Enhanced Debugging of Healthcare Business Hosts

Version 2020.3
2021-02-04

InterSystems Corporation 1 Memorial Drive Cambridge MA 02142 www.intersystems.com

Enhanced Debugging of Healthcare Business Hosts
InterSystems Version 2020.3 2021-02-04
Copyright © 2021 InterSystems Corporation
All rights reserved.

InterSystems, InterSystems IRIS, InterSystems Caché, InterSystems Ensemble, and InterSystems HealthShare are registered trademarks of InterSystems Corporation.

All other brand or product names used herein are trademarks or registered trademarks of their respective companies or organizations.

This document contains trade secret and confidential information which is the property of InterSystems Corporation, One Memorial Drive, Cambridge, MA 02142, or its affiliates, and is furnished for the sole purpose of the operation and maintenance of the products of InterSystems Corporation. No part of this publication is to be used for any other purpose, and this publication is not to be reproduced, copied, disclosed, transmitted, stored in a retrieval system or translated into any human or computer language, in any form, by any means, in whole or in part, without the express prior written consent of InterSystems Corporation.

The copying, use and disposition of this document and the software programs described herein is prohibited except to the limited extent set forth in the standard software license agreement(s) of InterSystems Corporation covering such programs and related documentation. InterSystems Corporation makes no representations and warranties concerning such software programs other than those set forth in such standard software license agreement(s). In addition, the liability of InterSystems Corporation for any losses or damages relating to or arising out of the use of such software programs is limited in the manner set forth in such standard software license agreement(s).

THE FOREGOING IS A GENERAL SUMMARY OF THE RESTRICTIONS AND LIMITATIONS IMPOSED BY INTERSYSTEMS CORPORATION ON THE USE OF, AND LIABILITY ARISING FROM, ITS COMPUTER SOFTWARE. FOR COMPLETE INFORMATION REFERENCE SHOULD BE MADE TO THE STANDARD SOFTWARE LICENSE AGREEMENT(S) OF INTERSYSTEMS CORPORATION, COPIES OF WHICH WILL BE MADE AVAILABLE UPON REQUEST.

InterSystems Corporation disclaims responsibility for errors which may appear in this document, and it reserves the right, in its sole discretion and without notice, to make substitutions and modifications in the products and practices described in this document.

For Support questions about any InterSystems products, contact:

InterSystems Worldwide Response Center (WRC)
Tel: +1-617-621-0700
Tel: +44 (0) 844 854 2917
Email: support@InterSystems.com

Table of Contents

Enhanced Debugging of Healthcare Business Hosts **1**

1 Adding Debugging Messages from Custom Code 1

Enhanced Debugging of Healthcare Business Hosts

You can add debugging messages to the message trace for most of the healthcare business hosts. These built-in healthcare business hosts start with the prefix `HS`.

The business operation **HS.Util.Trace.Operations** adds special messages to the Interoperability message trace from the internals of a healthcare business host. You can then use the Interoperability message trace options to view the messages and see how the data is being processed within the business host. For more information about using Interoperability message trace, see Viewing, Searching, and Managing Messages.

To enable enhanced debugging of healthcare business hosts:

1. Add HS.Util.Trace.Operations to your production.
2. Go to the **Settings** tab of the healthcare business host in your production.
3. In the **Development and Debugging** section, select a debugging level from the **TraceOperations** drop-down list.

   Debugging levels are:

   - *ERRORSONLY* — Shows only `$$$HSTRACEERROR` events in the message trace.
   - *MINIMAL* — Shows both `$$$HSTRACEERROR` and `$$$HSTRACEMIN` issues in the message trace. `$$$HSTRACEMIN` includes IHE messages that are generated by the operation.
   - *FULL* — Shows all `$$$HSTRACE`, `$$$HSTRACEMIN`, and `$$$HSTRACEERROR` issues in the message trace.
   - Any other value — Same as *FULL*
   - no value — Disables message tracing for the business host.

While full trace operation debugging is very useful during development and testing, the option should be turned off or minimized in a production environment, as it will slow your production due to the added processing and reporting time incurred for routine messages.

1 Adding Debugging Messages from Custom Code

You can also use these enhanced debugging messages in custom code. If you create a business host that extends **HS.HC.Util.Trace.Helper**, you can use one of the $$$HSTRACE macros to output debugging messages to the message trace. Invoke the macro as follows:

`$$$HSTRACEERROR(`*<comment>*`,`*<list of variable names>*`,`*<variable1>*`,`*<variable2>*`,...)`

`$$$HSTRACEMIN(`*<comment>*`,`*<list of variable names>*`,`*<variable1>*`,`*<variable2>*`,...)`

`$$$HSTRACE(`*<comment>*`,`*<list of variable names>*`,`*<variable1>*`,`*<variable2>*`,...)`

where *<comment>* is an explanatory text string, *<list of variable names>* is a comma-separated list of variable names or expression descriptions (enclosed in quotes), and the rest of the arguments are the values of those variables or expressions. For example:

```
$$$HSTRACE("HTML Stream","size,stream",tPushDocument.HTMLData.Size,tPushDocument.HTMLData)
```