

Network Working Group
Request for Comments: 2447
Category: Standards Track

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[iTIP] - specifies an interoperability protocol for scheduling between different implementations;

This memo does not attempt to repeat the specification of concepts or definitions from these other memos. Where possible, references are made to the memo that provides for the specification of these concepts or definitions.

1.2 Formatting Conventions

The mechanisms defined in this memo are defined in prose. In order to refer to elements of the calendaring and scheduling model, core object or interoperability protocol defined in [iCAL] and [iTIP] some formatting conventions have been used.

The key words "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT", "SHOULD", "SHOULD NOT", "RECOMMENDED", "MAY" and "OPTIONAL" in this document are to be interpreted as described in [RFC-2119].

Calendaring and scheduling roles are referred to in quoted-strings of text with the first character of each word in upper case. For example, "Organizer" refers to a role of a "Calendar User" within the scheduling protocol defined by [iTIP].

Calendar components defined by [iCAL] are referred to with capitalized, quoted-strings of text. All calendar components start with the letter "V". For example, "VEVENT" refers to the event calendar component, "VTODO" refers to the to-do calendar component and "VJOURNAL" refers to the daily journal calendar component.

Scheduling methods defined by [iTIP] are referred to with capitalized, quoted-strings of text. For example, "REQUEST" refers to the method for requesting a scheduling calendar component be created or modified, "REPLY" refers to the method a recipient of a request uses to update their status with the "Organizer" of the calendar component.

Properties defined by [iCAL] are referred to with capitalized, quoted-strings of text, followed by the word "property". For example, "ATTENDEE" property refers to the iCalendar property used to convey the calendar address of a calendar user.

Property parameters defined by [iCAL] are referred to with lower case, quoted-strings of text, followed by the word "parameter". For example, "value" parameter refers to the iCalendar property parameter used to override the default data type for a property value.

1.3 Terminology

The email terms used in this memo are defined in [RFC-822] and [RFC-2045]. The calendaring and scheduling terms used in this memo are defined in [iCAL] and [iTIP].

2 MIME Message Format Binding

This section defines the message binding to the MIME electronic mail transport.

The sections below refer to the "originator" and the "respondent" of an iMIP message. Typically, the originator is the "Organizer" of an event. The respondent is an "Attendee" of the event.

The [RFC-822] "Reply-To" header typically contains the email address of the originator or respondent of an event. However, this cannot be guaranteed as Mail User Agents (MUA) are not required to enforce iMIP semantics.

2.1 MIME Media Type

A MIME entity containing content information formatted according to this document will be referenced as a "text/calendar" content type. It is assumed that this content type will be transported through a MIME electronic mail transport.

2.2 Security

This section addresses several aspects of security including

object. This means that a MIME message containing multiple iCalendar objects with different method values must be further encapsulated with a "multipart/mixed" MIME entity. This will allow each of the iCalendar objects to be encapsulated within their own "text/calendar" MIME entity.

A "charset" parameter MUST be present if the iCalendar object contains characters that are not part of the US-ASCII character set. [RFC-2046] discusses the selection of an appropriate "charset" value.

The optional "component" parameter defines the iCalendar component type contained within the iCalendar object.

The following is an example of this header field with a value that indicates an event message.

```
Content-Type:text/calendar; method=request; charset=UTF-8;
      component=vevent
```



```
BEGIN:VCALENDAR
PRODID:-//ACME/DesktopCalendar//EN
METHOD:REQUEST
VERSION:2.0
BEGIN:VEVENT
ORGANIZER:mailto:fool@example.com
```


ATTACH:cid:calsvr.example.com-12345aaa
 SEQUENCE:0
 STATUS:CONFIRMED
 END:VEVENT
 END:VCALENDAR

-----00FEE3790DC7E35189CA67CE2C00

-----FEE3790DC7E35189CA67CE2C
 Content-Type: application/msword; name="FieldReport.doc"
 Content-Transfer-Encoding: base64
 Content-Disposition: inline; filename="FieldReport.doc"
 Content-ID: <calsvr.example.com-12345aaa>

R0lGODdhTAQZAJEAAFVVvd3d3e4AAP///ywAAAAATAQZAAAC/5yPOSld6OctNqLs94XqAG
 4kiW5ommm6sq27gvH8kzX9oly+s73/g8MCoFEovGITCoxKMbyCRl6cNSq9YrNarfcrvdriIH
 5LL5jE6rxc3G+v2cguf0uv2Oz+v38L7/DxgoOKjURnjIIbe3yNjo+AgZWYVIWWl5iZnJY6J.

-----FEE3790DC7E35189CA67CE2C

5 Recommended Practices

This section outlines a series of recommended practices when using a messaging transport to exchange iCalendar objects.

5.1 Use of Content and Message IDs

The [iCAL] specification defines the use of Content IDs and Message IDs as follows:

6 Bibliography

- [CHST] Character Sets, <ftp://ftp.isi.edu/in-notes/iana/assignments/character-sets>
- [iCAL] Dawson, F. and D. Stenerson, "Internet Calendaring and

7 Authors' Addresses

The following address information is provided in a vCard v3.0, Electronic Business Card, format.

```
BEGIN:VCARD
VERSION:3.0
N:Dawson;Frank
FN:Frank Dawson
ORG:Lotus Development Corporation
ADR;TYPE=WORK,POSTAL,PARCEL;;;6544 Battleford
  Drive;Raleigh;NC;27613-3502;USA
TEL;TYPE=WORK,MSG:+1-919-676-9515
TEL;TYPE=WORK,FAX:+1-919-676-9564
EMAIL;TYPE=INTERNET:fdawson@earthlink.net
URL:http://home.earthlink.net/~fdawson
END:VCARD
```

```
BEGIN:VCARD
VERSION:3.0
N:Mansour;Steve
FN:Steve Mansour
ORG:Netscape Communications Corporation
ADR;TYPE=WORK,POSTAL,PARCEL;;;501 East Middlefield Road;Mountain
  View;CA;94043;USA
TEL;TYPE=WORK,MSG:+1-650-937-2378
TEL;TYPE=WORK,FAX:+1-650-937-2103
```


The iCalendar Object 222222 rAa2998

