MPRIS Support for Multimedia Applications

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Media Player Remote Interfacing Specification (MPRIS)

IPC and D-Bus

System and Session Buses

D-Bus Internals

- Services
- Objects
- Interfaces
- Methods
- Signals

D-Bus Internals

- ## Services
  - org.kde.kdeconnect
- ## Objects
  - /modules/kdeconnect/devices/
- ## Interfaces
  - org.kde.kdeconnect.device
  - org.kde.kdeconnect.client

Methods and Signals

calling and being called

MPRIS Interfaces

Object Path: /org/mpris/MediaPlayer2

- Root (org.mpris.MediaPlayer2)
- Player (org.mpris.MediaPlayer2.Player)
- TrackList (org.mpris.MediaPlayer2.TrackList)
- Playlists (org.mpris.MediaPlayer2.Playlists)

The media player *must* implement the first two interfaces.

Root Interface

Methods

Raise () → nothing

Quit () → nothing

Properties

CanQuit	b	Read only	
Fullscreen	b	Read/Write	(optional)
CanSetFullscreen	b	Read only	(optional)
CanRaise	b	Read only	
HasTrackList	b	Read only	
Identity	s	Read only	
DesktopEntry	s	Read only	(optional)
SupportedUriSchemes	as	Read only	
SupportedMimeTypes	as	Read only	

Player Interface

Methods

Next	()	→	nothing
Previous	()	→	nothing
Pause	()	→	nothing
PlayPause	()	→	nothing
Stop	()	→	nothing
Play	()	→	nothing
Seek	(x: Offset)	→	nothing
SetPosition	(o: TrackId, x: Position)	→	nothing
OpenUri	(s: Uri)	→	nothing

Signals

Seeked (x: Position)

Player Interface

Properties

PlaybackStatus	s (Playback_Status)	Read only	
LoopStatus	s (Loop_Status)	Read/Write	(optional)
Rate	d (Playback_Rate)	Read/Write	
Shuffle	b	Read/Write	(optional)
Metadata	a{sv} (Metadata_Map)	Read only	
Volume	d (Volume)	Read/Write	
Position	x (Time_In_Us)	Read only	
MinimumRate	d (Playback_Rate)	Read only	
MaximumRate	d (Playback_Rate)	Read only	
CanGoNext	b	Read only	
CanGoPrevious	b	Read only	
CanPlay	b	Read only	
CanPause	b	Read only	
CanSeek	b	Read only	
CanControl	b	Read only	

Testing MPRIS

qdbusviewer and mpristester

Thank You