



# Release Notes

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## Browsium Ion 3.5

Product Version: 3.5.0

Release Notes Updated: 13 July 2015

### About this Release

This document lists known issues and incompatibilities as of the release date. If you discover an issue, please review the Known Issues list below to determine if it has already been documented. If the issue is not referenced, please visit the [Browsium Support website](#) for troubleshooting tips, product documentation, and the option to submit support tickets.

### What is Ion

Browsium Ion is a web application remediation and browser management solution. Ion enables legacy web applications to run in modern versions of Internet Explorer, allows multiple versions of Java to run side-by-side, and provides granular control over Internet Explorer settings to allow incompatible applications to run seamlessly on the same Windows system.

### What's New in this Release

This section of the release notes is reserved for notable changes and new features since the prior version. See last section of release notes to view features of prior releases.

#### What's new in Ion 3.5.0:

This section details changes to Ion since the prior version, Ion 3.4.2.

- Redesigned Java Version Manager uses the Oracle Java Development Kit (JDK) to provide more robust Java remediation. The following are the major Java remediation enhancements and changes in Ion 3.5:
  - 32-bit Java Development Kit must be installed on systems running Ion Configuration Manager to use the Java Version Manager.
  - Ion now supports multiple versions of Java 8 running side-by-side.
  - Ion now enables current Java 8 to be upgraded without affecting legacy Java remediation.
  - Eliminates need to create or manage Custom Files entries for Java remediation for JRE 1.4 and above.
  - Displays version of Java used in each Ion profile in Java Version field of the Profile Properties page.
  - Ion Configuration Manager 3.5 automatically migrates legacy Java remediations (which used Custom Files Manager) by running the new Java Version Manager and selecting the version of Java required for the profile.
- New, lightweight file virtualization mode improves performance for Ion-managed instances of Internet Explorer that use custom files or Java version remediations, but no custom registry values.
- Fixes an incompatibility between Ion and Sophos web filtering.

# Minimum System Requirements

<b>Operating System</b>	Windows XP Windows 7 Windows 8 Windows Server 2003 Windows Server 2008 R2 Windows Server 2012 R2
<b>Browsers</b>	Internet Explorer 8, 9, 10, or 11
<b>.NET Framework</b>	Version 3.5 SP1 or later
<b>Java Development Kit (JDK) and Java Runtime Environment (JRE)</b>	32-bit JDK 7u40 (8u45 recommended) for Ion Configuration Manager * Client PCs requiring Java remediations only need the appropriate 32-bit JREs
<b>Processor</b>	1 GHz or faster 32-bit (x86) or 64-bit (x64) processor
<b>Memory</b>	1 GB total system RAM, 2 GB for use on Windows Server

\* Java Development Kit only required when using Java Version Manager.

## Installing and Using This Release

- Ion Client 3.5 can be installed as an in-place upgrade for earlier versions of Ion Client 3.x in enterprise deployments.
- Ion Client 3.5 installer will automatically close all Internet Explorer windows. Prior releases recommended this action but it was not forced by the installer. This has changed in Ion 3.5 to ensure Ion Client is properly installed. Enterprise deployments to end user PCs should be scripted to install at night or immediately following a reboot.
- If upgrading from Ion 3.2 (three versions back) or earlier, read the following guidance:
  - It is recommended that you script the deployment to stop the Ion 3.2 Controller (CovController.exe), Ion 3.2 Monitor (CovMonitor.exe), and Internet Explorer (iexplore.exe) processes prior to installing Ion 3.5. A reboot, user logoff/logon, or a scripted Start of the Ion 3.5 Controller (BrowsiumIonController.exe) is then required.
  - It is recommended that you uninstall the Ion 3.2 Client and Configuration Manager before installing Ion 3.5 on test or project development systems. At a minimum, Clear Local Settings in Ion Configuration Manager 3.2 or below before installing Ion 3.4 as some of the test configuration data will persist in the system registry. This data will not interfere with the operation of Ion 3.5.
- If upgrading from Ion 2.x (prior generation of Ion) or earlier, read the following guidance:
  - If you already have a version of Ion 2 installed on your PC, you must uninstall both the Ion Client and the Ion Configuration Manager before installing Ion 3.5.
  - Ion 3.5 cannot read projects created with Ion 2. Projects will need to be re-created to upgrade to this release. Contact [Browsium Support](#) if you need assistance with this process. However Ion 3.5 can read, and automatically upgrade, projects created with any prior release of Ion 3.
- You must install both the Ion Client (Ion-ClientSetup.msi) and Ion Configuration Manager (Ion-ManagerSetup.msi) to test the software and develop configurations. Deployments to end user PCs require only the Ion Client.

- As of Ion 3.3, HKEY\_LOCAL\_MACHINE\SOFTWARE\Wow6432Node\Browsium\Ion\Settings is no longer supported for LoadFromFileName values. Refer to section 5 of [Ion Administration Guide](#) for supported locations.
- Use the 30-day Evaluation Kit option during installation of the Ion Client unless Browsium has already provided you with a license key.
- Read the [Ion Administration Guide](#) for more information on installing and using Browsium Ion 3.5.

## **Known Issues**

- Projects with a legacy Custom Files-based Java remediation that has not yet been migrated using the new Java Version Manager will display System Default in the Java Version field in Profile Properties, even though the project will remediate Java using the entry in Custom Files Manager. It is recommended that all legacy Java remediations (for Java 1.4 and later) be migrated to the new remediation architecture using Java Version Manager.
- A change to Java introduced by Oracle in Java 7u71 and Java 8u25 and above creates an incompatibility in the Java cache between the current version of Java and the version being remediated by Browsium Ion when invoking Java 6 versions below 6u10 (e.g., Java 6u7, 6u6, 6u5, and 6u4). This may result in Java failing to load in Ion-managed instances of Internet Explorer on Windows 7 or later. To work around this issue, follow the guidance to create a Custom Files entry for Java's deployment.properties file as detailed in the [Ion Knowledge Base](#).
- Internet Explorer may crash when attempting to override Java 7 or Java 8 with specific early versions of Java 6 (6u0 - 6u3) due to a bug in Java that was fixed in Java 6u7. Therefore Browsium Ion does not support profiles using Java 6u0, 6u1, 6u2, or 6u3. Contact Browsium Support for more information.
- A bug in the Java 7u17 installer fails to register the installation in the Java Deployment.Properties file. This, in turn, causes an incompatibility with Ion Java remediations. To work around this issue, the Java Deployment.Properties file must be refreshed. This can be done by opening and then closing the Java control panel (configuration changes are not required). Contact Oracle support for other methodologies to refresh this file.
- Ion projects created in Ion 3.1 or 3.2 will always trigger an Ion project cache refresh, even if the project has not changed, when loaded by Ion Client 3.5. To work around this issue, update all project files to the Ion 3.5 format by opening and then saving the .bcx file in Ion Configuration Manager 3.5. No other project changes are necessary.
- The window size of Ion Configuration Manger's String Replacement Editor persists from prior versions, even if the prior version was uninstalled. The new default in Ion 3.5 only affects new installations on PCs that have never installed Ion Configuration Manager. If an older version had been installed and the window size is incorrect (with scroll bars and text cut off on the left), resize the window by selecting the dragging the lower right corner of the window. The new size will persist.
- When navigating between Ion-managed and unmanaged instances of Internet Explorer, the source webpage may navigate to a blank page or close the tab entirely if the navigation crosses between Internet Explorer zones. This is due to an issue with how Internet Explorer exposes its History to Browser Helper Objects. This issue will be addressed in a future release of Ion.
- On IE8 and IE9, attempts to load some Java 1.6 updates may throw an "object expected" error or the applet may not load at all. Refer to the [Ion Knowledge Base](#) for the appropriate workaround.
- Start Test Configuration fails to populate the registry and restart the controller if the Project file is located on a read-only location. Place the project file in a location with read-write privileges before using Start Test Configuration. Note that the Ion Client runs properly in an enterprise deployment with the Project file in a read-only location.

- Ion 3.5 writes its logs in Event Viewer under the application name "Browsium Ion". Some prior versions of Ion wrote logs under the application name "Ion". The "Ion" log entries may remain visible after installing Ion 3.5, though all new log entries are written to "Browsium Ion". The "Ion" log entries can be manually deleted if no longer needed.
- Selecting the "Modify" option when installing Ion Client 3.5 on a system with Ion Client 3.5 already installed may result in a corrupt installation. Do not use the Modify option. However, "Remove" and "Repair" work properly.
- Installing Ion Client 3.5 with a license key as an in-place upgrade for the evaluation version of Ion Client will result in installation of the evaluation version of Ion Client 3.5. If this occurs, the license key can be manually configured in the Windows Registry by following the instructions in Section 2.6 of the [Ion Administration Guide](#).
- On any system except Windows XP, the Ion Client only logs when Protected Mode is disabled for the zone in which the web page loads. This functionality is by design. As a workaround, turn off Protected Mode in Internet Explorer if you need to capture logs for troubleshooting Ion's Internet Explorer extension.
- Uninstalling the Ion Client via the Command Line may fail to complete successfully if an Internet Explorer window is open during the uninstall process. Rebooting the system after uninstall will complete the uninstall process.
- Pinned Site shortcuts created by Internet Explore fail to respond to Ion rules and do not open in an Ion-managed window of Internet Explorer. Pinned Site shortcuts should not be used with web sites that require Ion remediation. Internet Shortcuts on the desktop or Start menu will work properly. See the [Ion Knowledge Base](#) for information on disabling Pinned Site shortcuts via Group Policy.
- The address bar in an unmanaged Internet Explorer window may continue to show the URL that was redirected and opened in an Ion-managed window. The content of the web page in the originating window is not affected.
- On systems with IE10 or IE11 installed, selecting "Auto" for each Profile's "Examine Web Requests" property will default to the "Always" behavior. This issue will be addressed in a future release.

## **Contact**

For technical support, please visit the [Browsium Support website](#) for a list of contact options.

# What's New in Prior Releases

## What's new in Ion 3.4.2:

This section details changes to Ion since the prior version, Ion 3.4.1.

- Provides improved handling of an incomplete chunk response from certain web servers. (Chunked transfer encoding is a data transfer mechanism in version 1.1 of HTTP in which data is sent in a series of "chunks".)
- Fixes an issue which causes Ion to periodically crash on systems also running AppSense software (e.g., Application Manager or Environment Manager) to manage the desktop environment.
- Fixes an issue in which Ion may crash on a system with certain Ion registry keys configured for roaming. Ion previously relied on those keys to determine whether to rebuild local cache files. On affected machines with a roaming profile, the registry key would be present, but the cache files would be missing – causing the crash in Ion.
- Fixes an issue in which Ion certificates for HTTPS sites are not properly recreated during Ion version upgrades.
- Fixes an issue in which Ion fails to properly parse file names containing a space for .htm or .html pages accessed from the local file system.
- Fixes an issue which causes Ion to fail to run properly on the Turkish version of Windows.

## What's new in Ion 3.4.1:

This section details changes to Ion since the prior version, Ion 3.4.0.

- Fixes an issue that arises when a server sends an incorrect Content-Type. For example, if JPEG files are sent using Content-Type – text/html, Ion will now properly handle the file.
- Fixes an issue where Ion-managed instances of Internet Explorer may corrupt image files as a result of a bad whitelist value in the Ion configuration.
- Fixes an authentication issue for non HTTPS traffic in Ion-managed instances of Internet Explorer.

## What's new in Ion 3.4.0:

This section details changes to Ion since the prior version, Ion 3.3.1.

- Adds support for Zone-based rules, enabling Ion rules to be triggered by the Internet Explorer Zone of the target web application.
- Renamed Ion Configuration Manager installer to Ion-ManagerSetup.msi (from Ion-AdminSetup.msi in prior versions).
- Increased default window size of String Replacement Editor so all fields are visible with no scroll bars.
- Changed Show Splash Screen on Start default to 'Disabled' in Project Settings for new projects (from 'Enabled' in prior versions).
- Enabled specification of HTTPS protocol version in the Ion proxy layer via Custom Ion Preferences. This change allows customers who have trouble connecting to a server in their environment with the default HTTPS protocol to specify a version of the protocol to use. Typically, this is used to specify an earlier, more widely compatible protocol version (e.g. CONFIG.oAcceptedServerHTTPSProtocols = Ssl3).
- Enabled specification of HTTP encoding character set in the Ion proxy layer via Custom Ion Preferences. This allows customers to fix a problem in which Ion may corrupt HTTP content containing certain characters during string replacement. This problem happens when the HTTP server does not specify the character set for content that contains data that is incompatible with UTF-8.

### What's new in Ion 3.3.1:

This section details changes to Ion since the prior version, Ion 3.3.0.

- Fixed an issue in the Content-type Whitelist property in Ion configurations that can cause Ion to corrupt images and other binary files present in remediated web applications.

### What's new in Ion 3.3.0:

This section details changes to Ion since the prior version, Ion 3.2.3.

Ion Configuration Manager enhancements:

- Streamlined code to improve speed and enable more rapid addition of new features.
- Support for high DPI monitors enables project development at any screen resolution.
- New design enables multiple projects to be edited side-by-side, simplifying project development.
- Copy/paste Rules and Profiles between projects, and configuration items (String Replacements, Custom Files, etc.) within projects, for faster configuration development.
- Improved configuration testing functionality uses XML files instead of serialized registry entries, with automatic saving of project files and simplified menu options.
- String Replacements can be enabled/disabled, saving time, easing project development.
- String Replacements now include a description field with metadata to ease project development.
- New, syntax-aware text editor for complex text entry fields (e.g. String Replacements, Content Overrides, etc.).
- Support for Java 8 as default version of Java in Java Version Manager.
- Logging to Event Viewer.

Ion Client enhancements:

- Enhanced logging to improve supportability, including unique entries on multi-user servers.
- Improved performance for Profiles with Custom Registry entries.
- Fixes issue with local intranet authentication when using .NET Framework 4.5 on Windows 8.
- Resolved issue where Microsoft Office documents were loading in Protected View.
- Fixed issue with setting 'Default' value for Custom Registry entries.

Deployment enhancements:

- Simplified configuration hierarchy, based on XML-formatted configuration files to ease deployment.
- New ADM/ADMX templates for easy Group Policy deployment of configuration file pointers available at <http://www.browsium.com/wp-content/uploads/Browsium-Group-Policy-Templates.zip>.
- New command-line switch displays registry and file location of active Ion configuration via the command "BrowsiumIonController /WhichConfig". Similar functionality available by pressing 'Ctrl' while displaying the Ion Configuration Manager About Box.
- Improved robustness to handle scenarios where browser process starts before Ion Controller after PC reboot
- Configuration caching to enable offline Ion process initialization when deploying configuration file on a server.
- Ion process names have been updated to be more consistent and more easily identified:

*Prior → Current*

CovManager → BrowsiumIonManager

CovController → BrowsiumIonController

CovBroker → BrowsiumIonBroker

CovMonitor → BrowsiumIonMonitor

CovCertificateSetup → BrowsiumIonCertificateSetup

CovLauncher → BrowsiumIonLauncher

### What's new in Ion 3.2.3:

This section details changes to Ion since the prior version, Ion 3.2.

- Fixes an issue with an unexpected error message during Ion Controller initialization on certain PC configurations.
- Added a new feature to provide the ability to launch URLs directly into managed instances of Internet Explorer.
- Added the ability to implement Session Isolation between managed instances of Internet Explorer using the same Ion profile.
- Addresses an issue while trying to set registry values with no name (also referred to as default registry value) in Custom Registry Manager.

### What's new in Ion 3.2:

This section details changes to Ion since the prior version, Ion 3.1.

- Support for Windows 8.1 and Windows Server 2012 R2 with IE11, and IE11 on Windows 7.
- Added support for Custom Files, Custom Registries, and Java management on Windows Server 2003.
- Ion Controller and Ion Monitor processes only run when a valid Ion configuration is present on client systems.
- Internet Explorer cache is cleared only when the Ion configuration changes, not every time the Controller starts.
- Examine Web Requests setting moved from main Profile Settings page to Advanced Profile Settings page.
- Ion Client and Ion Configuration Manager installation screens now look crisp on high-DPI displays.
- New capability to allow Ion to remediate site resources that do not match the site's rule.
- Fixed issue where Ion incorrectly launched new managed IE instance on rule matching POSTs.
- Fixed issue where subsequent request was not handled by Ion following a 401 response from server.
- Improved logging to Event Viewer for configuration load errors.

### What's new in Ion 3.1:

This section details changes to Ion since the prior version, Ion 3.0.1.

- Default for Examine Web Requests changes from Auto to Always to improve efficiency.
- Improved performance of Ion-managed instances of Internet Explorer for Profiles without Custom Registries or Custom Files.
- Added support for Windows Server 2003 for Profiles without Custom Files and Custom Registries. "Examine Web Requests" must be set to "Always" (the default setting) for Windows Server 2003.
- Simplified the architecture and implementation of Ion by using newer .NET 3.5 framework class libraries.
- Fixed issue with duplicate entries in ADML files when exporting to ADMX.
- Improved logging to reduce noise from non-critical entries.
- Added support for in-place version-to-version upgrades.
- Interoperability between Ion 3.0.1 Configurations and the Ion 3.1 Client. However Browsium recommends keeping Configuration and Client versions aligned.

### What's new in Ion 3.0.1:

This section details new features and architecture changes since the prior major released version, Ion 2.

- Ion 3 is a major upgrade to Ion, delivering dramatic improvements in ease of use, scalability, and reliability.
- Ion 3 simplifies remediation with smarter defaults and new wizards to automate complex tasks.
- The new Java Version Manager provides a wizard that automatically detects all versions of Java installed on the system, and enables easy selection of the desired Java version to be invoked to override the default.

- Ion 3 is built on a brand new architecture, developed by Browsium, called "Covalence". The Covalence architecture delivers powerful web application remediation and browser management capabilities with no adverse impact on non-remediated applications and the Windows system in general.
- The Covalence architecture invokes and controls Ion-managed instances of Internet Explorer, with admin-specified document modes and user agent strings, HTML, JavaScript and ActiveX Control overrides, and custom registry settings. An unlimited number of custom configurations can be created, and all are isolated from the default instance of Internet Explorer to deliver maximum performance and reliability.
- Ion 3 utilizes N+1 instances of Internet Explorer, where N is the number of Ion Profiles in use on a client system and "+1" represents the native, unmanaged instance of Internet Explorer. A new Internet Explorer window will be launched as each Profile is invoked. Multiple websites sharing the same Profile will open in tabs within a single Internet Explorer window. This experience maximizes performance and reliability for remediated applications, and ensures that Ion doesn't interfere with any non-remediated applications.
- Ion 3 adds support for IE10 on Windows 7 and Windows Server 2008 R2