

INTERNATIONAL STANDARD



**Information technology – Home electronic system (HES) architecture –
Part 5-11: Intelligent grouping and resource sharing for HES Class 2 and
Class 3 – Remote user interface**

<https://standards.iteh.ai>
Document Preview

ISO/IEC 14543-5-11:2018

<https://standards.iteh.ai/catalog/standards/iso/7186aee5-a652-4106-9747-0b108d1333c5/iso-iec-14543-5-11-2018>



THIS PUBLICATION IS COPYRIGHT PROTECTED
Copyright © 2018 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 ISO/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 Central Office
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 corrigenda or an amendment might have been published.

IEC Catalogue - webstore.iec.ch/catalogue

The stand-alone application for consulting the entire bibliographical information on IEC International Standards, Technical Specifications, Technical Reports and other documents. Available for PC, Mac OS, Android Tablets and iPad.

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 It also gives information on projects, replaced and withdrawn publications.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 also once a month by email.

Electropedia - www.electropedia.org

The world's leading online dictionary of electronic and electrical terms containing 21 000 terms and definitions in English and French, with equivalent terms in 16 additional languages. Also known as the International Electrotechnical Vocabulary (IEV) online.

IEC Glossary - std.iec.ch/glossary

67 000 electrotechnical terminology entries in English and French extracted from the Terms and Definitions clause of IEC publications issued since 2002. Some entries have been collected from earlier publications of IEC TC 37, 77, 86 and CISPR.

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.

[ISO/IEC 14543-5-11:2018](https://standards.iteh.ai/catalog/standards/iso/7186aee5-a652-4106-9747-0b108d1333c5/iso-iec-14543-5-11-2018)

<https://standards.iteh.ai/catalog/standards/iso/7186aee5-a652-4106-9747-0b108d1333c5/iso-iec-14543-5-11-2018>

INTERNATIONAL STANDARD



Information technology – Home electronic system (HES) architecture –
Part 5-11: Intelligent grouping and resource sharing for HES Class 2 and
Class 3 – Remote user interface

Document Preview

[ISO/IEC 14543-5-11:2018](https://standards.iteh.ai/catalog/standards/iso/7186aee5-a652-4106-9747-0b108d1333c5/iso-iec-14543-5-11-2018)

<https://standards.iteh.ai/catalog/standards/iso/7186aee5-a652-4106-9747-0b108d1333c5/iso-iec-14543-5-11-2018>

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

ICS 35.200

ISBN 978-2-8322-5531-5

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

CONTENTS

FOREWORD.....	5
INTRODUCTION.....	7
1 Scope.....	9
2 Normative references	9
3 Terms, definitions and abbreviated terms	9
3.1 Terms and definitions.....	9
3.2 Abbreviated terms.....	10
4 Conformance.....	10
5 IGRS RUI overview.....	11
5.1 IGRS RUI features	11
5.2 RUI configuration models	11
5.2.1 Overview	11
5.2.2 Internet RUI configuration model	11
5.2.3 2-tier RUI configuration model	11
5.2.4 3-tier RUI configuration model	12
5.3 RUIS and RUIC types	12
5.4 RUI architecture.....	12
5.4.1 Detailed RUI architecture.....	12
5.4.2 RUIC architecture	13
5.4.3 RUI Server architecture	14
6 IGRS type definitions for RUIS and RUIC	15
6.1 Overview.....	15
6.2 IGRS device types for RUIS and RUIC.....	15
6.3 IGRS service types for RUIS and RUIC.....	16
6.4 IGRS invocation interfaces for RUIC service.....	16
6.5 IGRS invocation interface for RUIS service	16
6.6 IGRS RUI operation scenarios	16
6.6.1 Overview	16
6.6.2 Discovery and retrieval of server information	16
6.6.3 Connecting	16
6.6.4 Controlling IGRS devices using IGRS RUI	17
7 Abstract entity in IGRS RUI	18
8 RUI Description Language (RDL).....	21
8.1 Overview.....	21
8.2 RDL element.....	21
8.3 RDLPackage element	22
8.4 RDLInfo element.....	23
8.5 Declaration element.....	23
8.6 Package element	24
8.7 LayoutContainer element	24
8.8 SceneContainer element.....	25
8.9 Item element.....	25
8.10 Layout element	26
8.11 Scene element.....	27
8.12 Group element	28
8.13 Asset element	28

- 8.14 ItemRef element 29
- 8.15 LayoutRef element..... 29
- 8.16 SceneNavigation element 30
- 8.17 Annotation element..... 30
- 8.18 Descriptor element..... 30
- 8.19 Condition element..... 31
- 8.20 Choice element..... 32
- 8.21 Selection element 32
- 8.22 Statement element..... 33
- 8.23 DCCondition element 34
- Annex A (normative) RDL schema 35
- Bibliography..... 43

- Figure 1 – Internet RUI configuration model..... 11
- Figure 2 – 2-tier RUI configuration model..... 12
- Figure 3 – 3-tier RUI configuration model..... 12
- Figure 4 – Detailed RUI architecture 13
- Figure 5 – RUIC architecture 14
- Figure 6 – RUIS architecture..... 15
- Figure 7 – RUI retrieval from Internet RUIS..... 17
- Figure 8 – Example configuration of controlling IGRS device with RUI 17
- Figure 9 – Structures of major entities in an IGRS RUI application..... 20
- Figure 10 – RDL namespace declaration..... 21
- Figure 11 – RDL element definition 22
- Figure 12 – RDLPackage element definition..... 22
- Figure 13 – Example of an RDLPackage element..... 23
- Figure 14 – RDLInfo element definition 23
- Figure 15 – Declaration element definition 23
- Figure 16 – Package element definition 24
- Figure 17 – LayoutContainer element definition 24
- Figure 18 – SceneContainer element definition 25
- Figure 19 – Item element definition 26
- Figure 20 – Layout element definition 27
- Figure 21 – Scene element definition 27
- Figure 22 – Group element definition 28
- Figure 23 – Asset element definition 29
- Figure 24 – ItemRef element definition..... 29
- Figure 25 – LayoutRef element definition 30
- Figure 26 – SceneNavigation element definition..... 30
- Figure 27 – Annotation element definition 30
- Figure 28 – Descriptor element definition 31
- Figure 29 – Condition element definition 31
- Figure 30 – Choice element definition 32
- Figure 31 – Selection element definition 33

Tab Standards
<https://standards.itec.ai/>
Document Preview
ISO/IEC 14543-5-11:2018
<https://standards.itec.ai/catalog/standards-iso/7106-9747-05108813335/iso-iec-14543-5-11-2018>

Figure 32 – Statement element definition	34
Figure 33 – DCCondition element definition	34
Table 1 – RUI device type definitions	15
Table 2 – RUI service type definitions	16
Table 3 – Definitions of abstract entities in an IGRS RUI	18

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

[ISO/IEC 14543-5-11:2018](https://standards.itih.ai/catalog/standards/iso/7186aee5-a652-4106-9747-0b108d1333c5/iso-iec-14543-5-11-2018)

<https://standards.itih.ai/catalog/standards/iso/7186aee5-a652-4106-9747-0b108d1333c5/iso-iec-14543-5-11-2018>