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Systèmes d'alarme et de sécurité électroniques – Partie 11-33: Systèmes de contrôle d'accès électronique – Configuration du contrôle d'accès en fonction des services Web

IEC 60839-11-33:2021-08(en-fr)

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ALARM AND ELECTRONIC SECURITY SYSTEMS –

Part 11-33: Electronic access control systems – Access control configuration based on Web services

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The text of this International Standard is based on the following documents:

FDIS	Report on voting
79/646/FDIS	79/648/RVD

Full information on the voting for its approval can be found in the report on voting indicated in the above table.

The language used for the development of this International Standard is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/standardsdev/publications.

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INTRODUCTION

This document makes it possible to build an alarm and electronic security system with clients, typically a monitoring console, and devices, typically an access control unit, from different manufacturers using common and well defined interfaces.

The document specifies only the data and control flow between a client and the services without reference to any physical device as the services required to implement a compliant electronic access control system (EACS) are not necessarily implemented on a single device, i.e. all services can be run on a control panel, event aggregator software on PC, etc.

This document does not define internal communication between an access control unit and its components if they are implemented on a single device.

This document is based upon work done by the ONVIF open industry forum. The ONVIF Credential specification, ONVIF Access Rules specification, ONVIF Authentication Behaviour specification and ONVIF Schedule specification are compatible with this document.

This document is accompanied by a set of computer readable interface definitions (see Annex A):

- credential service WSDL, see Clause A.1;
- access rules service WSDL, see Clause A.2;
- authentication behaviour service WSDL, see Clause A.3;
- schedule service WSDL, see Clause A.4.

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Additional services needed for monitoring of doors and access points (portal sides) are outside the scope of this document. These services are covered by IEC 60839-11-32.

ALARM AND ELECTRONIC SECURITY SYSTEMS –

Part 11-33: Electronic access control systems – Access control configuration based on Web services

1 Scope

This part of IEC 60839 defines the Web services interface for electronic access control systems. This includes listing electronic access control system components, their logical composition, monitoring their states and controlling them. It also includes a mapping of mandatory and optional requirements in accordance with IEC 60839-11-1:2013, as covered by Annex B.

This document applies to physical security only. Physical security prevents unauthorized personnel, attackers or accidental intruders from physically accessing a building, room, etc.

Web services usage and device management functionality are outside the scope of this document. Refer to IEC 60839-11-31:2016 for more information.

This document does not in any way limit a manufacturer to add other protocols or extend the protocol defined here. For rules on how to accomplish this, refer to IEC 60839-11-31:2016.

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2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60839-11-1:2013, *Alarm and electronic security systems – Part 11-1: Electronic access control systems – System and components requirements*

IEC 60839-11-2:2014, *Alarm and electronic security systems – Part 11-2: Electronic access control systems – Application guidelines*

IEC 60839-11-31:2016, *Alarm and electronic security systems – Part 11-31: Electronic access control systems – Core interoperability protocol based on Web services*

IEC 60839-11-32:2016, *Alarm and electronic security systems – Part 11-32: Electronic access control systems – Access control monitoring based on Web services*

ISO 16484-5:2017, *Building automation and control systems (BACS) – Part 5: Data communication protocol*

RFC 5545, *Internet Calendaring and Scheduling Core Object Specification (iCalendar),* (availabe at https://tools.ietf.org/html/rfc5545)

RFC 5234, *Augmented BNF for Syntax Specifications: ABNF,* (available at https://tools.ietf.org/html/rfc5234)

3 Terms and definitions

For the purposes of this document the terms and definitions given in IEC 60839-11-1, IEC 60839-11-2, IEC 60839-11-31 and IEC 60839-11-32 and the following apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at http://www.electropedia.org/
- ISO Online browsing platform: available at http://www.iso.org/obp

NOTE When the IEC term defined in IEC 60839-11-1 and IEC 60839-11-2 differs from the terms used in this document, the IEC term will be given within parentheses in the section headers.

3.1
access level
set of rules used to determine where and when a credential has authorized access to one or more portals and which may include special passage conditions such as specific portal allowed open times

Note 1 to entry: In this document, the term "access rules" is used.

3.2
access point
portal
physical entrance/exit at which access can be controlled by a door, turnstile or other secure barrier

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Note 1 to entry: For the purposes of this document the access point is considered to be a logical composition of a physical door and reader(s) controlling access in one direction.

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Note 2 to entry: In this document, the term "door" has the same meaning as "access point" or "portal".

3.3
access policy
association of an access point (portal side) and a schedule (time zone)

Note 1 to entry: An access policy defines when an access point (portal side) can be accessed.

3.4
access profile
collection of access policies

Note 1 to entry: Access profiles are used to define "when" and "where" access will be granted.

3.5
anti-passback violation state
state indicating if the anti-passback rules have been violated for a credential

3.6
authentication policy
association of a security level and a schedule (time zone)

Note 1 to entry: An authentication policy defines when a security level is required at an access point (portal side).

3.7
authentication profile
collection of authentication policies

EXAMPLE All entrance access points (portal sides) are configured to require card access during office hours, card and PIN access during nighttime, and no access during holidays.

Note 1 to entry: Authentication profiles are used to define authentication behaviour for a type of access point (portal sides).

3.8
credential
information either memorized or held within a token with information either memorized, held within a token or uniquely identified biological (person) or physical (vehicle) trait of the user or credential holder

EXAMPLE A credential number can be stored in the physical credential (token). A PIN code is associated with the token, but will not necessarily be stored in the token. Both the credential number and the PIN code are credential identifiers that can be contained in the same credential.

Note 1 to entry: In this document, the term "credential" represents information that is used to identify a credential holder (user) at an access point (portal side). This information is not necessarily held within a token.

Note 2 to entry: In this document, several pieces of information (credential identifiers) can be part of the same credential if they belong together.

3.9
credential identifier
piece of data that identifies a credential holder (user) at an access point

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EXAMPLE Card number, unique card information, PIN, fingerprint, or other biometric information.

Note 1 to entry: A credential identifier also specifies the type of identifier (recognition method) and the format of the value used in the Web service interface.

IEC 60839-11-33:2021
https://standards.iteh.ai/catalog/standards/sist/fe133ec4-756d-4321-95f6-6db526971dcf/iec-60839-11-33-2021

3.10
credential state
state indicating if a credential is enabled or disabled, or if anti-passback rules have been violated or not

Note 1 to entry: The state may also contain a reason why the credential was disabled.

3.11
format type
format of a credential identifier value in the Web services interface

Note 1 to entry: The format is not necessarily the same as when it is stored in a physical credential.

Note 2 to entry: ONVIF supports the BACnet format types listed in ISO 16484-5:2017.

3.12
iCalendar
industry standard format for exchanging scheduling and activity-recording information electronically

3.13
recognition group
logical OR between the recognition methods in a security level

EXAMPLE One recognition group contains the recognition methods pt:Card and pt:Fingerprint. Another group contains the recognition methods pt:Card and pt:Face. The resulting effect is that the access point will require either Card+Fingerprint, or Card+Face.