


















# TWONKY COMPARISON CHART

	OPEN SOURCE ALTERNATIVE	TWONKY SERVER
Out-of-the-box compliance with DLNA certification tools	 The version under test failed 3 DLNA and 2 UPnP test cases	 DLNA reference server for trickmodes and DTCP
Comfortable media browsing based on rich metadata also addressing large media libraries		
	Music <ul style="list-style-type: none"> <li>• All Tracks</li> <li>• Album</li> <li>• Artist</li> <li>• Genre</li> <li>• Folder</li> </ul>	Music <ul style="list-style-type: none"> <li>• All Tracks</li> <li>• Album</li> <li>• Artist</li> <li>• Artist Index</li> <li>• Artist/ Album</li> <li>• By Folder</li> <li>• Composer</li> <li>• Genre</li> <li>• Genre/ Album</li> <li>• Genre/ Artist/ Album</li> <li>• Rating</li> <li>• Playlists</li> <li>• Online Services</li> </ul>
	Pictures <ul style="list-style-type: none"> <li>• All Photos</li> <li>• Camera</li> <li>• Date</li> <li>• Folder</li> </ul>	Pictures <ul style="list-style-type: none"> <li>• Album</li> <li>• All Photos</li> <li>• By Date</li> <li>• By Folder</li> <li>• Keywords</li> <li>• Rating</li> <li>• Slidesbows</li> <li>• Online Services</li> </ul>
	Video <ul style="list-style-type: none"> <li>• All Videos</li> <li>• Folder</li> </ul>	Video <ul style="list-style-type: none"> <li>• Album</li> <li>• All Videos</li> <li>• By Date</li> <li>• By Folder</li> <li>• Rating</li> <li>• Playlists</li> <li>• Title Index</li> <li>• Online Services</li> </ul>
Access to online and cloud media from off-the-shelf client devices through the server		
 Not Supported  Partial Support  Full Support  Full Support + Additional Formats		

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Upload of media items from a client device to the server (e.g. to backup media from a mobile device)		
Time seek support allowing client devices to start video playback at a certain time, (e.g. at the same time the user stopped watching it previously)		
Client adaptation to improve interoperability between server and client device and to provide better user experience	 Hardcoded for a limited number of devices; including additional clients or updates to existing clients require a complete firmware update	 Flexible mechanism that allows adding new client devices at any time independent of firmware updates; Twonky Server provides more than 200 client device adaptations
Server-side playlist handling to enable clients to create and manage playlists that are also visible to other connected devices		
Automatically generates smart playlists based on user behavior		 Highly Rated, Last Played, Most Played, Recently Added
Video subtitle support	 Limited to a few devices	
Support for Karaoke files (.cdg and .kar) in conjunction with MP3		
Aggregation of other media servers provides a single, comprehensive view of all media to ease searching and browsing		

 Not Supported   
  Partial Support   
  Full Support   
  Full Support + Additional Formats









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To ease browsing the "duplicate removal" feature lists media items that are shared multiple times just once in the navigation tree	✗	✓
The transcoding interface enables software as well as hardware transcoding on-the-fly; client adaptation makes sure that transcoding only takes place when really needed	✗	✓
Picture scaling	✓ Memory footprint depends on original picture size (27MB for a 12MP photo); it is also significantly slower than Twonky (1400ms vs 900ms); picture scaling is not combined with client adaptation, i.e. most client devices will get the original size and have to scale locally	✓ The Twonky scaler has a constant memory footprint of 2MB independent of original picture size; it automatically pre-scales pictures depending on client needs (part of client adaptation); This not only saves a lot of bandwidth but also results in better picture quality
Support for thumbnail generation	✗ Devices like PlayStation have to generate the thumbnails themselves which results in a poor/slow browsing experience	✓ Extraction of thumbnails from EXIF header and automatic creation if not available
Support for streaming premium content through DTCP-IP	✗	✓
Anonymous reporting of usage data for media analytics like library size, media types, connected devices seen in the households, usage pattern for play vs beam	✗	✓
✗ Not Supported              ✓ Partial Support              ✓ Full Support              ✓✓ Full Support + Additional Formats		

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Built-in web-based control point to browse and control connected devices	✗	✓
Built-in remote UI server to serve the same UI to every client device; can be utilized for services like VoD and any kind of device control like scheduled recoding	✗	✓
Web-based configuration UI allowing user to customize the service according to their preferences, e.g. to define media shares	✗	✓
Configuration API allowing OEMs to tailor the server for their specific platform	✓ Simple configuration file with limited number of configuration options parameters	✓ Runtime configuration though http-based configuration API with large number of configuration options that allow tailoring the server to the platform
Provision of status information like number of shared items, db status, file scan progress, connected clients or active streaming sessions	✗	✓
Non-DLNA front-ends to enable browser-based client applications	✗	✓ RSS, JSON
DLNA profile support	✓	✓ ✓ AAC_ADTS_320, PNG_LRG, MPEG_TS_JP_T
Supported media formats by file extension including non-DLNA formats	✓	✓ ✓
✗ Not Supported    ✓ Partial Support    ✓ Full Support    ✓ ✓ Full Support + Additional Formats		

# COMPARISON CHART

	OPEN SOURCE ALTERNATIVE	TWONKY SERVER
Music	AAC, FLAG, M4A, MP3, MP4, OGG, PCM, WAV, WMA	AAC, FLAC, M4A, M4B, MP3, MP4, OGG, PCM, WAV, WMA, 3GP, MP2, AC3, MPA, MP1, AIF, ASF, DSD (DSF, DFF)
Picture	JPEG	JPEG, PNG, TIF, TIFF, BMP, GIF
Video	AVI, DIVX, M2TS, MKV, MOV, MP4, MPEG2, MPEG4, MPG, VOB, WMV, XVID	AVI, DIVX, M2TS, MKV, MOV, MP4, MPEG2, MPEG4, MPG, VOB, WMV, XVID, MP1, SPTS, 3GP, VDR, MPE DVR-MS, M1V, M4V, MPV, FLV
Support for playlists covering all media types	Music-only	Music playlists, picture slideshows and video playlists
Interface to import 3rd party databases to enhance meta-data, e.g. from a PVR or EPG		
Professional services for integration and certification		
 Not Supported  Partial Support  Full Support  Full Support + Additional Formats		

Share local and streaming media and content across devices anytime, anywhere.

Twonky has been the industry's most reliable media connectivity software since its introduction in 2004. Unlike other media connectivity solutions, Twonky was developed 100% in-house and supports all major media types, platforms, and industry standards.

## TWONKY'S TECHNICAL SPECIFICATIONS

- ➔ Built-in integration with popular media adapters such as FireTV, Roku, Chromecast, Apple TV, DLNA DMRs, and Smart TVs
- ➔ Device adaptation technology to future-proof your services across all types of devices
- ➔ Solutions designed to common standards, such as DLNA and UPnP
- ➔ Digital Rights Management (DRM), Digital Transmission Content Protection over IP (DTCP-IP) and Microsoft PlayReady
- ➔ Broad platform support including:
  - Android: Android 4.0 or higher
  - Android TV
  - iOS: iOS 6.0 or higher
  - SDK includes Xcode project for Sample App
    - Linux
- ➔ Twonky 8 SDK development environment
  - Android: Eclipse, ADT, ANT, or Gradle on Windows, Mac, or Linux with Android 4.2.2 SDK(API level 17) and Android SDK Tools v22 / Build tools v19
  - SDK includes Eclipse project for Sample Application
  - iOS: XCode 5.0 or higher with iOS SDK 7.0 or 7.1
  - SDK includes Xcode project for Sample App
    - Linux