

TECHNICAL SPECIFICATION

**Application integration at electric utilities – System interfaces for distribution management –
Part 2: Glossary**



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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**APPLICATION INTEGRATION AT ELECTRIC UTILITIES –
SYSTEM INTERFACES FOR DISTRIBUTION MANAGEMENT –****Part 2: Glossary****FOREWORD**

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Technical specifications are subject to review within three years of publication to decide whether they can be transformed into International Standards.

IEC 61968-2, which is a technical specification, has been prepared by IEC technical committee 57: Power systems management and associated information exchange.

The text of this technical specification is based on the following documents:

TS	Report on voting
57/1054/DTS	57/1088/RVC

Full information on the voting for the approval of this technical specification can be found in the report on voting indicated in the above table.

This publication has been drafted in accordance with the ISO/IEC Directives Part 2.

This second edition cancels and replaces the first edition published in 2003. This second edition constitutes a technical revision. It contains numerous new terms in support of IEC 61968-9, as well as revisions to terms found in the first edition.

The reader will find citations to bibliographic references within square brackets [] below many of the term definitions. Cross references between many related terms have also been added to this edition. These are located among the notes and begin with the words "See also."

A list of all the parts in the IEC 61968 series, published under the general title *Application integration at electric utilities – System interfaces for distribution management* can be found on the IEC website.

A bilingual version may be issued at a later date.

The committee has decided that the contents of this publication will remain unchanged until the stability date indicated on the IEC web site under "<http://webstore.iec.ch>" in the data related to the specific publication. At this date, the publication will be

- transformed into an International standard,
- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

INTRODUCTION

The IEC 61968 series is intended to facilitate inter-application integration, as opposed to intra-application integration, of the various distributed software application systems supporting the management of utility electrical distribution networks. Intra-application integration is aimed at programs in the same application system, usually communicating with each other using middleware that is embedded in their underlying runtime environment, and tends to be optimized for close, real-time, synchronous connections and interactive request/reply or conversation communication models. IEC 61968, by contrast, is intended to support the inter-application integration of a utility enterprise that needs to connect disparate applications that are already built or new (legacy or purchased applications), each supported by dissimilar runtime environments. Therefore, IEC 61968 is relevant to loosely coupled applications with more heterogeneity in languages, operating systems, protocols and management tools. IEC 61968 is intended to support applications that need to exchange data on an event driven basis. IEC 61968 is intended to be implemented with middleware services that broker messages among applications, and will complement, but not replace utility data warehouses, database gateways, and operational stores.

The series of standards will be using a lot of definitions, terms and abbreviations from the area of distribution management as well as from the area of Information and Communication Technology. This glossary part defines the terms and abbreviations as they are used in the context of this series of standards.

APPLICATION INTEGRATION AT ELECTRIC UTILITIES – SYSTEM INTERFACES FOR DISTRIBUTION MANAGEMENT –

Part 2: Glossary

1 Scope

This part of IEC 61968 identifies and explains terms and abbreviations used in the remaining parts of IEC 61968.

This glossary, accompanying the IEC 61968 series, is the second part in the series that, taken as a whole, defines interfaces for the major elements of an interface architecture for distribution management systems (DMS).

As used in IEC 61968, a DMS consists of various distributed application components for the utility to manage electrical distribution networks. These capabilities include monitoring and control of equipment for power delivery, management processes to ensure system reliability, voltage management, demand-side management, outage management, work management, automated mapping and facilities management.

2 Terms and definitions

For the purposes of the IEC 61968 series, the following terms and definitions apply.

2.1

abstract component

smallest logical block of software considered in the IEC 61968 interface reference model

NOTE Abstract components have interfaces that will be defined in parts 3 to 10 of the IEC 61968 series. It is expected that different vendors will supply physical application components that support the interfaces for one or more abstract components.

2.2

absolute data

data which is based on a fixed sample at a prescribed moment in time

NOTE 1 The data may have been scaled and may consist of a signed value (as opposed to unsigned).

[Aclara 2008]

NOTE 2 See also: "incremental data".

2.3

account number

unique number issued by a customer information system to identify a specific customer account within a given utility

[Aclara 2008]

2.4

accuracy (of a measurement)

quality of freedom from mistake or error, that is, of conformity to truth or to a rule

NOTE 1 Accuracy is distinguished from precision as in the following example: A six-place table is more precise than a four-place table. However, if there are errors in the six-place table, it may be more or less accurate than the four-place table.