CalConnect TC

Index to Calendaring and Scheduling Standards

Published Report

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The Calendaring and Scheduling Consortium, Inc. 2011

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Contents

Foreword

This page provides links, titles, and very brief abstracts of Calendaring and Calendaring-related (e.g. WebDAV, vCard) standards, specifications, and guides. The material is divided by category and subdivided in turn to base standards, additions and extensions, and work in progress. Entries are alphabetical by title within section. The material linked is largely but not entirely IETF and CalConnect.

We would appreciate additions and corrections to the list; please send any recommendations to Standards Recommendations to CalConnect.

Index to Calendaring and Scheduling Standards

1. General

1.1. An Introduction to Internet Calendaring

This CalConnect guide introduces internet calendaring and the major standards and specifications related to calendaring and scheduling.

1.2. Calendaring and Scheduling Glossary of Terms

A Glossary of Calendaring and Scheduling Terms, developed by CalConnect.

2. iCalendar

2.1. Base Standards

2.1.1. Internet Calendaring and Scheduling Core Object Specification (iCalendar) RFC 5545

iCalendar is the core data schema for calendaring information. This is the new version and obsoletes RFC 2445.

2.1.2. iCalendar Transport-Independent Interoperability Protocol (iTIP) — Scheduling Events, BusyTime, To-dos and Journal Entries RFC 5546

Specifies the mechanisms for calendaring event interchange between calendar servers. This is the new version and obsoletes RFC 2446.

2.1.3. iCalendar Message-Based Interoperability Protocol (iMIP) RFC 6047

Specifies how to exchange calendaring data via e-mail. This is the new version and obsoletes RFC 2447.

2.1.4. xCal: The XML format for iCalendar RFC 6321

This specification defines a format for representing iCalendar data in XML. More specifically, is to define an XML format that allows iCalendar data to be converted to XML, and then back to iCalendar, without losing any semantic meaning in the data. Anyone creating XML calendar data according to this specification will know that their data can be converted to a valid iCalendar representation as well.

2.2. Additional and Extensions

2.2.1. CalWS RESTful Web Services Protocol for Calendaring

This document, developed by the XML Technical Committee, specifies a RESTful web services Protocol for calendaring operations. This protocol has been contributed to OASIS `WS-CALENDAR` as a component of the `WS-CALENDAR` Specification under development by OASIS.

2.2.2. Freebusy Read URL

This proposal, developed by the Freebusy Technical Committee, defines a standardized form of Freebusy Read URL to improve interoperability between client and server implementations, while extending functionality and utility through the use of optional parameters.

2.2.3. hCalendar 1.0 microformat

hCalendar is a simple, open, distributed calendaring and events format, using a 1:1 representation of standard iCalendar (RFC 2445) `VEVENT` properties and values in semantic HTML or XHTML.

2.2.4. IANA Registration of Enumservices for Internet Calendaring RFC 5333

This document registers Enumservices for Internet calendaring. Specifically, this document focuses on Enumservices for scheduling with iMIP (iCalendar Message-Based Interoperability Protocol) and for accessing Internet calendaring information with CalDAV (Calendaring Extensions to WebDAV).

2.3. Work in Progress

2.3.1. Calendar Availability

This document specifies a new iCalendar calendar component `VAVAILABILITY` that allows the publication of available and unavailable time periods associated with a calendar user. This component can be used in standard iCalendar free-busy lookups, including iTIP free-busy requests, to generate repeating blocks of available or busy time with exceptions as needed.

2.3.2. Event Publication Extensions to iCalendar

This specification introduces a number of new iCalendar properties which are of particular use for event publishers and in social networking.

2.3.3. Internet Calendar Scheduling Protocol (iSchedule)

This document defines the Internet Calendar Scheduling Protocol (iSchedule), which is a binding from the iCalendar Transport- independent Interoperability Protocol (iTIP) to the Hypertext Transfer Protocol (HTTP) to enable interoperability between calendaring and scheduling systems over the Internet.

2.3.4. `LINK` Property Extension to iCalendar

This specification introduces a new iCalendar property `LINK` to provide ancillary information for iCalendar components.

2.3.5. Masking existing meetings in iCalendar free busy requests

This document defines an extension to the iTIP calendar scheduling protocol to allow an organizer to have a specific event that may exist on an attendee’s calendar ignored when the attendee calculates and returns their free-busy information after a request from the organizer.

2.3.6. New Properties for iCalendar

This document defines a set of new properties for iCalendar data.

2.3.7. Schema for representing resources for calendaring and scheduling services

This specification describes a schema for representing resources for calendaring and scheduling. A resource in the scheduling context is any shared entity that can be scheduled by a calendar user, but does not control its own attendance status.

2.3.8. `VALARM` Extensions for iCalendar

This document defines a set of extensions to the iCalendar `VALARM` component to enhance use of alarms and improve interoperability between clients and servers.

3. CalDAV

3.1. Base Standards

3.1.1. Calendaring Extensions to WebDAV (CalDAV) RFC 4791

This document defines extensions to the Web Distributed Authoring and Versioning (WebDAV) protocol to specify a standard way of accessing, managing, and sharing calendaring and scheduling information based on the iCalendar format. This document defines the "calendar-access" feature of CalDAV.

3.2. Additional and Extensions

3.3. Work in Progress

3.3.1. Calendar Collection Entity Tag (CTag) in CalDAV

This specification defines an extension to CalDAV that provides a fast way for a client to determine whether the contents of a calendar collection may have changed.

3.3.2. Calendar Usery Proxy Functionality in CalDAV

This specification defines an extension to CalDAV that makes it easy for clients to setup and manage calendar user proxies, using the WebDAV Access Control List extension as a basis.

3.3.3. Locating CalDAV and CardDAV Services

This specification describes how DNS SRV records, DNS TXT records and well-known URIs can be used together or separately to locate Calendaring Extensions to WebDAV (CalDAV) or vCard Extensions to WebDAV (CardDAV) services.

3.3.4. Scheduling Extensions to CalDAV

This document defines extensions to the Web Distributed Authoring and Versioning (WebDAV) protocol to specify a standard way of exchanging and processing scheduling messages based on the iCalendar Transport-Independent Interoperability Protocol (iTIP). This document defines the "calendar-schedule" feature of CalDAV.

Also see CC/R 1104:2018.

4. vCard

4.1. Base Standards

4.1.1. vCard Format Specification RFC 6350

This document defines the vCard data format for representing and exchanging a variety of information about individuals and other entities (e.g., formatted and structured name and delivery addresses, email address, multiple telephone numbers, photograph, logo, audio clips, etc.). This is the new version and obsoletes RFCs 2425, 2426, and 4770, and updates RFC 2739.

4.1.2. xCard: vCard XML Representation RFC 6351

This document defines the XML schema of the vCard data format.

4.2. Additional and Extensions

4.2.1. Calendar Attributes for vCard and LDAP RFC 2739

This memo defines three mechanisms for obtaining a URI to a user's calendar and free/busy time. These include manual transfer of the information, personal data exchange using the vCard format, and directory lookup using the LDAP protocol.

4.2.2. hCard 1.0 microformat

hCard is a simple, open, distributed format for representing people, companies, organizations, and places, using a 1:1 representation of vCard (RFC2426) properties and values in semantic HTML or XHTML.

4.3. Work in Progress

4.3.1. vCard Service Type Parameter

This document defines a "Service Type" parameter for use on various vCard properties to help clients distinguish between different types of communication services that may be using the same protocol, yet are distinct.

5. CardDAV

5.1. Base Standards

5.1.1. CardDAV: vCard Extensions to Web Distributed Authoring and Versioning (WebDAV) RFC 6352

This document defines extensions to the Web Distributed Authoring and Versioning (WebDAV) protocol to specify a standard way of accessing, managing, and sharing contact information based on the vCard format.

5.2. Additional and Extensions

5.3. Work in Progress

5.3.1. CardDAV Directory Gateway Extension

This document defines an extension to the vCard Extensions to WebDAV (CardDAV) protocol that allows a server to expose a directory as a read-only address book collection.

Also see CC/R 1104:2018.

6. WebDAV

6.1. Base Standards

6.1.1. HTTP Extensions for Web Distributed Authoring and Versioning (WebDAV) RFC 4918

Web Distributed Authoring and Versioning (WebDAV) consists of a set of methods, headers, and content-types ancillary to HTTP/1.1 for the management of resource properties, creation and management of resource collections, URL namespace manipulation, and resource locking (collision avoidance).

6.2. Additional and Extensions

6.2.1. Binding Extensions to WebDAV RFC 4842

This specification defines bindings, and the `BIND` method for creating multiple bindings to the same resource. Creating a new binding to a resource causes at least one new URI to be mapped to that resource. Servers are required to ensure the integrity of any bindings that they allow to be created.

6.2.2. Extended `MKCOL` for Web Distributed Authoring and Versioning (WebDAV) RFC 5689

This specification extends the Web Distributed Authoring and Versioning (WebDAV) `MKCOL` (Make Collection) method to allow collections of arbitrary resource-type to be created and to allow properties to be set at the same time.

6.2.3. Quota and Size Properties for Distributed Authoring and Versioning (DAV) Collections RFC 4331

This document discusses the properties and minor behaviors needed for clients to interoperate with quota (size) implementations on WebDAV repositories.

6.2.4. Using `POST` to Add Members to WebDAV Collectons RFC 5995

This specification defines a discovery mechanism through which servers can advertise support for `POST` requests with the aforementioned “add collection member” semantics.

6.2.5. Versioning Extensions to WebDAV RFC 3253

This document specifies a set of methods, headers, and resource types that define the WebDAV (Web Distributed Authoring and Versioning) versioning extensions to the HTTP/1.1 protocol.

6.2.6. Web Distributed Authoring and Versioning (WebDAV) SEARCH RFC 5323

This document specifies a set of methods, headers and properties composing WebDAV SEARCH, an application of the HTTP/1.1 protocol to efficiently search for DAV resources based upon a set of client- supplied criteria.

6.2.7. WebDAV Access Control Protocol RFC 3744

This specification extends the Web Distributed Authoring and Versioning (WebDAV) Protocol to support the server-side ordering of collection members.

6.2.8. WebDAV Current Principal Extension RFC 5397

This specification defines a new WebDAV property that allows clients to quickly determine the principal corresponding to the current authenticated user.

6.2.9. WebDAV Ordered Collections Protocol RFC 3648

This specification extends the Web Distributed Authoring and Versioning (WebDAV) Protocol to support the server-side ordering of collection members.

6.3. Work in Progress

6.3.1. Collection Synchronization for WebDAV

This specification defines an extension to WebDAV that allows efficient synchronization of the contents of a WebDAV collection.

7. Related

7.1. Base Standards

7.1.1. Date and Time on the Internet: Timestamps RFC 3339

This document defines a date and time format for use in Internet protocols that is a profile of the ISO 8601 standard for representation of dates and times using the Gregorian calendar.

7.2. Additional and Extensions

7.3. Work in Progress

7.3.1. Portable Contacts

The Portable Contacts specification is designed to make it easier for developers to give their users a secure way to access the address books and friends lists they have built up all over the web. Specifically, it seeks to create a common access pattern and contact schema that any site can provide, well-specified authentication and access rules, standard libraries that can work with any site, and absolutely minimal complexity, with the lightest possible toolchain requirements for developers.

7.3.2. Timezone Service Protocol

This document defines a timezone service protocol that allows reliable, secure and fast delivery of timezone information to client systems such as calendaring and scheduling applications or operating systems.

7.3.3. Timezone XML Specification

This specification describes a format for describing timezone information for software and services.

7.3.4. WS-Calendar

WS-Calendar is an OASIS cross-domain standard for passing schedule and interval information between and within services.

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