



Ensemble Release Notes

Version 2018.1
2019-09-20

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Ensemble Version 2018.1 2019-09-20

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About This Book

Welcome and thank you for using Ensemble 2018.1.

This book describes the contents of this release of Ensemble including compatibility issues with previous releases. It contains the following chapters:

- [New Features and Enhancements](#)
- [Known Issues](#)
- [Upgrade Compatibility Issues](#)

There is also a detailed [table of contents](#). For releases *before* the current release, see the [Ensemble Release Note Archive](#).

InterSystems Ensemble shares many underlying core technologies with InterSystems Caché. This book refers you to books in both documentation sets. The Caché books are particularly important as you first set up the system. After initial configuration, the Ensemble books become your primary source of information. The following books are the best places to start if you are new to Ensemble:

- [Preparing to Use Ensemble](#) provides a road map for installing, upgrading, and getting started with Ensemble.
- [Introducing Ensemble](#) provides an overview of product features.
- [Ensemble Best Practices](#) describes best practices for designing, developing, and maintaining Ensemble productions.

For general information, see [Using InterSystems Documentation](#).

1

New Features and Enhancements

This release of Ensemble has minor corrections and fixes. It also incorporates the following new Caché 2018.1 features:

- Key Management Interoperability Protocol (KMIP)
- Microsoft Volume Shadow Copy (VSS) Integration
- Support for Microsoft Integrated Windows Authentication for HTTP Connections
- SSH Enhancements

For more information, see the Caché Release Notes and Upgrade Checklist.

2

Known Issues

Review the following issues carefully to determine if they affect your system:

- “Upgrade Compatibility Issues” described in the next chapter.
- [Browser Pop-up Blocker Interferes with Portal Functions](#)
- [EnsLib.HL7.Segment GetValueAt\(\) 32-KB Limitation](#)
- [Internet Explorer 9 Restriction](#)
- [Enterprise Message Viewer Display Issue with Older Versions of Internet Explorer](#)
- [Failure to Add Imported Rules Exported from Prior Versions to a Studio Project](#)
- [Message Browser Search With TimeCreated Property](#)
- [Business Rule Export and Import](#)
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- [BPL Scope within Loop Restriction](#)
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- [Order of Compiling Custom Function Used in Rules](#)
- [Cannot Use Some %CSP.REST Features in EnsLib.REST.Service](#)

Important: For an updated list of known problems in this release, contact the [InterSystems Worldwide Response Center \(WRC\)](#).

2.1 Browser Pop-up Blocker Interferes with Portal Functions

Your web browser pop-up blocker may interfere with a number of dialog boxes in the Management Portal, such as source control configuration. Ensemble users have seen this in particular with Safari, which has pop-ups blocked by default. This issue will be resolved in future versions of Ensemble.

2.2 EnsLib.HL7.Segment GetValueAt() 32-KB Limitation

The **GetValueAt()** method of the `EnsLib.HL7.Segment` class truncates values larger than 32 KB. This limitation exists even if you have long strings enabled.

As a workaround, use one of the following methods:

- **GetFieldStreamRaw()**
- **GetFieldStreamUnescaped()**
- **GetFieldStreamBase64()**

See the entry for `EnsLib.HL7.Segment` in the *Class Reference* for details.

2.3 Internet Explorer 9 Restriction

If you are running Ensemble in Internet Explorer 9, do *not* use the *Compatibility View*.

2.4 Enterprise Message Viewer Display Issue with Older Versions of Internet Explorer

If you are using Internet Explorer Version 7 or 8 and the browser window is not wide enough, the Enterprise Message Viewer does not display some columns. This problem does not exist on more recent versions of the supported browsers. See “Supported Web Browsers” in the online *InterSystems Supported Platforms* document for this release for a list of the web browsers supported by the Caché Server Pages (CSP) technology.

2.5 Failure to Add Imported Rules Exported from Prior Versions to a Studio Project

If you import an XML export containing a business rule or routing rule that you exported from a version prior to 2012.1, the import does not add that rule definition to a project in Studio. You receive an error message indicating that the rules

does not exist on the server. This occurs because the process attempts to add the old .RUL form of name to the project, but the business rule has been converted to a class. The class containing the rule is created and you can add the class to your project manually.

2.6 Message Browser Search With TimeCreated Property

When you use the message browser after an upgrade and you specify a **Start Time**, exact matches against the start time are not shown in some circumstances. If the time you enter ends in one or more trailing zeroes when the seconds are expressed to three decimal places and there is a message created before upgrading at that exact time, that message is not included in the search result.

For example, Ensemble creates a message prior to the upgrade at 2009-12-02 15:16:44.710. After the upgrade, if you enter 2009-12-02 15:16:44.710 or 2009-12-02 15:16:44.71 as the **Start Time** in your search criteria, the message is not found. To work around this issue, widen the search time slightly to 2009-12-02 15:16:44.709.

You could resolve the problem by rebuilding the TimeCreated index of the Ens.MessageHeader class, but InterSystems does not recommend this for most customers. It requires the system to be idle during the rebuild, which can take several hours for message warehouses with 100 million messages. Since most searches are for recent messages, this is expected to only present a problem for a short period after upgrading. Similar behavior exists when using SQL searches against the Ens.MessageHeader class. This issue also exists in Ensemble release 2009.1.

2.7 Business Rule Export and Import

InterSystems has identified a known problem with the Xerces parser version used in the current and past releases for Ensemble. The symptom related to Ensemble business rules is that Ensemble wrongly reports errors when importing a previously exported production from an XML file. The symptom occurs only when the XML file contains definitions of general business rules that define “assign” actions in addition to simply returning a result.

There are two techniques for working around this problem. One makes import simple and places the burden on the person exporting the production. The other makes export simple and places the burden on the person importing the production. You only need to use one of the following equally effective techniques:

Import

Use the following approach to facilitate the import task:

1. Find each general business rule that defines “assign” actions in addition to returning a result.
2. Export each of these rules to a separate file. Make sure you are exporting one rule per file.
3. Export everything else in the production, including other rules, to a different file.
4. Import (and compile) each of the exported files individually.

Export

Use the following approach to facilitate the export task:

1. Export everything to one file.
2. Upon import, do not use Studio. Instead, start Terminal, change to the namespace where you need to import, and enter one of the following commands (either works):

```
do $system.OBJ.Load("C:\MyDir\MyFile.xml", "-i")
```

```
do $system.OBJ.Load("C:\MyDir\MyFile.xml", "/checkschema=0")
```

2.8 HL7 Schema Errors

The HL7 schema definitions loaded into Ensemble were generated directly from the respective standards (HL7 2.1, 2.2, 2.3, 2.3.1, 2.4, 2.5, 2.5.1, 2.6, 2.7, and 2.7.1). With only a few exceptions, they replicate any errors, omissions, or discrepancies that exist in these standards as published by the Health Level Seven organization.

2.9 BPL Scope within Loop Restriction

Under certain conditions, loops that contain scopes and have a large number of repetitions can cause an error. If possible, define the scope so that it includes the loop rather than being defined inside of the loop.

2.10 Access to DeepSee Dashboard Pages Not Enabled by Default

Application access to arbitrary %CSP pages, including DeepSee, is controlled by a security global. By default, only the SAMPLES and ENSDEMO namespaces can access DeepSee pages, including dashboards. To enable DeepSee access in another Ensemble namespace and its associated web application, select **System Administration, Security, Applications,** and **Web Applications** and then select the namespace that requires DeepSee access, check the **DeepSee** checkbox on the **General** tab and click **Save**.

You should set this checkbox for any namespace that uses DeepSee dashboards or other DeepSee pages. Note that for HealthShare installations, the web application names start with /csp/healthshare/.

Alternatively, you can enable DeepSee access for all namespaces and web applications by entering the following command in an Ensemble terminal window:

```
Do EnableDeepSee^%SYS.cspServer(0)
```

For a detailed description of this issue, see *Application Access To %CSP Pages Now Controlled in the Caché Release Notes and Upgrade Checklist Archive*.

2.11 Inbound Ports May Conflict with Operating System Ephemeral Ports

When Ensemble or any other application opens an outbound port for a TCP connection, it specifies the listening port number on the target server, but the operating system creates a temporary, or ephemeral, outbound local port in the port range that it uses for ephemeral ports. Typically, the operating system does not reuse a port until it has reached the end of the port range. If a service specifies a listening port that is within the range that the operating system uses for ephemeral ports, that port may not be available when the service starts, which causes an error.

To avoid potential port conflicts, you can do a web search on “ephemeral port” to find the ephemeral port range used by your operating system. You should avoid having a service listen on any port within that range. Some users have encountered this error when they have stopped and then immediately restarted a production that uses many TCP connections.

2.12 Cannot Do Recursive Copies If Source and Target Have Different Types

Ensemble provides a data transformation mechanism to recursively copy structured and repeating parts of virtual documents. This mechanism works only if the source and target have the same types and the same structures. For example, you can use this feature to copy from an `EnsLib.HL7.Message` to another `EnsLib.HL7.Message` even if the versions of HL7 are different. But you cannot use this feature to copy from an `EnsLib.HL7.Message` to an `EnsLib.EDI.XML.Document`. For details on copying all values in structured and repeating types, see “[Copying Values of All Sub-properties](#)” in the *Developing DTL Transformations*.

2.13 Error Saving Credentials is Not Reported to User

If there is an error saving credentials, this error is not reported to users. If your code is creating and saving credentials by creating an instance of `Ens.Config.Credentials`, you should do the following:

1. Call the `Ens.Config.Credentials.PasswordSet()` method.
2. Check the status return value.
3. If there is an error, notify the user and take appropriate error recovery.

2.14 Productions and Namespaces

In most cases, productions are defined and run in the same namespace, but you can use Caché package mapping to make a production class visible in a namespace other than the one it is defined in. If you use package mapping and a production is visible in more than one namespace, you should designate only one of these namespaces to compile and run the production. You should not compile, modify, or run the production in any other namespace. If you run or modify the same production in more than one namespace it can cause failures that are hard to diagnose. Under no circumstances should you do this. If you do not use package mapping to map a database to a namespace you do not need to be concerned about this issue.

2.15 Order of Compiling Custom Function Used in Rules

If you are using a custom function in a rule, it must have been compiled before the rule is compiled. If the custom function is being imported at the same time as the rule, you cannot explicitly control the order of compilation. To avoid this situation, you can compile any custom functions used in rules before you compile the remainder of the production. Typically, you could encounter this situation when you are deploying a production to a new namespace or system.

If the custom function is already defined in the namespace and has been compiled before, the order of compilation does not matter even if the custom function has been changed. But, if the custom function has not previously been defined in

the namespace, Ensemble encounters an error and fails to compile the rule even if the function would be compiled later in the same import.

2.16 Cannot Use Some %CSP.REST Features in EnsLib.REST.Service

Although the EnsLib.REST.Service class is a subclass of %CSP.REST, you cannot use some of the features added to %CSP.REST after Ensemble Version 2015.1. Specifically, you cannot use the following new Caché 2015.2, %CSP.REST features:

- UrlMap Routes contain Map elements that forward to another subclass of %CSP.REST. This feature cannot be used in EnsLib.REST.Service.
- %CSP.REST support of cross-origin resource sharing (CORS), which provides a framework to allow some resources from external domains to be used in the REST service. This feature cannot be used in EnsLib.REST.Service.

If you need to use these new features, you should subclass %CSP.REST directly and use the **Ens.Director.CreateBusinessService()** method to instantiate the class as a business service.

3

Compatibility Issues for Upgrades to Ensemble 2018.1 (This Release)

Before upgrading Ensemble, first review the product changes in this release that could affect the operation of your existing system. There are no known Ensemble compatibility issues in this release, but be sure to also review the issues for each intervening release since you last installed Ensemble. Also, see the Caché Release Notes and Upgrade Checklist.

