



FP6 - IST 507836 MHP-CONFIDENCE

*Examples of Specification Issues for MHP 1.1.2 and PVR
reported to DVB*

Introduction

During its efforts to develop conformance tests for these areas, the project MHP-CONFIDENCE has identified 65 specification issues on MHP 1.1.2 and 156 specification issues on PVR/PDR. These have been reported to the relevant DVB groups and have mainly been solved with participation of the project's members in these groups.

The complete information on these specification issues is available to DVB members through the TM-TAM adhoc group. This document gives a pointer to this information in DVB-TAM.

Specification issues for MHP 1.1.2

The DVB project uses a FileMaker Pro database to track MHP specification issues. The specification issues arising from the MHP 1.1.2 assertion development work are issues number 4317 to 4381 inclusive. Below are some examples of the problem descriptions of these issues.

Issue #4327

Annex AG, org.dvb.application.storage.StoredApplicationService:

The description of removeService() does not describe the behaviour in the case that the user permits some applications to be removed but refuses to allow others to be removed. Are applications only removed if the user permits all applications to be removed, or is each individual application removed once the user agrees to its removal?

Issue #4372

Annex AG, org.dvb.application.storage.InvalidApplicationException:

The class description states that this exception occurs when

“The application is not identified as able to run stand-alone in it's application_storage_descriptor”

However, the exception is also used in “ApplicationCache” in the case that the application is not signalled as capable of being stored.

Issue #4374

Section 10.14.3.4:

The specification of the 'version' field contains the statement that it

“Must match the version number signalled in the AIT...”

This should be clarified to refer to the version field in the application storage descriptor associated with this application.

From the issues concerned, 49 have resulted in changes to the MHP specification, 13 have been rejected (e.g. due to mis-understanding of the specification or as duplicates) and 2 remain open.

Specification issues for MHP PVR

For PVR / PDR issues, the DVB project has switched from the FileMaker Pro database to a bugzilla database. There are 156 issues in this database attributed to the project. The review of these issues was divided between a number of DVB participants.

The instructions for the review were as follows;

1. decide if the issue makes sense at all or should be rejected, if it should be rejected then propose an explanation of why
2. if there's a proposed solution, check it and indicate if you agree
3. where there's no proposed solution, create one
4. assign a severity to the issue

The following table shows the 4 levels of severity used, a description of each level and the number of issues with that severity.

Number of Issues	Severity	Description
28	trivial	Editorial, typos etc
44	minor	Corner cases, behaviour in error conditions, etc
77	normal	Default
7	major	Significant issues

The following are examples of the initial problem description of issues with each level of severity.

Major

```
Specification Ambiguity JavaDoc,  
org.ocap.shared.dvr.navigation.RecordingListFilter  
setCascadingFilter(RecordingListFilter filter)
```

There is no specified means to remove (as opposed to replace) a cascading filter.

There is no means to interrogate the currently set cascading filter (i.e. `getCascadingFilter()`).

This was classified as major because it is proposing the addition of new methods to the API.

Normal

```
Specification Ambiguity JavaDoc,  
org.ocap.shared.dvr.navigation.RecordingListIterator nextEntries(int  
n)
```

The specification should clarify that the current position is advanced in accordance with the number of `RecordingRequest` entries returned.

This was classified as normal because it is an issue which would be encountered by applications in the normal use of the method concerned.

Minor

```
Specification Ambiguity JavaDoc,  
org.ocap.shared.dvr.navigation.RecordingListIterator nextEntries(int  
n)
```

The specification should define the behaviour in the case that `n` is zero or negative on a call to either `nextEntries(int n)` or `previousEntries(int n)`. Does this also return an array with length zero?

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This was classified as minor because while it's a technical issue, well written applications would not encounter this problem.

Trivial

Specification Error JavaDoc, `org.ocap.shared.dvr.LeafRecordingRequest`:

The second sentence in the `PENDING_NO_CONFLICT_STATE` should start with an upper case letter.

This was classified as trivial because it's purely an editorial issue.

The following table shows the status of the issues at the conclusion of the review process.

Number of Issues	Status	Description
117	Fixed	Specification changed to resolve issue
17	Invalid	Issue is rejected, not a real problem, mis-understanding of the specification,
20	Duplicate	Issue is a duplicate of another issue
2	Later consideration	Issue remains open for later consideration