

SMS: Schedule structure

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1 Aim/objective

This document describes the structure of the schedule in an xml form as it should be exchanged through the communication interfaces of the SMS.

2 Scope

This document is intended for software engineers that need to manipulate schedule entries.

3 Schedule overview

The SMS schedule is can be summarized as a list of shows that are scheduled in the future and that shall be performed by the player at the expected start time. Each show must refer to one show playlist title so that the SMS can resolve the SPL to select at that time.



Note: the schedule does not reference SPL by their id but by their title in order to keep a human understandable link to the show playlist. If a SPL is changed and saved under the same title, the new version will automatically be used by the player when executing the schedule.

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The schedule can also list past shows with their execution result but the SMS will erase them after some configurable time.

3.1 Format

The SMS allows to update its schedule by exchanging schedule entries in an xml document that cover one given time range. The xml document must explicitly contain the time range that it covers and the schedule entries that it list must refer to time within that range.

3.2 Saving

Schedule xml document can be read from the SMS, modified by users and saved back to the SMS.

The covered time range specified in the xml document will be used by the SMS to erase any existing schedule entries within that time range and add the new ones from the document.



Note: It is not possible to change the past schedule by default. However one optional value can be set in the xml to force overwriting of past schedule entries.

3.3 Schedule execution

3.3.1 Player Scheduled mode

The SMS player must be changed to scheduled mode so that the scheduled is executed. When in a non-scheduled mode the player ignores all scheduler commands.

3.3.2 Pre-selection

The SMS will attempt to select the SPL in the player a configurable number of minutes before the start time of the show. The goal is to prepare the performance upfront and to report any show issue before the start time.

If the player is busy playing the previous show, it will refuse the pre-selection until the running show ends.

3.3.3 Accepted delay

In case the player is still busy playing the previous show, the SMS will attempt to select and play the current show for a configurable number of minutes. Once this delay is over, the show has to be handled manually by the user.

4 Schedule xml structure

The following describes the xml structure of the show playlist.

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4.1 SmsSchedule

The root node for the SMS settings is named *SmsSchedule*.

```
<SmsSchedule>
  <CoveredTimeRange>
    <StartDate>2013-09-13T10:06:01+00:00</StartDate>
    <EndDate>2013-09-13T10:06:01+00:00</EndDate>
    <UpdatePastShows>false</UpdatePastShows>
  </CoveredTimeRange>

  <ScheduledShows>
    <ScheduledShow>
      <ScheduleId>427673f2-28b5-408e-ac6d-308e9b56228c</ScheduleId>
      <ShowTitle>Example show</ShowTitle>
      <ShowId>5a34129a-cd3a-424a-8a9b-127a70bce8d5</ShowId>
      <Description>This is an example of scheduled show</Description>
      <StartDate>2013-09-13T10:06:01+00:00</StartDate>
      <DurationInSeconds>7200</DurationInSeconds>
      <Error>0</Error>
    </ScheduledShow>
    ...
  </ScheduledShows>
</SmsSchedule>
```

4.1.1 CoveredTimeRange

The *CoveredTimeRange* node contains the time range that is covered by this schedule xml document. The start date of all shows listed in the document must be contained within that time range.

When saving a schedule, it will be used by the SMS to remove any scheduled show that are within that range and replace them with new ones.

4.1.1.1 StartDate

This is the start date in ISO 8601 format of the covered time range.

4.1.1.2 EndDate

This is the end date in ISO 8601 format of the covered time range. The end date must be higher or equal to the start date.

4.1.1.3 UpdatePastShows

This is optional field that can be used to force the update of past shows. The system does not allow updating past scheduled shows by default except if this field is set to 'true'.

Default value = 'false'.

4.1.2 ScheduledShows

The *ScheduledShows* node is the root node for the list of scheduled shows for the covered time range. It is preferable to list the scheduled shows sorted by their start date.

4.1.2.1 ScheduledShow

The *ScheduledShow* node defines one schedule entry. It contains information about the SPL to play, the start time and an error status to report any issue with that schedule entry.

4.1.2.1.1 ScheduleId

This is an optional identifier for the schedule entry. It is not mandatory for the system but allows TMS or end user applications to keep track of scheduled events. If the client application provides a non-empty ScheduleId when updating the schedule, the system will save that identifier else it will generate a default uuid.

4.1.2.1.2 ShowTitle

This is the human readable title of the show playlist that will be played by the SMS at the scheduled time. This title is used as the identifier towards the show that will be played.

4.1.2.1.3 ShowId

This is the optional identifier of the show that will be played by the system. This field is resolved by the system based on the show title.



Note: It is only returned by the system when reading schedule xml data and it is ignored when updating the schedule. If the system has no show that matches the show title, this value is not returned.

4.1.2.1.4 Description

This is the human readable description of the scheduled show entry. It is informative.

4.1.2.1.5 StartDate

This is the start time of the show in ISO 8601 format.

4.1.2.1.6 DurationInSeconds

This is the duration of the scheduled show. It is informative and can change if the SPL content is changed.

4.1.2.1.7 Error

This is one error code that can be associated with the current schedule entry. The value 0 means no error and any other value will be an error code as defined by the SMS.

