```
CALCONNECT DOCUMENT CD 1604
Type:      Report
Title:     Report on Interoperability Test Event XXXVI
Version:   1.0
Date:      2016-05-31
Status:    Published
Source:    N/A
```

Report on CalConnect Interoperability Test Event XXXVI

April 18-19, 2016

The Calconnect interoperability event was hosted by Ribose and OGCIO at Cyberport in Hong Kong on April 18 and 19, 2016.

The event at HongKong continued our move to a more forum like approach, combining testing of new and standard calendar features with a number of in-depth discussions.

The following organizations were attending
• dmfs GmbH (formerly SmoothSync)
• FastMail
• Fruux
• Google
• Open-change
• Philipp Gewischt
• Ribose
• Spherical Cow Group

A major topic for this event - as for the last one - is trying to make iMip more reliable. In some cases it is the representation of the data which is the issue, other times it is incorrect handling of iTip.

Another topic which keeps coming back is dealing with differing interpretations of the iCalendar specification regarding recurrences.

Discussions and issues raised

During discussions a number of issues were raised. These included:

Timezones
    Do servers handle timezone definition changes - e.g. recalculate recurrences based on new timezone: the answer is usually not.

VJOURNAL:
    There was a proposal for adding an additional status to indicate "ARCHIVED"

Suggested alternatives: use different collection, or perhaps a structured category (this is also backwards-compatible, as opposed to a new status)

There is also a lack of rich text support - but that's also true for events and tasks - this should also be addressed - see "Styled-Description" in https://www.ietf.org/archive/id/draft-douglass-calendar-extension-04.txt

The general feeling is that JOURNAL is not heavily used.

Managed attachments:
Problem: we cannot add an attachment right away together with an event with managed attachments - we would have to first add an event, than once it synced and we know the uid we can add an attachment.

Support for wiping devices (Raised by Marten from dmfs):
Do we need a special operation?

The way to go is to use per-device passwords (or OAuth to get device-specific markers) and return empty collections on the first sync.

This last point led to a discussion on client authentication and whether we could perhaps support open connect. See
https://tools.ietf.org/html/rfc7591
http://openid.net/connect/

New API discussion:

There is a new format proposal
https://github.com/CalConnect/API/blob/master/CalendarEvent.mdwn

Some of the api issues that were discussed were
Structured location & structured data

Alerts and defaults support, have a separate field for defaults

isAcknowledged - as currently is it would cause gradual expansion of alerts on the instances; solution: make isAcknowledged store not boolean but the last recurrence instance for which the alert was acknowledged, and only store it on the base range, not on the instances (unless the instance has override alerts).

Attachments

Multi-language support - to group localizations under a "localize" component

Custom properties representation:

Should we use a special prefix (like the X-)? The problem is that once use of a property is widespread enough a property's custom name is "cut in stone", since everyone's using it.

Maybe a special string namespace/registry with easy way of claiming?

URLs (with domain names)?

On recurrences there was a discussion on the idea of excluding certain instances based on another event(s)

The start and end timezones are expressed through locations: first one corresponds to start, last - to end. The event timezone is independent.

Issues found during testing

These included:
 Missing timezones in ICS for single events.

When the recurrence rule doesn't match the first start then some services silently move the first start to the first actual occurrence (which seems reasonable)

Moving a recurring instance into a different day did not work correctly.

Timezone customization is not set for events (at least recurring) sent through iMIP (although the timezone is saved).

Some clients were mishandling sequence numbers

Create a recurring event in the future, save and send invitations
    "Add to Calendar" set a response, e.g. Yes
    Move an exception to a different time (again, send updates)
    "Update Calendar" set a response, e.g. Maybe
    Result: the response is discarded as outdated

Some servers don't send invitations for past events even when the user is explicitly asked whether to send or not and says yes.

There were problems with autodiscovery

Some issues discovered and questions about Android clients:
    may only sync 1 year of data
    attachments first appear and then disappear again
    Is CalDAV syncing support in the future?
    Android is missing new features or bugs, e.g.:
        bad recurrence expansions
        empty recurring events (when all instances are cancelled)

Client iMip bug: invitations to single instances of a recurring event are not handled properly

Server iMip bug:
  Have a recurring event with one exception moved, then invite an attendee - the invitation only contains the series but not the exception

An interesting fact was noted: for recurring events where the recurrence doesn't match the start date - between Apple, FastMail, Google and Open-Xchange these are all expanded differently (3 different behaviors).