page 25 for 22.7R2.5
5.0	December 2024	Updated "Resolved Issues" on page 31, version and build number, "Upgrade and Migration" on page 25, for 22.7R2.4
4.0	October 2024	Updated "What's New" on the next page, "Resolved Issues" on page 31, "Known Issues" on page 53, version and build number, "Upgrade and Migration" on page 25 for 22.7R2.3
3.0	September 2024	Updated "Resolved Issues" on page 31, version and build number, "Upgrade and Migration" on page 25, for 22.7R2.2
2.0	July 2024	Updated with "What's New" on the next page, "Resolved Issues" on page 31, "Known Issues" on page 53, version and build number, "Upgrade and Migration" on page 25, and Noteworthy Information 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 22.7R2.13

Product Version	Build
ICS 22.7R2.13	6071
ISAC 22.8R5	41063
Default ESAP	4.6.4

This release includes security enhancement and [bug fixes](#). Ivanti encourages customers to upgrade to this latest version..

Release 22.7R2.12

Product Version	Build
ICS 22.7R2.12	5819
ISAC 22.8R5	41063
Default ESAP	4.6.4

This release includes [bug fixes](#). There are no new features. This release includes patch for OpenSSL CVE-2025-15467. Feature parity of this release remains same as 22.7R2.11. Refer the [KB](#) for more info.

Release 22.7R2.11

Product Version	Build
ICS 22.7R2.11	5751
ISAC 22.8R5	41063
Default ESAP	4.6.4

New Features

- **Proxy Servers for PSAM Connection:** ICS now supports Proxy Server for connections to PSAM destination (TCP only) via Proxy Servers. Administrators can modify existing policies to route traffic through proxy servers, enhancing both security and scalability, see [Proxy Servers for PSAM Connection](#).
- **Source IP and Geo-Location access restriction:** Allow administrators to configure and enable both Geo-Location and manual IP lists simultaneously. This enhancement improve ICS security by allowing customers to better restrict access from bad actors while permitting legitimate traffic, see [Specifying Source IP Restrictions at the Realm Level](#).
- **FallBack Authentication Server:** ICS now supports configuring authentication fallback options within any user realm. Currently, the available fallback option is TOTP (Time-Based One-Time Password). This means if the primary authentication methods such as certificate, or Active Directory fails, users can use TOTP as a backup method, see [FallBack Authentication Server](#).
- **Enhancements in End User Portal:** ICS now supports the ability to delete multiple user-created bookmarks at once in Web, Files, Terminal Sessions, and HTML5 Access Sessions. This feature is available in both Block view and List view.
- **Samsung Knox Manage:** This feature enhances security by ensuring that only authorized android devices are permitted access based on validated device identifiers, see [Configuring an MDM Server](#).

Release 22.7R2.10

Product Version	Build
ICS 22.7R2.10	5367
ISAC 22.8R4	38767
Default ESAP	4.3.8

New Features

- **Multi-Factor Authentication Support for REST API:** Users authenticating via the REST API now benefit from MFA. Depending on realm configuration, both primary and secondary authentication steps are enforced for increased security, see [Realm-based Authentication](#).

- **SFTP Archiving Support on Gateways:** ICS Gateways now support SFTP for archiving. Archived data can be securely transferred to remote SFTP servers, improving both data protection and storage flexibility, see [Archiving Servers](#).
- **OAuth Enhancement: Proof Key for Code Exchange (PKCE) Support:** Proof Key for Code Exchange (PKCE) can now be enabled or disabled for each OAuth authentication server, giving administrators granular control over OAuth flows, see [Configuration on ICS](#).
- **Maximum SAML Response Size:** A new UI option has been added to configure the XML Buffer size. By default, the XML Buffer is set to 1 MB, see [Configuring Miscellaneous Security Options](#).
- **Support for Minimum Version Check:** In Host checker, enable the **Minimum Version check** for Windows Update Agent, in the Patch Management Rule, see [Host Checker](#).
- **Enhancements in End User Portal**
 - **Global Search Functionality:** Users can quickly find content across the portal using the new global search, available in Block View and List View.
 - **Custom Tooltip for Bookmark Titles:** For bookmark titles with long text, a custom tooltip is displayed when hovering over the title. This ensures that users can view the complete title even if it is truncated in the interface.

Release 22.7R2.9

Product Version	Build
ICS 22.7R2.9	4757
ISAC 22.8R3	35577
Default ESAP	4.3.8

New Features

- **Package Installation Status:** Service package installation status page now gives start and end time stamps, and software version being installed, during upgrade and downgrade scenarios from 22.7R2.9 onwards, see [Software Upgrade Status Page](#).
- **End User Portal:** Improved search functionality and with pagination on Admin Users page.



Addition or deletion of users on end user admin page are displayed on ICS Admin logs.

- **Azure Qualification:** ISA-V deployment on Azure supports DdV5 and DdsV5 series VMs.
- **Increase ISA-V log size (Event/User/Admin):** ISA-V log size is now increased up to 400 MB from existing 200 MB, see [Log Events Settings Configuration Page](#).



To know more on unsupported features, refer to [Unsupported Features](#).



It is mandatory to see "Noteworthy Information " on page 17

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
- **Multi Factor Authentication:** Multi Factor Authentication can be configured for the Realm(s). It is recommended to configure Multi Factor Authentication for enhanced Security. View Admin Realms and User Realms to review the configuration, see [Authentication Realms](#).

The notification banner is added on the following pages:

- Dashboard Page
- Administrator Authentication Realm Page
- User Authentication Realm Page

Sample Notification Banner

 Warning: Multi Factor Authentication is not configured for the Realm(s). It is recommended to configure Multi Factor Authentication for enhanced Security. Go to [Admin Realms](#) and [User Realms](#) to review the configuration. 

- **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 [Run External ICT Scan](#).



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

Release 22.7R2.7

Product Version	Build
ICS 22.7R2.7	4377
ISAC 22.8R1	31437
Default ESAP	4.3.8

New Features

This release includes [bug fixes](#). There are no new features.

Release 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 [Using the Debug Log](#) and [Supported Virtual 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 [Configuring Sign-In Pages](#).
 - 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 [Logs](#).

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 [Disk Usage Monitoring](#) and [Disk Cleanup](#).
- **XML Import/Export:** Strengthening the XML config file import/export process with password authentication checks, and updating Rest APIs accordingly, see [Exporting an XML Configuration 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 [Configuring Sign-In Pages](#).

Release 22.7R2.2

Product Version	Build
ICS 22.7R2.2	3221

Product Version	Build
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 [Using the Mobile Options](#).
- **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 [Health Check](#).
- **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 [Realm-based Authentication](#).
- **FDQN Support:** Lockdown Mode Exception Rule is added with Remote FDQN Resources to support FDQN, see [Custom-based Resource Access](#).

- **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 [Using Remote 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 [Security Hardening](#).
- **Configuring Administrator Roles:** You can customize the number of records to be displayed per page in a table, see [Creating and Configuring Administrator Roles](#).
- **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 [Configuring Miscellaneous Security Options](#).
- **Additional Client package(s):** Now, only the active client package will get exported/carry forwarded, see [Software Upgrade Page](#).
- **MDM Auth Server:** New option is added with interface selection for MDM connections to enable outgoing interface, see [Configuring an MDM Server](#).

- **SAML/ Web Server:** New setting is added to monitor the SAML/Web server, see [Configuring 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 [Using the Mobile Options](#).
- **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 [KVM](#), [Hyper-V](#), [VM](#), [Nutanix](#).
- **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 22.7R2.13

- As part of Citrix's transition from file-based to cloud-based licensing, this release will support Citrix 2507 LTSR versions.
- This release version includes security enhancement. Ivanti encourages customers to upgrade to this latest version.

Version 22.7R2.11

- Starting with ICS version 22.R2.11 the default global (**System > Configuration > Client configuration**) and Role level (**User > User Roles > <name> > VPN tunnelling > Ivanti Secure Access Client Settings**) options for the ISAC Desktop user experience (UX) is set to NeUX for fresh installations of ICS.
 - Ensure your environment allows installation and execution of the React Native Appx bundle used by NeUX.
 - Follow the guidance in the [forum](#) article to enable the Appx bundle.
 - Applies to: New installations to ICS 22.7R2.11 and later.
- The planned deprecation of the Ivanti Secure Access Client (ISAC) Classic UI has been moved out to allow customers additional time to plan for the transition. For the latest timeline and guidance, see the [KB](#) article.
- The Next Generation Web Server (Nginx) will restart when performing any of the following certificate-related operations. User connections may drop during this period:
 - Mapping a device certificate to a port.
 - Importing or deleting a trusted client CA.
 - Making changes to inbound TLS versions and cipher suites.

Version 22.7R2.10

- After a node joins the cluster, it may take up to 60 seconds for the correct VIP owner to be reflected. This delay ensures accuracy in cluster state reporting.

- From 22.7R2.10 release onwards ICS has been Certified for NIAPP Common Criteria. Refer to the [NIAPP Certificate](#) for additional details.
- A secure-by-default configuration change is introduced in 22.7R2.10 to enable the host header validations on fresh deployment/upgrade in HW, VMware and Hyper_V instances. For Cloud and KVM instances the default behavior is not changed and the option remains disabled by default. For more information, see [KB](#).



With Q1 2026 Release of ICS, the default ESAP version will be 4.6.4. ESAP 4.6.4 has been released in Q2 2025.

Version 22.7R2.9

- To enable TLS 1.3 functionality, ensure that the enable_tls_v1_3 Key Value Pair is configured and pushed to ISAC client from the MDM server.
- The CSR generation process in ICS 22.7R2.9 is improved. This makes the process more secure and user friendly, compared to previous releases.
- This release includes important security enhancements as part of our ongoing commitment to secure-by-design. Ivanti encourages customers to upgrade to this latest version.
- Added validation checks to verify the file-type in `/api/v1/system/maintenance/upgrade`, when passing the file to the API. Modify your scripts to include the file-type as `'application/octet-stream'`.

Code snippet for python provided by Postman App.

```
import requests

url = "https://<ICS-IP>/api/v1/system/maintenance/upgrade"

payload = {}
files=[
    ('file',('package.pkg',open
    ('/C:/Users/qa1/Downloads/<package.pkg>', 'rb'), 'application/octet-stream'))
]
headers = {
    'Authorization': '.....'
}

response = requests.request("POST", url, headers=headers, data=payload, files=files)

print(response.text)
```

Version 22.7R2.8

- To enable TLS 1.3 functionality, ensure that the enable_tls_v1_3 Key Value Pair is configured and pushed to ISAC client from the MDM server.
- 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.

Version 22.7R2.7

- To enable TLS 1.3 functionality, ensure that the enable_tls_v1_3 Key Value Pair is configured and pushed to ISAC client from the MDM server.
- 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

- To enable TLS 1.3 functionality, ensure that the enable_tls_v1_3 Key Value Pair is configured and pushed to ISAC client from the MDM server.
- 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 [API Sample](#).

Version 22.7R2.3

- Functionality provided by the IF-MAP feature has reached a final state. Refer the [forum article](#) for more information.

Version 22.7R2.1



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 [KB](#). 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

- Admin Access via External Interface is no longer supported in Ivanti Connect Secure (ICS) from Version 22.7R2.9, refer to [article](#).
- Ivanti Connect Secure: Features and Options Becoming Unsupported or Deprecated in 22.7Rx, 22.8Rx, and 25.x, refer to [article](#).
- Deprecation of TDI Fail-Over Option for Pulse SAM Connection, refer to [article](#).

Caveats

- Active Directory (AD) 2025 and above will not be supported on 22.7Rx releases due to incompatibility issues with Samba versions. For AD 2025 support, upgrading to release 25.x is required.

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 features listed in [KB44747](#) 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 [KB](#) before staging or upgrading to prevent upgrade related issues.


Upgrade to	Upgrade From (Supported Versions)
22.7R2.13	22.7R2.12, 22.7R2.11
22.7R2.12	22.7R2.11, 22.7R2.10
22.7R2.11	22.7R2.10, 22.7R2.9, 22.7R2.8
22.7R2.10	22.7R2.9, 22.7R2.8, 22.7R2.7

Configuration Migration Path

The following table describes the tested migration paths. See [PSA-ISA-Migration-Guide](#) 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)
22.7R2.13	22.7R2.12, 22.7R2.11

 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 22.7R2.13

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 8.0U3d 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	vCPU	RAM	Disk Space
Azure-V	ISA4000-V (Standard_D4ds_v5 - 2NICs)	4	16 GB	80 GB

Variant	Platform	vCPU	RAM	Disk Space
	ISA6000-V (Standard_D8ds_v5 - 2NICs)	8	32 GB	80 GB
	ISA6000-V (Standard_D8ds_v5 - 3NICs)	8	32 GB	80 GB
	ISA8000-V (Standard_D16ds_v5 - 2NICs)	16	64 GB	80 GB
	ISA8000-V (Standard_D16ds_v5 - 3NICs)	16	64 GB	80 GB
	ISA4000-V (Standard_D4d_v5 - 2NICs)	4	16 GB	80 GB
	ISA6000-V (Standard_D8d_v5 - 2NICs)	8	32 GB	80 GB
	ISA6000-V (Standard_D8d_v5 - 3NICs)	8	32 GB	80 GB
	ISA8000-V (Standard_D16d_v5 - 2NICs)	16	64 GB	80 GB
	ISA8000-V (Standard_D16d_v5 - 3NICs)	16	64 GB	80 GB
	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 - 3NICs)	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

Variant	Platform	vCPU	RAM	Disk Space
AWS-V	ISA4000-V (M5.xlarge - 3 NICs)	4	16 GB	80 GB
	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
OpenStack KVM OpenStack Dalmatian on Ubuntu 24.04.2 LTS	ISA4000-V	4	8 GB	80 GB
	ISA6000-V	8	16 GB	80 GB
	ISA8000-V	12	32 GB	80 GB
Hyper-V Microsoft Hyper-V Server 2022	ISA4000-V	4	8 GB	80 GB
	ISA6000-V	8	16 GB	80 GB
	ISA8000-V	12	32 GB	80 GB

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

For more information see [Support Platform Guide](#).

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 22.7R2.13	
1792433	Client UI mode neux is enforced post upgrading to ICS 22.7R2.12
1800401	Source IP is disabled upon upgrading the ICS server from 22.7R2.9 to 22.7R2.12.
Release 22.7R2.12	
1713105	Kernel panic was observed on ICS versions 22.7R2.8 and above due to a kernel bug in the NFQUEUE reinjection path, which could result in an abrupt reboot of the ICS server. This issue has been fixed.
1742929	OCSP checks for certificates failed intermittently on ICS versions 22.7R2.10 and above, due to an issue in parsing the OCSP response in the ICS server. This parsing issue has now been resolved.
Release 22.7R2.11	
1675864	The Active Directory (AD) join status occasionally appears as RED in the A/P (Active/Passive) cluster.
1675864	ACL checks fail because there is a mismatch between the client IP and the store IP in the PSAM DNS cache.
1704142	During a cluster upgrade, one node fails to upgrade and displays the GUI error message: "Upgrade failed.(-3)"
1712613	During the firmware upgrade from version 22.7R2.9 to 22.7R2.10, the console displays the error message: "Verifying package integrity ... failed."
1713083	The web process crashes on the active node of ICS running version 22.7R2.9 due to a buffer assertion failure.
1715613	After upgrading ICS from 22.7R2.9 to 22.7R2.10, ICS acting as an Identity Provider (IdP) no longer processes incoming SAML AuthnRequests.

Problem Report Number	Summary
1728549	REST API-based authentication does not work when the VPN hostname resolves to an IPv6 address.
1737782	IP addresses from "Korea, Republic Of" are blocked, even though they are explicitly allowed in the source IP restriction settings.
1548062	NTP configuration override does not function correctly when importing System.cfg that specifies a source interface for NTP traffic.
1706448	DNS resolution fails on the Active Directory (AD) troubleshooting page when multiple AD servers are configured.
1619697	Advanced HTML5 session recording to external storage does not function correctly after upgrading ICS.
1651479	Active Directory continues to run even when incorrect credentials are entered on a domain-joined IVE
1664473	Attempting to upload a file larger than the allowed size displays an error on the screen.
1658046	User-created HTML5 bookmarks do not function as expected on ISA6000v appliances.
1675236	The pre-authentication sign-in notification displays a long text message.
1676770	A blank screen is displayed when attempting to access a file browsing bookmark created by the user.
1680651	REST API authentication fails when the administrator password contains the special character ":", even though the same password works via the admin Web GUI.
1670596	The dsbsd and cgi-server services encounter failures during OCSP checks when deep OCSP responder certificate chains are used.
1693396	Audio playback continuously loops or repeats during HTML5 RDP sessions on MacOS Safari after upgrading ICS.
1694587	The web process crashes, which results in dsagentd dropping all active connections.

Problem Report Number	Summary
1693381	The hproxy-server process crashes with a segmentation fault (segfault) when executing a Python API script.
1700467	Web Process Crash
1665134	The screen resolution does not auto-refresh during HTML5 RDP sessions from Mac to Windows after upgrading ICS.
1684209	Multi-Factor Authentication (MFA) fails when accessing a web bookmark through the Pass Through Proxy.
1714418	Attempting to launch an HTML5 RDP bookmark results in the error: "Unimplemented decrypt tag 3076."
1648412	NSA log forwarding fails due to the presence of duplicate JSON filters after importing configuration files.
1618112	After changing the RSA PIN on the ACE server, the old login user interface is displayed instead of the updated UI.
1634109	User login attempts fail with a "Max Sessions" error, even though there are sufficient available licenses on the ISA appliance.
1644084	Prevent VIP failover when External ICT scan is performed through REST API.
1716795	The Postgres program (database service) recently failed.
1703110	The Perl process intermittently crashes in an Active/Active cluster deployment on Azure.
1720550 1716243	After upgrading to Connect Secure version 22.7R2.10, users experience unexpected disconnections or are unable to establish new connections.
1649267	The LDAP unbind operation is taking an unusually long time to complete on the IPS server.
1681780	Users are unable to obtain an IP address during connection attempts and receive error 1319.
1708182	REST API calls fail with an execution error during Active Directory reset join and basic verification operations.


Problem Report Number	Summary
1724912	When Pulse One is enabled on the Connect Secure server, event logs do not display data regarding the results of External Integrity Check runs.
Release 22.7R2.10	
1679818	REST API ACL Update Error for IP Range Format in ICS Configuration
1637301	ICS server running 22.7R2.8 code and the CGI-Server process crashed.
1636887	Post upgrade to 22.7R2.9, ISA 8000V servers exhibit a sustained 100% CPU usage.
1627127	Periodic snapshot feature fails to function in firmware version 22.7R2.8 (Build 4471).
1626502	Admini access logs display an older IP address for login failures.
1626060	Event logs do not display EICT scan results as expected.
1620642	VPN connections cannot be established from Holo Lens 2 devices.
1620485	HTML5 SSH Bookmark throws "Page Not Found" error when using framed toolbar.
1619178	Selective push config and XML import between nodes fail with "invalid IPv4 address" error.
1618167	ICS fails to process OCSP requests correctly when proxy is enabled (22.7R2.8).
1617065	System reboots unexpectedly during ICT scans initiated via REST API.
1615682	ICS security warnings link to outdated KBA references.
1611426	Active node displays persistent Watchdog errors post upgrade to 22.7R2.8.
1603139	User unable to log in after entering credentials when accessing backend resources via PTP.
1595897	REST-API responses for "logging-disk" show incorrect usage values.
1592756	Active/Active cluster stuck in leader/leader status following upgrade to ICS 22.7R2.6.

Problem Report Number	Summary
1592676	Nodes in A/A cluster report incorrect vpnACLCount in SNMP responses.
1591366	Error "The server had an internal error" occurs when saving changes to the "Validate Server Certificate" option if a backup LDAP server is configured.
1588276	Web Bookmark functionality is broken after migrating from 9.1 to 22.x.
1588028	Clip icon does not appear during file upload via FileShare bookmark.
1583871	Unexpected postgres program failure observed in ICS 22.7R2.6.
1574009	Login page displays copyright notice after UI setting to disable has been used.
1562348	Favorites functionality for Terminal Services is not operating as expected in specific scenarios.
1559144	ISA-6000 (22.7R2.6) shows inconsistencies in user access logs.
1557985	Access issues with SSH bookmarks observed after migration to ISA4000V.
1554467	Users experience mass tunnel drops on 2-node ISA 8000 cluster (22.7R2.6 build 3981).
1554439	Default role options welcome message popup fails to appear after updates.
1548088	ICS servers incorrectly lease AdvancedHTML5 user licenses from licensing server.
1636813	The dserver-tasks program has experienced failures following an upgrade to version ICS 22.7R2.9.
1544244	Admin/Event logs do not record updates to rewriting filters.
1541927	Admin log outputs contain incorrect logging information.
1541023	Admins cannot upload upgrade package when Google Cloud cluster is in Active/Active mode.
1536467	VIP failover is not functioning correctly on servers running 22.7R2X.
1535831	"User Summary Report" displays incorrect data in IPS.
1531297	LDAP authentication breaks after migrating from PSA to ISA 22.7R2.5.

Problem Report Number	Summary
1530281	ICS fails to handle special characters during configuration via NETCONF connection.
1529005	New ISA6000 cluster nodes struggle to route traffic through the appropriate node during failover.
1511208	Behavior check required for cluster formation when default VLAN ID is used.
1414045	Joining node taking the VIP ownership during join operation in cluster causing the establish VPN connection to disconnect and re-connect
1621177	System/User Binary import/XML import is failing with 22.7R2.9 gateway registered to 22.8R1.3.1 controller.
Release 22.7R2.9	
1415379	Cluster Node Hang and Recovery during Active Sync with IKEv2 VPN after migrating to 22.7R2.
1302269	Uploading certs in Trusted Server CAs, it shows a message about duplication and the cert fails to add.
1379921	Events logs are not getting generated after a successful external ICT Scan when upgrade to 22.7R2.
1482628	VLS License is not getting activated after upgrade from 22.7R2.1 to 22.7R2.3 due to change in VM ID.
1597472 1513765 1578451 1524159	PSAM process crashes leading to user disconnection.
1537623	Could not delete user records through the UI on ICS 22.7R2.6.
1391127	Domain joined Windows machine causing dswws, cgi-server process to crash for the AD authentication.
1490173	An error "Please wait while connecting" seen with Advanced HTML5 connections (SSH and RDP sessions).
1536465	File Share/Browsing issue on 22.7R2.6 - Errors when folder contains a shortcut to launch an application

Problem Report Number	Summary
1527004 1576055	Users are unable to access PSAM resource post upgrading to 22.7R2.6 due to PSAM policy user attribute name appended with : at the end and failing with ACL check.
1550364	X-Frame-Options response header is seen twice for welcome.cgi URL.
1551450	RESTAPI: Internal Server Error while using Non ASCII Character UTF-8.
1524029 1541584	ntpq command execution from ICS Troubleshooting page via selected interface fails.
1531961	Guest OS Restart/Shut Down Issue After Ivanti Connect Secure Upgrade 22.7R2.4.
1556475	Config publish fails even after disabling ActiveX parameters and process snapshots observed.
1559412	User created Adv HTML5 W/ NLA bookmarks overrides settings for the additional NLA bookmarks.
1545594	ICS version 22.7R2.6 unable to handle the shortcuts in certain conditions.
1582076	In end user page, user is unable use the drop down arrow to select the realm, when multiple realms are assigned.
1582077	On the admin UI sign in policies, admins are unable use the move down button to move the mapped realms when multiple realms are assigned. Move up button works.
1540731	Browse-server process consuming High CPU on ICS 22.7R2.6
1456533	ICS SNMP Unresponsive to 'get' queries.
1591654	Issue with special characters in Bookmark description field on ISA 22.7R2.8.
1593038	AD authentication not working and not able to create AD Auth with Domain name containing hyphen in 22.7R2.8.
1427239	SCP Archiving is failing at times for config backups due to timer issue.
1423601	NTLM/KRB SSO Issue. After migrating from PSA to ISA, when accessing the bookmark it throws internal error after entering manual credentials.

Problem Report Number	Summary
1449954	GCP - Adding management port details of other in cluster is returning with invalid IPv6 gateway error message.
1528963	Need a interprocess lock to prevent race condition during remote TOTP invocation.
1588292	User with country based restriction (Virgin Island) is unable to connect to ISA VPN while using ISP, gets an error "Rejected by the server".
1597195	cgi-server crashes noticed on licensing server running on 22.7R2.8.
1582533 1610953	SMBCONF process crash after upgrading to 22.7R2.7.
1583261	Not able to access the Windows File shares links retrieved via User Attributes in certain cases.
1569267	Language translation issue in File Bookmark feature on ICS 22.7R2.5 / 2.6
1578962	User Session instability while logging In To ICS server via certificate based authentication In certain cases.
1534672	HTML5 external storage will not work when admin configures domain joined machines.
1592085 1444327 1551511 1563977	Kernel panic is observed in ICS in 22.7.x builds under multiple conditions (RIP:xfrm_state_delete, and RIP:ip_forward_finish).
1594711	Folder path truncation issue beyond 3 subfolder levels in File Resource Bookmarks on ISA platform 22.7R2.8.
1598063	Upload delays during IPS-V upgrade in Active/Active WAN Cluster. Applicable for ICS and IPS
1614728	Cluster Setup with ICS AD Server – "Save Credentials" Option Unchecked, may cause unexpected results in AD Auth Server in cluster (A/P) setup.
Release 22.7R2.8	
1535402	Not able to edit a file bookmark name when the configured URL contains <USERNAME> syntax.

Problem Report Number	Summary
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.
1504395	Improved handling and logging of watchdog when it encounters high FD values.
1499531	<p>Geolocation names have been updated to match current ISO-3166 values.</p> <hr/> <p> This may require manual adjustment of some Geolocation rules.</p> <hr/>
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.

Problem Report Number	Summary
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 <code>iveVPNtunnels</code> 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.
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.

Problem Report Number	Summary
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.
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.

Problem Report Number	Summary
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.shtml file on 22.x versions.
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.

Problem Report Number	Summary
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 .lnk Files Instead of Folder Browsing on ICS Version 22.7R2.1.
1424576	Issues with SAML-Authentication Server config sync from nSA controller.
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.

Problem Report Number	Summary
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
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

Problem Report Number	Summary
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 DSWSO recently failed when using certificate authentication
1416142	Process snapshots generated for unityConfigSpli & unityConfigNetc after 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.

Problem Report Number	Summary
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 KB .
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

Problem Report Number	Summary
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 Security Advisory 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.
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

Problem Report Number	Summary
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 stopped 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.
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.

Problem Report Number	Summary
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.
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.

Problem Report Number	Summary
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:

22.7R2.8

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 are available in our [security advisory](#).

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 [security advisory](#), 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 [security advisory blog](#), dated January 8th, 2025.

CVE's	Security Advisory Blog
CVE-2025-0282	For more details, see security advisory blog.
CVE-2025-0283	For more details, see security advisory 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 [security advisory](#), 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 [security advisory](#), scheduled for release on November 12, 2024.

22.7R2

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

Known Issues

The following table lists the known issues in respective releases:

Problem Report Number	Release Note
Release 22.7R2.13	
1867641	<p>Symptom: Copy and paste do not work in VNC.</p> <p>Condition: Occurs when using an Ubuntu VNC bookmark.</p> <p>Workaround: NA</p>
1861808	<p>Symptom: Copy and paste do not work in the HTML5 SSH bookmark.</p> <p>Condition: Occurs when attempting to use Ctrl+C and Ctrl+V.</p> <p>Workaround: Pasting with right-click works.</p>
Release 22.7R2.12	
1772967	<p>Symptom: When two Windows Update Agent rules are configured, with the first rule having minimum version check disabled, second rule also works like minimum version check is disabled though it is enabled.</p> <p>Condition: This is because the minimum version check attribute value is taken only from the first rule for both the rules.</p> <p>Workaround: Enable the "Minimum version" checkbox for both rules or at least for the first rule, so the client returns patch details to the server. You can also move the rule that requires a minimum-version check to the top of the policy so the checkbox setting is passed to the client.</p>
1751812	<p>Symptom: PSAL is unable to launch the Java applet (JSAM) on Mac machines.</p> <p>Condition: This occurs when an end user accesses a JSAM bookmark on a Mac machine with "HTTP Only Device Cookie" enabled.</p> <p>Workaround: NA</p>
Release 22.7R2.11	
1699595	<p>Symptom: Command actions such as Ping, ARP, Trace Route, Cluster RoundTrip, and TCP Dump under Gateway Troubleshooting in NSA fail to function.</p> <p>Workaround: To continue using these commands, access the Gateway User Interface (GW UI) directly, where these troubleshooting options remain fully operational.</p>

Problem Report Number	Release Note
1753244	<p>Symptom: The TOTP fallback server fails to function when used in conjunction with an LDAP authentication server.</p> <p>Condition: This issue occurs when configuring TOTP as a fallback for LDAP-based authentication.</p> <p>Workaround: N/A</p>
Release 22.7R2.10	
1677810	<p>Symptom: ISAC switches to Classic Mode after establishing connection even when ICS UI shows UI mode as NewUX.</p> <p>Condition: After upgrading to a new ICS software version.</p> <p>Workaround: Admin needs to set the UI mode to NewUX for the changes manually after each upgrade.</p>
1678709	<p>Symptom: Blank screen seen during Bookmark access.</p> <p>Condition: While trying to access user created bookmarks.</p> <p>Workaround: Access these via the browse bar in the EUP landing page by directly giving the file share path. Ensure file share location IP is added under Users > Resource Policies > Files (Windows ACL and SSO).</p>
Release 22.7R2.9	
1679016	<p>Symptom: JSAM launch fails on MAC OS Tahoe 26 RC version.</p> <p>Condition: When JSAM is launched via Safari browser.</p> <p>Workaround: Use Chrome browser to launch JSAM.</p>
1600939	<p>Symptom: When trying to create or update an Admin Realm through REST API, ICS returns "Unknown Element" error.</p> <p>Conditions: When the json input in the post body contains "allow-admin-signin-external-port".</p> <p>Workaround: Remove "allow-admin-signin-external-port" attribute. It is no longer supported in ICS 22.7R2.9 and later releases.</p>
1601128	<p>Symptom: ISAC Connection using IPv6 is disconnecting when custom UDP port</p> <p>Condition: When custom IPv6 UDP port is configured</p> <p>Workaround: None</p>
1600324	<p>Symptom: SAML Logout via ISAC is taking time.</p> <p>Workaround: None</p>

Problem Report Number	Release Note
1612333	<p>Symptom: "IP Pool cannot be empty" error observed when switching from DHCP-based IP assignment to Pool-based for VPN Connection Profiles via REST API.</p> <p>Condition: This occurs when the "ip-address-pool" attribute is provided before the "ip-address-assignment" attribute in the request body.</p> <p>Workaround: Provide "ip-address-assignment" before the "ip-address-pool" attribute in the request body.</p>
1621177	<p>Symptom: System/User Binary import/XML import is failing with 22.7R2.9 gateway registered to 22.8R1.3.1 controller.</p> <p>Condition: When trying to import the binary config using the Rest API (as form-data) or using NSA for importing config.</p> <p>Workaround: System/User Binary/XML import to be done from Admin UI of ICS.</p>
Release 22.7R2.8	
1570700	<p>Symptom: Not able to launch jsam</p> <p>Condition: When the platform used is ubuntu24 version</p> <p>Workaround: None</p>
1534672	<p>Symptom: HTML5 external storage will not work.</p> <p>Condition: When admin configures domain joined machines.</p> <p>Workaround: Admin can use non domain joined machines as external storage.</p>
1562404	<p>Symptom: Citrix Default ICA & custom ICA will not work.</p> <p>Condition: When Citrix workspace client 2409 is used in client machine.</p> <p>Workaround: Use Citrix workspace client 2405.</p>
1551511	<p>Symptom: Kernel panic is observed with RIP: __xfrm_state_delete</p> <p>Condition: During Tunnel deletion</p> <p>Workaround: None</p>
1563977	<p>Symptom: Kernel panic is observed with RIP: ip_forward_finish</p> <p>Condition: During IP packet routing</p> <p>Workaround: None</p>
Release 22.7R2.6	
1343190	<p>Symptom: Not able to add file share path as user bookmark.</p> <p>Condition: When file share path contains special characters.</p>

Problem Report Number	Release Note
	Workaround: Access via root share path.
1490114	<p>Symptom: Unable to go back to previous folder.</p> <p>Condition: When folder name contains special characters like #.</p> <p>Workaround: Create the folder without special characters.</p>
1518444	<p>Symptom: VDI bookmark is not shown in the End user page and works fine in Admin UI page.</p> <p>Condition: When the Admin imports 9.x XML/user configuration on ICS 22.7R2.6.</p> <p>Workaround: Select the Role and click Save Changes in the UI options page.</p>
1521559	<p>Symptom : Joining node is showing enabled and unreachable when node joins in AP cluster.</p> <p>Condition : When a Node joins a new cluster and switches to AP mode, it receives the cluster VIP.</p> <p>Workaround: Join node in AA cluster mode and then convert into AP cluster mode or reboot the setup.</p>
Release 22.7R2.3	
1435999	<p>Symptom: Cluster Upgrade: Device gets stuck in "started all services" when upgrading to 22.7R2.3 image</p> <p>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.</p> <p>Workaround: None. Need to do rollback and do RDC, and then remove the backup valVEconfig file.</p>
1428554	<p>Symptom: When a full config export is triggered, xml download progress is not seen.</p> <p>Condition: When full config export is triggered the progress bar of the xml download is not seen some times</p> <p>Workaround: XML download happens in the background, the progress bar is not visible</p>
1442736	<p>Symptom: Folder view is missing in 22.X</p> <p>Conditions: For Citrix listed applications.</p> <p>Workaround: Currently we support block/list view.</p>

Problem Report Number	Release Note
Release 22.7R2.1	
1387167	<p>Symptom: Citrix Storefront web bookmark over HTML5 is not working with 2203/2402 LTSR version.</p> <p>Condition: When ICS client access is selected with HTML5.</p> <p>Workaround: User can use ICS client access as CTS/WSAM.</p>
1397724	<p>Symptom: ICS upgrade from 22.7R2.1 or later fails through REST API.</p> <p>Conditions: Occurs during upgrades from 22.7R2.1 to newer versions.</p> <p>Workaround: None. Use Admin UI for upgrades instead.</p>
1371885	<p>Symptoms: Importing mTLS Client Certificates and Keys/bin/tar: tlcerts/cert.pem: Not found in archive message seen on ICS console after upgrade to 22.7R2.1</p> <p>Condition: On an upgrade to 22.7R2.1</p> <p>Workaround: None. Functionality is not affected. These message can be ignored.</p>
1369802	<p>Symptom: Under rare conditions, CPU utilization goes to an average of 30 percent</p> <p>Condition: When Adaptive Auth is enabled on the ICS cluster.</p> <p>Work around:</p> <ul style="list-style-type: none"> • Disable UEBA from System > Configuration > Behavioural Analytics. • Wait for 15 mins • Re-enable UEBA.
1380280	<p>Symptom: Invalid Domain name error seen when AD domain name is having "0"</p> <p>Condition: Domain name containing 0 fails to save with error "Invalid Domain name".</p> <p>Workaround: Upgrade of ICS from older release will work but need to Reset join. New AD configuration should be without 0 in domain name.</p>
1383587	<p>Symptom: AD domain join takes 15 mins to join.</p> <p>Condition: Upgrade to 22.7r2 or later.</p> <p>Workaround: Save changes of AD config does a AD domain join</p>
1367931	<p>Symptom : GCP - Adding management port details of other in cluster is returning with invalid IPv6 gateway error message.</p>

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

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 <https://forums.ivanti.com/s/contactsupport>