



INTERNATIONAL STANDARD

**Information technology - Home electronic system (HES) interfaces -
Part 4-3: Common user interface and cluster-to-cluster interface to support
interworking among home cluster systems - Messaging**

Document Preview

[ISO/IEC 10192-4-3:2025](https://standards.iteh.ai/catalog/standards/iso/2af47c61-e0af-4ed0-b2d8-0d82696862e2/iso-iec-10192-4-3-2025)

<https://standards.iteh.ai/catalog/standards/iso/2af47c61-e0af-4ed0-b2d8-0d82696862e2/iso-iec-10192-4-3-2025>



THIS PUBLICATION IS COPYRIGHT PROTECTED

Copyright © 2025 ISO/IEC, Geneva, Switzerland

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either IEC or IEC's member National Committee in the country of the requester. If you have any questions about IEC copyright or have an enquiry about obtaining additional rights to this publication, please contact the address below or your local IEC member National Committee for further information.

IEC Secretariat
3, rue de Varembe
CH-1211 Geneva 20
Switzerland

Tel.: +41 22 919 02 11
info@iec.ch
www.iec.ch

About the IEC

The International Electrotechnical Commission (IEC) is the leading global organization that prepares and publishes International Standards for all electrical, electronic and related technologies.

About IEC publications

The technical content of IEC publications is kept under constant review by the IEC. Please make sure that you have the latest edition, a corrigendum or an amendment might have been published.

IEC publications search -

webstore.iec.ch/advsearchform

The advanced search enables to find IEC publications by a variety of criteria (reference number, text, technical committee, ...). It also gives information on projects, replaced and withdrawn publications.

IEC Just Published - webstore.iec.ch/justpublished

Stay up to date on all new IEC publications. Just Published details all new publications released. Available online and once a month by email.

IEC Customer Service Centre - webstore.iec.ch/csc

If you wish to give us your feedback on this publication or need further assistance, please contact the Customer Service Centre: sales@iec.ch.

IEC Products & Services Portal - products.iec.ch

Discover our powerful search engine and read freely all the publications previews, graphical symbols and the glossary. With a subscription you will always have access to up to date content tailored to your needs.

Electropedia - www.electropedia.org

The world's leading online dictionary on electrotechnology, containing more than 22 500 terminological entries in English and French, with equivalent terms in 25 additional languages. Also known as the International Electrotechnical Vocabulary (IEV) online.

<https://standards.iteh.ai/catalog/standards/iso/2af47c61-e0af-4ed0-b2d8-0d82696862e2/iso-iec-10192-4-3-2025>

<https://standards.iteh.ai/catalog/standards/iso/2af47c61-e0af-4ed0-b2d8-0d82696862e2/iso-iec-10192-4-3-2025>

Warning! Make sure that you obtained this publication from an authorized distributor.

CONTENTS

FOREWORD	3
INTRODUCTION	5
1 Scope	7
2 Normative references	7
3 Terms, definitions, and abbreviated terms	8
3.1 Terms and definitions	8
3.2 Abbreviated terms	9
4 Conformance	9
5 Messaging architecture for CUI	9
6 Messaging for handling devices	11
6.1 Operations	11
6.1.1 CUI messaging over the C2C interface	11
6.1.2 CUI messaging within the HES gateway	11
6.1.3 CUI messaging within a cluster or the separate device	12
6.2 HES-CLIP messaging flows	12
6.2.1 Overview	12
6.2.2 Retrieval of all devices of a user	13
6.2.3 Retrieval of a device property	14
6.2.4 Update of a device property	15
6.2.5 Subscription to an event of a device	17
6.2.6 Notification of an event of a device	19
6.3 HES-CLDPE messaging flows	19
7 Messaging for user object relationship	20
8 Messaging for C2C authorization	21
9 Messaging for C2C interface	23
10 Privacy, security, and safety considerations	23
Bibliography	24

Figure 1 – Core interoperability and HES standards	6
Figure 2 – HES gateway applications standards	6
Figure 3 – Messaging architecture of alternative #1: common user interface in a cluster	10
Figure 4 – Messaging architecture of alternative #2: common user interface in a separate device	10
Figure 5 – Messaging architecture of alternative #3: common user interface in a service module	11
Figure 6 – CUI messaging within a cluster or a separate device	12
Figure 7 – Messaging flow for retrieval of all devices of a user	13
Figure 8 – Messaging flow for retrieval of a device property	14
Figure 9 – Messaging flow for update of a device property	16
Figure 10 – Messaging flow for subscription to an event of a device	17
Figure 11 – Messaging flow for notification of an event of a device	19
Figure 12 – User object relationships	21
Figure 13 – Messaging for setup of user object relationship	21
Figure 14 – Messaging flow for creating a user identity federation	22

Figure 15 – Messaging flow for adding a user identity into existing federation.....	22
Figure 16 – Messaging flow for issuing, using and verifying an access token	23

Table 1 – Description of messages for retrieval of all devices of a user	13
Table 2 – Description of parameters in HES-CLIP messages for retrieval of all devices of a user	14
Table 3 – Description of messages for retrieval of a device property.....	15
Table 4 – Description of parameters in HES-CLIP messages for retrieval of a device property	15
Table 5 – Description of messages for update of a device property	16
Table 6 – Description of parameters in HES-CLIP messages for update of a device property	17
Table 7 – Description of messages for subscription to an event of a device	18
Table 8 – Description of parameters in HES-CLIP messages for subscription to an event of a device	18
Table 9 – Description of messages for notification of an event of a device	19
Table 10 – Description of parameters in HES-CLIP messages for notification of an event of a device	19

iTeh Standards
(<https://standards.itih.ai>)
Document Preview

[ISO/IEC 10192-4-3:2025](https://standards.itih.ai/catalog/standards/iso/2af47c61-e0af-4ed0-b2d8-0d82696862e2/iso-iec-10192-4-3-2025)

<https://standards.itih.ai/catalog/standards/iso/2af47c61-e0af-4ed0-b2d8-0d82696862e2/iso-iec-10192-4-3-2025>