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## **Introduction**

The October 2010 Calconnect Interoperability Testing Event was actually two distinct sets of testing. One set of vendors tested CalDAV and CardDAV. The second set of vendors tested iMIP.

In addition to testing, a BOF (bird of a feather) session was held to discuss recurrence rules and issues pertaining to them. A summary of the session is included at the end of this report.

<b>Organization</b>	<b>Participants</b>	<b>Versions Tested</b>
<b>CalDAV / CARDDAV /IMIP Testing</b>		
Apple	Cyrus Daboo	iCal Server and client - OS X 10.6.1 Apple iCal 4.0 (SnowLeopard)
Sun Server	Arnaud	
IBM	Nate Barry	Lotus Notes/Domino 8.5.2
RPI	Mike Douglass	
Oracle	Simon Vaillancourt	
Kerio	Tomas Hnetila Jakub Schwarzmeier	

## **General Testing Notes**

The participating vendors continued the ongoing testing of the CalDAV and CardDAV protocols, focusing on WebDAV sync, issues surrounding vendor-specific CalDAV extensions which needed more clarification, and iMIP recurrence issues.

As usual, participants found and corrected bugs during the course of the interop. This is always beneficial because an organization can have a significant testing environment at their location but when they test outside of their protected domain, unknown issues can bubble up to the surface and be resolved.

Regarding iMIP, it was found that iMIP representations of the text/calendar section that have Content-Disposition: attachment are handled differently by different vendors. If there is Content-Disposition: attachment, then some vendors will attach the icalendar as a file attachment and others will represent as a workflow item.

With respect to CardDAV, interoperability testing is just really starting and participants noted that the vCard 4 specification in CardDAV was invalid and time was spent discussion and writing changes to the actual specification.

This is exactly why face to face interoperability testing is so beneficial. It is possible to not only uncover issues but then work in a collegial environment to enhance, correct and improve the specifications being tested.

## **Summary of recurrence BOF**

On Monday, 10/4/10 CalConnect held a BOF session to discuss problems that different implementations have in the area of communicating and processing updates to recurring meetings. It was agreed that in general updates and reschedules to a single instance of a series works well.

### **Problematic use cases:**

- An instance is updated/rescheduled with THISANDFUTURE (with or without prior modification)
- A series is updated/rescheduled (with no exceptional data)
- A series is updated/rescheduled and maintains some prior exception data
- A series is split, with a new UID being sent for a second half of the series: Truncation/Expansion (essentially capturing THISANDFUTURE behavior)

**Discussion:**

There was a lot of discussion around the problematic use cases above and data models that differ and are the underlying cause to these. The result of this were a few specific takeaways.

**Takeaways:**

1) We would like to clarify wording in standard such that when an RRULE is modified, the SEQUENCE number MUST be incremented (some implementations reset to 0), specifically Microsoft Exchange. This seems that it could probably be changed very easily by Microsoft, and would have little to no risk in causing any regressions. Incrementing the RRULE allows other implementations to treat the change as an update rather than forcing the entire series to be blown away and recreated.

2) We would like to explore the concept of a iCalendar diff format. This would be a single VEVENT that contains ONLY data that was modified by that update. This probably requires some property level sequence tracking to correctly apply notices that arrive out of date. Many implementations already have such capabilities but do not share them in a standardized fashion. This would make update/reschedule transactions much simpler and much smaller. Additionally, it would conceptually be able to interoperate well with varying data models. Follow up is needed as to the specifics of this.

3) We would like to explore the concept of adding a SERIES ID to the iCalendar spec so that multiple UIDs could still be considered part of the same series. This would help in the implementation of THISANDFUTURE. Currently, the only ways to truly represent THISANDFUTURE changes are:

- ◆ -Modification of each effected instance as an exception
- ◆ -Dynamic processing of data
- ◆ -Splitting the meeting into multiple UIDs for each split. At this point, a subsequent THISANDFUTURE call across the two modified sets becomes problematic and there remains problems linking the two separate UIDs as they are actually representing the same meeting.

4) IBM would like to re-add the deprecated THISANDPRIOR, as Notes/Domino does utilize this and is reliant upon it. It should be added as an addendum to RFC 5545 and remain in consideration as implementations handle THISANDFUTURE going forward.

**Summary**

As usual, all vendors learned a lot from the testing and actually fixed software onsite. These events are always useful and continue to ensure the protocol is tested appropriately.

Respectfully submitted by Patricia Egen.