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**Internet Calendaring and Scheduling Venue Component Specification
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Abstract

The currently existing iCalendar standard ([RFC 2445](#)) provides only a simple text field ("LOCATION" property) for specifying the location where an event (or "TODO" item) will occur. While this may be adequate for human readers, it is difficult for automated systems to make use of. With the recent advent of tools and services (event aggregators, for example) which would benefit greatly from structured location data, the need to specify detailed venue information has become apparent. This document describes a proposed method for addressing this need.

Comments are solicited and should be addressed to ietf-calsify@osafoundation.org and/or the authors.

Note: This document depends on RFC2445bis, currently in draft status, and should not proceed without RFC2445bis.

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1. Introduction

This specification introduces a new iCalendar [[RFC2445](#)] component VVENUE to provide detailed venue information for an event. The currently existing iCalendar standard ([RFC 2445](#)), and its proposed successor (RFC 2445bis) provide only a simple text field ("LOCATION" property) for specifying the location where an event (or "TODO" item) will occur. This is inadequate for use cases where structured location information (e.g. address, region, country, postal code) is required or preferred, and limits widespread adoption of iCalendar in those settings.

This specification is targeted at communicating detailed information about venues at which events occur; it is not intended to provide the level of location information necessary for resource scheduling.

2. Notational Conventions

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 [[RFC2119](#)].

3. An Example

To facilitate understanding the detailed descriptions below, here is an example iCalendar file including the proposed venue component. This example is for a Joe Bloggs concert occurring at The Venue in San Diego, CA.

```
BEGIN:VCALENDAR
PRODID:-//Example Co.//Example 2.0//EN
VERSION:2.0
BEGIN:VTIMEZONE
TZID:US/Pacific
LAST-MODIFIED:20060110T171418Z
BEGIN:STANDARD
DTSTART:20051030T080000
TZOFFSETTO:-0700
TZOFFSETFROM:+0000
TZNAME:MST
END:STANDARD
BEGIN:DAYLIGHT
DTSTART:20060402T020000
TZOFFSETTO:-0600
TZOFFSETFROM:-0700
TZNAME:MDT
END:DAYLIGHT
END:VTIMEZONE
BEGIN:VEVENT
UID:E0-001-000233571-3@events.example.com
LOCATION;VVENUE=V0-001-000153774-0@events.example.com:The Venue
  e\n1055 Fifth Avenue\nSan Diego, CA 92101
DTSTAMP:20060110T171344Z
DTSTART;TZID=US/Pacific:20060717T200000
SUMMARY:Joe Bloggs in concert
DTEND;TZID=US/Pacific:20060717T230000
DESCRIPTION:Joe Bloggs plays everything from the old
  Pieman & Garfunkie stuff to his latest album. Not to be
  missed!
END:VEVENT
BEGIN:VVENUE
VENUE-ID:V0-001-000153774-0@events.example.com
NAME:The Venue
DESCRIPTION: The Venues is a home for live music and
  southern-inspired cuisine in an environment celebrating
  the Afric an American cultural contributions of blues
  music and folk art.
STREET-ADDRESS:1055 Fifth Avenue\nSuite 4
EXTENDED-ADDRESS:Stage 2
LOCALITY:San Diego
```


REGION;ABBREV=CA:California
COUNTRY;ABBREV=US;ABBREV=USA:United States
POSTAL-CODE:92101
TZID=US/Pacific
GEO:32.716220;-117.160156
URL;TYPE=Map:http://maps.example.com/maps?q=1055%20Fifth
%20Avenue%2C%20San%20Diego%2C%20California%20&hl=en
URL;TYPE=Event Listing:http://events.example.com/venues/
V0-001-000153774-0
URL;TYPE=Official Site:http://thevenue.com/venues/clubvenues
/sandiego/
TEL;TYPE=Box Office:619.299.2583
CATEGORIES:music concert
END:VVENUE
END:VCALENDAR

The "VVENUE" component works similarly to "VTIMEZONE". It is referenced by parameter from the "LOCATION" property of a "VEVENT".

4. Venue Identifier Parameter

Parameter Name: "VVENUE"

Purpose: To specify the identifier for the venue definition for a venue component in the property value.

Format Definition:

```
venueparam = "VVENUE" "=" paramtext
```

Description: The parameter MAY be specified on the "LOCATION" property when detailed information about the venue is available.

Example: The following is an example of this property parameter as part of a LOCATION property in a VEVENT:

```
LOCATION;VVENUE=1234@events.example.com:Novell\, Inc.\n1860  
South Novell Place\nBuilding H\, Executive Briefing Center\nProvo\  
Utah
```


5. Venue Component

Component Name: "VVENUE"

Purpose: Provide a grouping of component properties that describe an event venue.

Format Definition: A "VVENUE" calendar component is defined by the following notation:

```
venuec = "BEGIN" ":" "VVENUE" CRLF
        venueprop
        "END" ":" "VVENUE" CRLF
```

```
venueprop = *(
    ; the following are all REQUIRED,
    ; but MUST NOT occur more than once

    uid

    ; the following are optional,
    ; but MUST NOT occur more than once

    name / description / street-address / extended-address /
    locality / region / country / postal-code / tzid / geo /
    location-type / categories

    ; the following are optional,
    ; and MAY occur more than once

    tel / url
)
```

Description: A "VVENUE" calendar component is a grouping of component properties that represent a venue where an event occurs. This extends the "LOCATION" property of "VEVENT" and "TODO" components, providing the ability to specify detailed information about the event venue.

Example: The following is an example of the "VVENUE" calendar component used to represent the The Venue in San Diego, California.


```
BEGIN:VVENUE
VENUE-ID:V0-001-000153774-0@events.example.com
NAME:The Venue
DESCRIPTION: The Venue is a home for live music
             and southern-inspired cuisine in an environment celebrating the
             African American cultural contributions of blues music and folk
             art.
STREET-ADDRESS:1055 Fifth Avenue\nSuite 4
EXTENDED-ADDRESS:Stage 2
LOCALITY:San Diego
REGION;ABBREV=CA:California
COUNTRY;ABBREV=US;ABBREV=USA:United States
POSTAL-CODE:92101
TZID=US/Pacific
GEO:32.716220;-117.160156
URL;TYPE=map:http://maps.example.com/maps?q=1055%20Fifth%20Avenue%
             2C%20San%20Diego%2C%20California%20&hl=en
URL;TYPE=Event Listing:http://events.example.com/venues/V0-001-00015
             3774-0
URL;TYPE=Official Site:http://thevenue.com/venues/clubvenues/sandi
             ego/
TEL;TYPE=Box Office:619.299.2583
CATEGORIES:music concert
END:VVENUE
```

[5.1.](#) UID Property Use Within Venue Component

The use of the UID component within VVENUE is identical to that specified in [RFC 2445](#) (iCalendar), extended simply to VVENUE.

[5.2.](#) Venue Name Property

Property Name: "NAME"

Purpose: This property specifies the name of a venue.

Value Type: TEXT

Property Parameters: Non-standard property parameters can be specified on this property.

Conformance: This property SHOULD be specified in a "VVENUE" calendar component.

Description: This is the commonly used name for the venue.

Format Definition: This property is defined by the following notation:

name = "NAME" ":" text CRLF

Example: The following is an example of a venue identifier property:

NAME:The Venue

5.3. Description Property Use Within Venue Component

The use of the Description property within VVENUE is identical to that specified in [RFC 2445](#) (iCalendar), extended simply to VVENUE.

5.4. Venue Street Address Property

Property Name: "STREET-ADDRESS"

Purpose: This property specifies the street address of a location.

Value Type: TEXT

Property Parameters: Non-standard property parameters can be specified on this property.

Conformance: This property MAY be specified in a "VVENUE" calendar component.

Description: This specifies the street address of a location. If the location requires a multiple-line address, they may be separated by an encoded newline "\n".

Format Definition:

street-address = "STREET-ADDRESS" ":" text CRLF

Example: The following is an example of a location identifier property:

STREET-ADDRESS:1055 Fifth Avenue\nSuite 4

5.5. Venue Extended Address Property

Property Name: "EXTENDED-ADDRESS"

Purpose: This property provides the opportunity to include extended address information for a location.

Value Type: TEXT

Property Parameters: Non-standard property parameters can be specified on this property.

Conformance: This property MAY be specified in a "VVENUE" calendar

component.

Description: This property provides the opportunity to include extended address information for a location. This property may be used to give additional information about an address that is not usually considered part of the street address. If the location requires a multiple-line address, they may be separated by an encoded newline "\n".

Format Definition:

```
extended-address = "EXTENDED-ADDRESS" ":" text CRLF
```

Example: The following is an example of a location identifier property:

```
EXTENDED-ADDRESS:Conference Room B
```

5.6. Venue Locality Property

Property Name: "LOCALITY"

Purpose: This property specifies the locality in which a venue is found.

Value Type: TEXT

Property Parameters: Non-standard property parameters can be specified on this property.

Conformance: This property MAY be specified in a "VVENUE" calendar component.

Description: This specifies the city or locality of a venue.

Format Definition:

```
locality = "LOCALITY" ":" text CRLF
```

Example: The following is an example of a locality property:

```
LOCALITY:San Diego
```

5.7. Venue Region Property

Property Name: "REGION"

Purpose: This property specifies the region (state, province, canton, etc.) in which a location is found.

Value Type: TEXT

Property Parameters: Non-standard, including ABBREV property parameters can be specified on this property.

Conformance: This property MAY be specified in a "VVENUE" calendar component.

Description: This specifies the region (state, province, canton, etc.) of a location.

Format Definition:

```
region = "REGION" ":" text CRLF
```

Example: The following is an example of a location identifier property:

```
REGION;ABBREV=CA:California
```

5.8. Venue Country Property

Property Name: "COUNTRY"

Purpose: This property specifies the country in which a location is found.

Value Type: TEXT

Property Parameters: Non-standard, including ABBREV property parameters can be specified on this property.

Conformance: This property MAY be specified in a "VVENUE" calendar component.

Description: This specifies the country of a location.

Format Definition:

```
country = "COUNTRY" ":" text CRLF
```

Example: The following is an example of a location identifier property:

```
COUNTRY;ABBREV=US;ABBREV=USA:United States
```

5.9. Venue Postal Code Property

Property Name: "POSTAL-CODE"

Purpose: This property specifies the postal code for a location.

Value Type: TEXT

Property Parameters: Non-standard property parameters can be specified on this property.

Conformance: This property MAY be specified in a "VVENUE" calendar component.

Description: This specifies the postal code of a location.

Format Definition:

```
postalcode = "POSTAL-CODE" ":" text CRLF
```

Example: The following is an example of a location identifier property:

```
POSTAL-CODE:92101
```

5.10. Telephone Property

Property Name: "TEL"

Purpose: This property specifies a telephone number for a location.

Value Type: TEXT

Property Parameters: Non-standard property parameters, including the TYPE parameter, can be specified on this property.

Conformance: This property MAY be specified in a "VVENUE" calendar component.

Description: This specifies the telephone number of a location.

Format Definition:

```
telephone = "TEL" ":" text CRLF
```

Example: The following is an example of a telephone property:

```
TEL;TYPE=Box Office:619.299.2583
```

5.11. Location Type Property

Property Name: "LOCATION-TYPE"

Purpose: To specify the IANA location-type [[RFC4589](#)] designator for a VVENUE component.

Format Definition:

```
location-type = "LOCATION-TYPE" "=" text CRLF
```

Description: The parameter MAY be specified on a "VVENUE" component

when the IANA location-type designation is available.

Example: The following is an example of this property:

```
LOCATION-TYPE:club, bar, restaurant
```

Although categories and location type tokens are perhaps similar, they serve rather different purposes. Location type tokens serve to categorize a VVENUE using a well-defined, finite list of possibilities (the IANA Location Type Registry). Categories on the other hand are user-provided and user defined and have both a richness and "messiness" that allows user-created taxonomies to arise and evolve.

5.12. TZID Use Within Venue Component

Property Name: TZID

Purpose: To specify the identifier for the time zone definition for a venue component.

Description: The use of the TZID property within VVENUE is substantially similar to the use of the TZID parameter specified in [RFC 2445](#) (iCalendar), extended to specify the time zone of a venue component.

Where the TZID parameter specifies the identifier for the time zone definition for a time component, the TZID property conveys the same information for a venue component.

An individual "VTIMEZONE" calendar component MUST be specified for each unique "TZID" parameter value specified in the iCalendar object.

Time zone calendar components may be shared between venue components and other components. For instance, a venue component and an event component may both point to the same timezone component.

5.13. GEO Property Use Within Venue Component

The use of the GEO property within VVENUE is identical to that specified in [RFC 2445](#) (iCalendar), extended simply to VVENUE.

5.14. CATEGORIES Use Within Location Component

The use of the CATEGORIES property within VVENUE is identical to that specified in [RFC 2445](#) (iCalendar), extended simply to VVENUE.

5.15. URL Use Within Location Component

The use of the URL property within VVENUE is identical to that specified in [RFC 2445](#) (iCalendar), extended simply to VVENUE.

5.16. Related To Use Within Location Component

The use of the RELATED-TO property within VVENUE is identical to that specified in [RFC 2445](#) (iCalendar), extended simply to VVENUE.

5.17. Date/Time Created Use Within Location Component

The use of the CREATED property within VVENUE is identical to that specified in [RFC 2445](#) (iCalendar), extended simply to VVENUE.

5.18. Date/Time Stamp Use Within Location Component

The use of the DTSTAMP property within VVENUE is identical to that specified in [RFC 2445](#) (iCalendar), extended simply to VVENUE.

5.19. Last Modified Use Within Location Component

The use of the LAST-MODIFIED property within VVENUE is identical to that specified in [RFC 2445](#) (iCalendar), extended simply to VVENUE.

5.20. Abbreviation Parameter

Parameter Name: "ABBREV"

Purpose: To specify an abbreviated version of a REGION or COUNTRY.

Format Definition:

```
abbreviation = "ABBREV" "=" paramtext CRLF
```

Description: The parameter MAY be specified on the "REGION" and "COUNTRY" properties when abbreviated versions are available and may be useful.

Example: The following is an example of this property parameter:

```
COUNTRY;ABBREV=US;ABBREV=USA:United States
```

5.21. Type Parameter

Parameter Name: "TYPE"

Purpose: To specify a type string for a URL or TEL property.

Format Definition:

type = "TYPE" "=" paramtext CRLF

Description: The parameter MAY be specified on the "URL" and "TEL" properties when information about the type of these resources is available and may be useful. For example, identifying the box office phone number, or fax number may be useful for phone numbers, or identifying a tickets URL, official site, or other URL types may be useful for URL property.

Example: The following is an example of this property parameter:

```
URL;TYPE=map:http://maps.example.com/
    maps?q=1055%20Fifth%20Avenue%2C%20San%20Diego%2C%20California
    %20&hl=en
```

5.22. Example

Here's an example of two related venues, one representing the venue at which an event occurs, and another representing a suggested parking facility.

```
BEGIN:VVENUE
VENUE-ID:V0-001-000153774-0@events.example.com
NAME:The Venue
DESCRIPTION: The Venue is a home for live music and southern-insp
    ired cuisine in an environment celebrating the African American cult
    ural contributions of blues music and folk art. In 1992, our company
    converted a historical house in Cambridge, Massachusetts into the o
    riginal The Venue. The original The Venue opened its door
    on Thanksgiving Day, 1992 feeding the homeless before opening to th
    e public. Our commitment to serving the community will always be a p
    riority.
ROOM:Stage 2
ADDRESS:1055 Fifth Avenue\nSuite 4
LOCALITY:San Diego
REGION;ABBREV=CA:California
COUNTRY;ABBREV=US;ABBREV=USA:United States
POSTAL-CODE:92101
TZID=US/Pacific
GEO:32.716220;-117.160156
URL;TYPE=map:http://maps.example.com/maps?q=1055%20Fifth%20Avenue%2C%20
    San%20Diego%2C%20California%20&hl=en
URL;TYPE=Event Listing:http://events.example.com/venues/V0-001-00015
    3774-0
URL;TYPE=Official Site:http://thevenue.com/venues/clubvenues/sand
    iego/
TEL;TYPE=Box Office:619.299.2583
CATEGORIES:music concert
    t the local Ace Parking lot.
```


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RELATED-TO;RELTYPE=CHILD;VENUE-ID=:V0-001-000041351-0@events.example.com
END:VVENUE
BEGIN:VVENUE
VENUE-ID:V0-001-000041351-0@events.example.com
NAME: Ace Parking Fifth Street
DESCRIPTION: Public parking lot on the corner of Fifth and A.
ROOM: Stage 2
ADDRESS: 1042 Fifth Avenue\nSuite 4
LOCALITY: San Diego
REGION; ABBREV=CA: California
COUNTRY; ABBREV=US; ABBREV=USA: United States
POSTAL-CODE: 92101
TZID=US/Pacific
GEO: 32.716224; -117.160167
URL; TYPE=map: http://maps.example.com/maps?q=1042%20Fifth%20Avenue%2C%20
San%20Diego%2C%20California%20&hl=en
URL; TYPE=Event Listing: http://events.example.com/venues/V0-001-00001
4351-0
CATEGORIES: parking
RELATED-TO; RELTYPE=PARENT; VENUE-ID=:V0-001-000153774-0@events.example.co
m
END:VVENUE

6. Internationalization Considerations

This draft proposes changes to the iCalendar format ([RFC 2445](#)) and the internationalization issues are the same as in the larger iCalendar context.

7. Security Considerations

This draft proposes changes to the iCalendar format ([RFC 2445](#)) and the security issues are the same as in the larger iCalendar context.

8. IANA Considerations

TBD

9. Acknowledgements

The editors of this document would like to thank the Calendaring and Scheduling Consortium (CalConnect) for advice with this specification, and specifically thanks to Cyrus Daboo and Lisa Dusseault for their help and guidance.

10. References

10.1. Normative References

- [RFC2119] Bradner, S., "Key words for use in RFCs to Indicate Requirement Levels", [RFC 2119](#), March 1997.
- [RFC2445] Dawson, F. and D. Stenerson, "Internet Calendaring and Scheduling Core Object Specification (iCalendar)", [RFC 2445](#), November 1998.

10.2. Informative References

- [RFC2426] Dawson, F. and T. Howes, "vCard MIME Directory Profile", [RFC 2426](#), September 1998.
- [RFC3693] Cuellar, J., Morris, J., Mulligan, D., Peterson, J., and J. Polk, "Geopriv Requirements", [RFC 3693](#), February 2004.
- [RFC4119] Peterson, J., "A Presence-based GEOPRIV Location Object Format", [RFC 4119](#), December 2005.
- [RFC4589] Schulzrinne, H. and H. Tschofenig, "Location Types Registry", [RFC 4589](#), July 2006.

[Appendix A](#). Change History

[A.1](#). Changes in -01

1. Cleaned up VVENUE identifier. Still had a few instances where "UID" was used - now using "VENUE-ID" throughout.
2. Anonymized examples to remove references to specific companies and/or individuals.
3. Added note that timezone component must be provided to match any TZID property in a VVENUE.
4. Corrected "CITY" to "LOCALITY" in a few examples.
5. Removed references to NOTES in examples.
6. Change of one author's address.
7. Mailing list changed to ietf-calsify@osafoundation.org.
8. Corrected inconsistent use of POSTAL-CODE in examples.
9. Shuffled section order to group like items.
10. Corrected incorreced referenced RFC number.

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