

QNAP

QNAP NAS & PLEX

Build Your Home Media Center



In-depth use of PLEX & QNAP

1

QNAP NAS & Plex

2

Plex Introduction

3

Installation & Setup

4

How to use Plex

5

Transcoding

QNAP NAS & PLEX

Build Your Home Media Center

Powerful
Hardware



Comprehensive
Storage
Functionality



Multimedia
Application



Your Best Choice - QNAP NAS

Powerful hardware support

High-speed network / expansion Capabilities

- 10GbE
- Thunderbolt 3
- USB-C QuickAccess
- SD Card slot

Local display

- HDMI

Easy storage expansion

- Qtier
- VJBOD
- Attach Expansion Enclosure

Powerful GPU

High-speed network / expansion capabilities

Variety options meet your need

Thunderbolt™ 3

High-speed Thunderbolt 3 with SMB protocol, allowing Mac and Windows users to collaborate on media editing.

10GbE Network

10GbE connectivity accelerates file sharing across devices.

USB-C QuickAccess

The files and data stored on the NAS can be directly accessed by using a USB cable

SD Card Slot

Allows you to quickly transfer data from other devices to the NAS

One Plex for different NAS series

Intel series

High performance
for Video Transcoding

GPU transcoding



AMD series

High-speed
multi-tasking

CPU transcoding



ARM series

Light multimedia
application

Audio transcoding only



Multimedia Transcoding

Supported models - Intel-based



Intel-based models support video transcoding via GPU

- Suitable for photo, music and video.
- Support hardware transcoding for high bitrate videos; some series also can support up to HEVC 4K.

Multimedia Transcoding

Supported models - Intel-based



NAS Model	1080P	H.264 4K	HEVC 4K 8-bit	HEVC 4K 10-bit
x51+	✓	✗	✗	✗
x51A, x53A	✓	✓	✗	✗
x82 (Core i Gen6)	✓	✓	✓	✗
x53B (Apollo Lake), x82T3, x82BR (Core i Gen7)	✓	✓	✓	✓

 HEVC 10-bit sample file: 4K 30F Level 5.1 main10 -> 1080P(10Mbps)

Multimedia Transcoding

Supported models - AMD-based



AMD-based models support video transcoding via CPU

- Suitable for photo, music and video. The NAS will use more resource for processing high bitrate video formats.
- With QNAP multimedia packages, such as Qmedia for Android TV or Apple TV, you can play videos on TV directly. With QVHelper, you can stream media files or music playlists from QNAP NAS to VLC media player, providing more choices for your multimedia enjoyments.

Multimedia Transcoding

Supported models - x31 (ARM-based)



ARM-based models only support audio transcoding

- Suitable for photo and music.
- With QNAP multimedia packages, such as Qmedia for Android TV or Apple TV, you can play videos on TV directly. With QVHelper, you can stream media files or music playlists from QNAP NAS to VLC media player, providing more choices for your multimedia enjoyments.

Multimedia Solution

Collect



Manage



Play



Multimedia Solution Package

Collect

- File Station remote mount
- Qsync
- Mobile apps
- Download Station
- Happyget

Manage, Backup & Search

- File Station
- Mobile apps
- Hybrid Backup Sync
- Qsirch
- Snapshot

Playback

- PLEX
- Video Station
- Photo Station
- Music Station
- Cinema28
- Mobile apps

Collect data to NAS



Plex Introduction

PLEX

Plex is like mission control for your personal media collections

Easy to use

Available anywhere

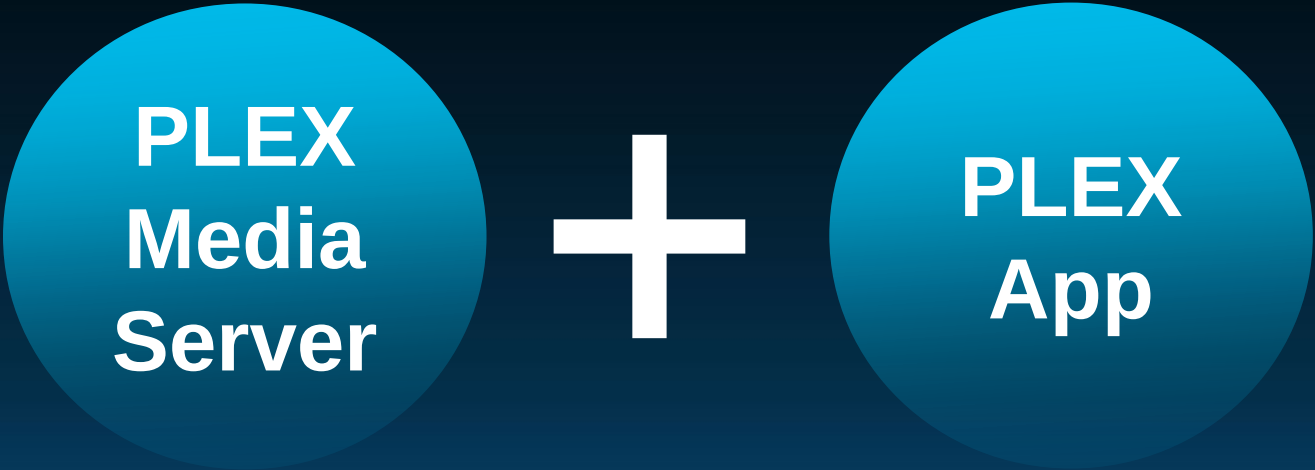
Rich media information

Support any format

Support various devices

Sharing

Plex Media Server and Apps



PLEX
Media
Server



PLEX
App

PLEX Media Server



PLEX APP



PLEX features

Feature	Free	Premium
Any Format	✓	✓
Support various devices, such as Apple TV	✓	✓
Library Organization	✓	✓
Sharing	✓	✓
Trailers and Extras	✗	✓
Hardware-Accelerated	✗	✓

For more information, please visit PLEX official website: <https://www.plex.tv/>

Installation and Setup

Install / Update

Install / Update Plex Media Server via App Center inside QTS

The screenshot displays the QNAP App Center interface. On the left is a sidebar menu with categories like 'My Apps', 'QNAS Store', 'All Apps', 'QTS Essentials', 'Recommended', 'Beta Lab', 'Partners', 'Backup/ Sync', 'Business', 'Content Management', 'JIL Communications', 'Developer Tools', 'Download', 'Entertainment', 'Surveillance', 'Utilities', 'Home Automation', and 'Security'. The main area shows a grid of apps. The 'Plex Media Server' app is highlighted with a red box. An orange arrow points from this app to a detailed view window on the right.

App Center

App Center

Plex Media Server Installed: DataVol1, Size: 948.47 MB
V1.9.6.4429 (2017/11/20) | Entertainment | Total Installs: 881447
Current Version: V1.10.1.602 (Installation Date 2017/12/22) Open

Resource: [Change Log](#) | [Forum](#) | [Download](#)

Plex organizes all of your personal media so you can easily access and enjoy it. Notice: If you upgrade the QNAP firmware and the app stops working, please reinstall the app.

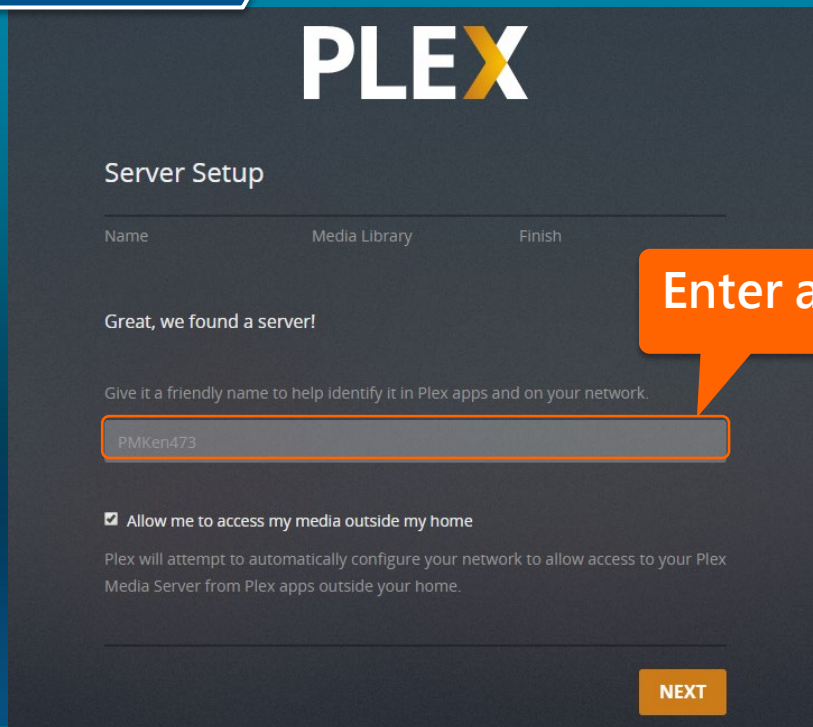
Language: English

Developer: [PLEX](#)

Maintainer: PLEX

Setup - 1

Set up the server name

The image shows the Plex Server Setup interface. At the top is the Plex logo. Below it is the title 'Server Setup'. A progress bar shows three steps: 'Name' (active), 'Media Library', and 'Finish'. The main text says 'Great, we found a server!'. Below this is a prompt: 'Give it a friendly name to help identify it in Plex apps and on your network.' A text input field contains 'PMKen473'. Below the input field is a checkbox labeled 'Allow me to access my media outside my home', which is checked. A note below the checkbox says 'Plex will attempt to automatically configure your network to allow access to your Plex Media Server from Plex apps outside your home.' At the bottom right is a 'NEXT' button.

PLEX

Server Setup

Name Media Library Finish

Great, we found a server!

Give it a friendly name to help identify it in Plex apps and on your network.

☒ Allow me to access my media outside my home

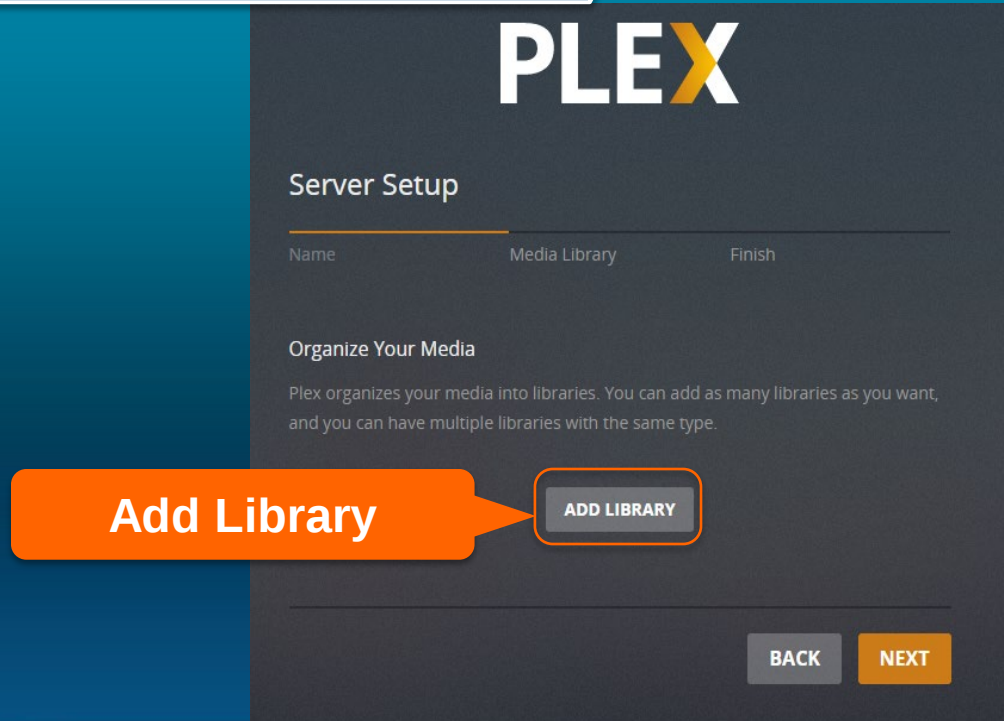
Plex will attempt to automatically configure your network to allow access to your Plex Media Server from Plex apps outside your home.

NEXT

Enter a server name

Setup – 2 (a)

Set up the multimedia library



The image shows the Plex Server Setup interface. At the top, the Plex logo is displayed. Below it, the 'Server Setup' section is active, indicated by a yellow underline. A progress bar shows three steps: 'Name', 'Media Library', and 'Finish'. The 'Media Library' step is currently selected. Under the 'Organize Your Media' heading, there is a paragraph explaining that Plex organizes media into libraries and that multiple libraries can be added. At the bottom of the screen, there are 'BACK' and 'NEXT' buttons. An orange callout bubble with the text 'Add Library' points to a button labeled 'ADD LIBRARY'.

PLEX

Server Setup

Name Media Library Finish

Organize Your Media

Plex organizes your media into libraries. You can add as many libraries as you want, and you can have multiple libraries with the same type.

Add Library

ADD LIBRARY

BACK NEXT

Setup – 2 (b)

Define the library type

Define the library type

Set up a name

Define the language for this type

The screenshot shows the 'Add Library' dialog box with the following elements and annotations:

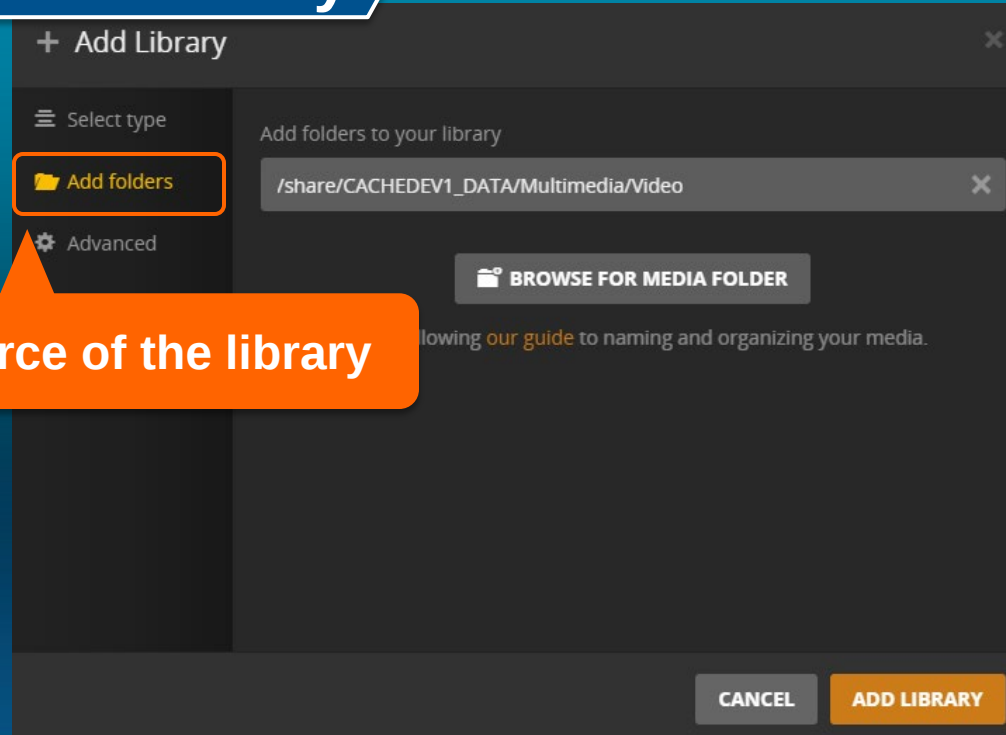
- 1** (orange circle) points to the 'Select type' menu icon.
- 2** (orange circle) points to the 'Name' text input field, which contains the text 'Movies'.
- 3** (orange circle) points to the 'Language' dropdown menu, which is set to 'English'.

The dialog box includes the following options and fields:

- Select type** (menu icon)
- Add folders** (folder icon)
- Advanced** (gear icon)
- Select your library type** (title)
- Library types:** Movies (film strip icon), TV Shows (TV icon), Music (musical note icon), Photos (camera icon), Other Videos (video camera icon).
- Name:** Text input field containing 'Movies'.
- Language:** Dropdown menu set to 'English'.
- Buttons:** CANCEL and NEXT.

Setup – 2 (c)

Add folder to this library



Select the source of the library

Setup - 3

Confirm



The image shows the Plex Server Setup screen. At the top is the Plex logo. Below it is the title "Server Setup". A progress bar shows three steps: "Name", "Media Library", and "Finish". The "Media Library" step is currently active. Below the progress bar are three icons representing different devices: a smartphone, a tablet, and a desktop monitor, each with a yellow arrow pointing right. To the right of these icons is a button labeled "GET PLEX APPS". Below the icons, there is a paragraph of text: "All set! Your Plex Media Server is working hard to find your media and make it beautiful. Grab the Plex app for all your favorite devices to get the most out of Plex and start streaming everywhere!". At the bottom right, there are two buttons: "BACK" and "DONE". The "DONE" button is highlighted in orange.

PLEX

Server Setup

Name Media Library Finish

GET PLEX APPS

All set! Your Plex Media Server is working hard to find your media and make it beautiful. Grab the Plex app for all your favorite devices to get the most out of Plex and start streaming everywhere!

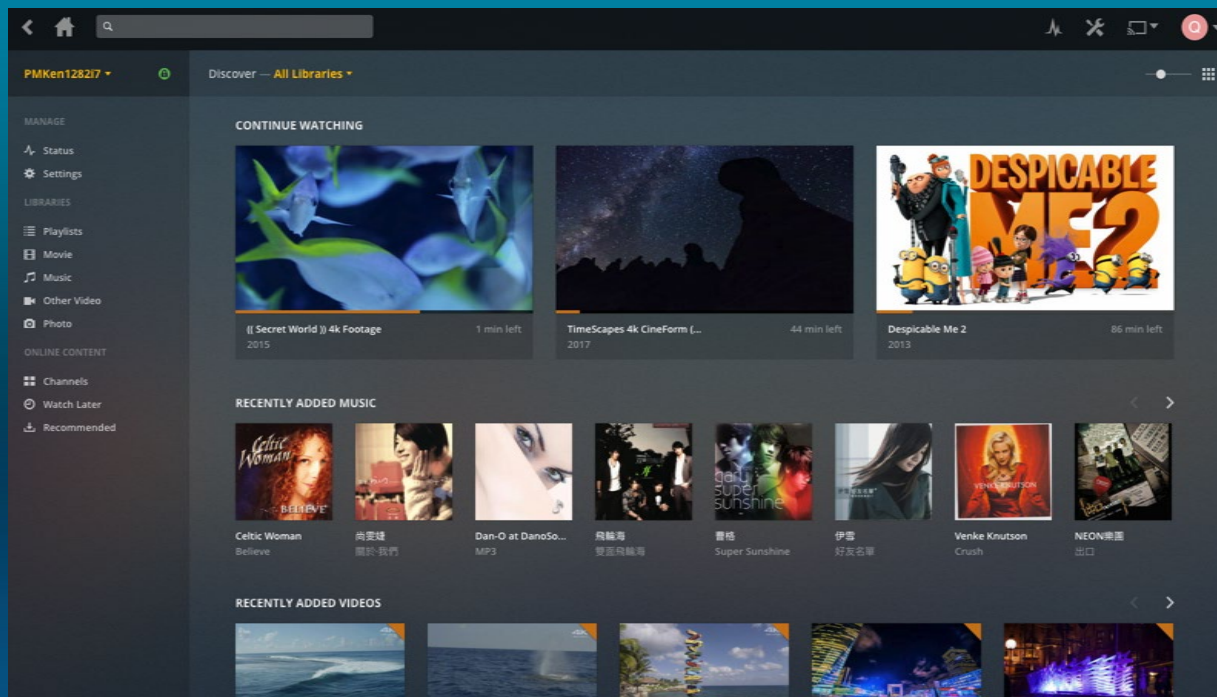
BACK DONE

Click "Done" to finish setting up

How to use Plex

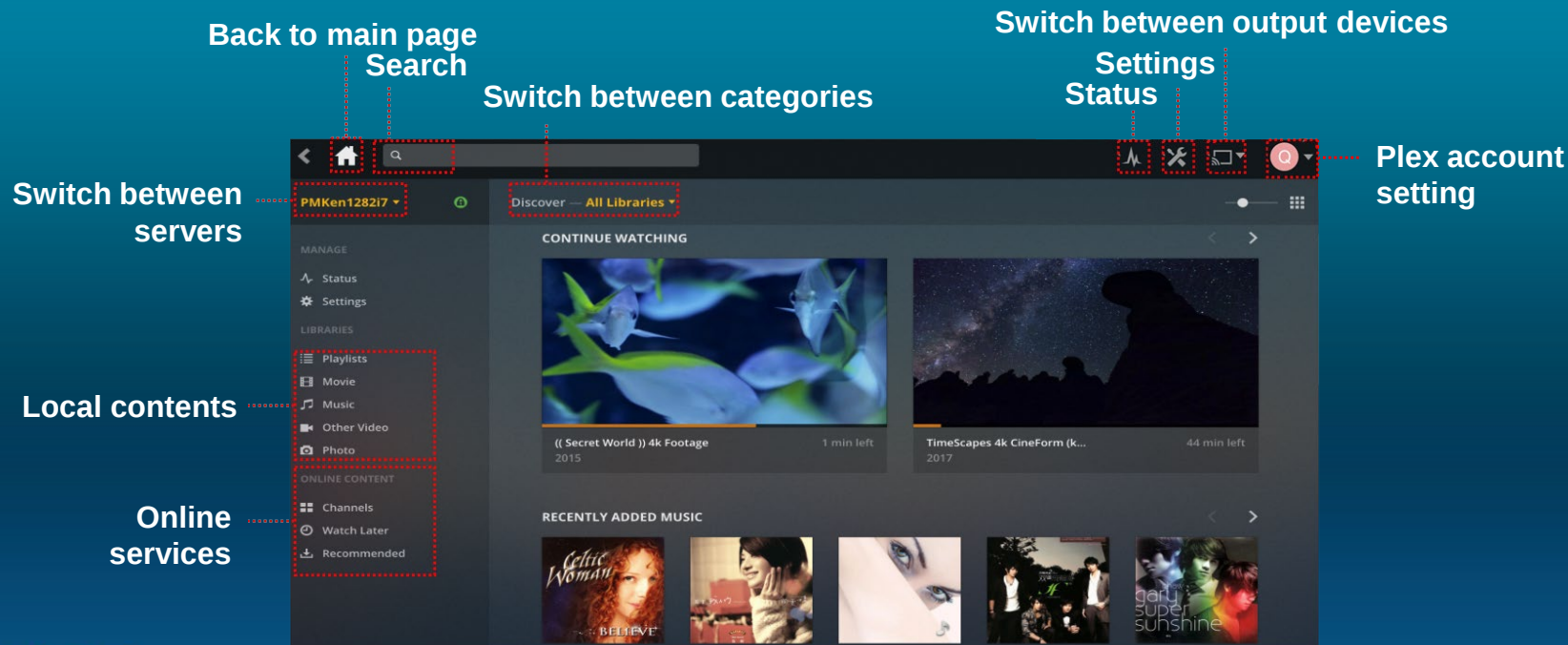
Plex Web UI

Main page



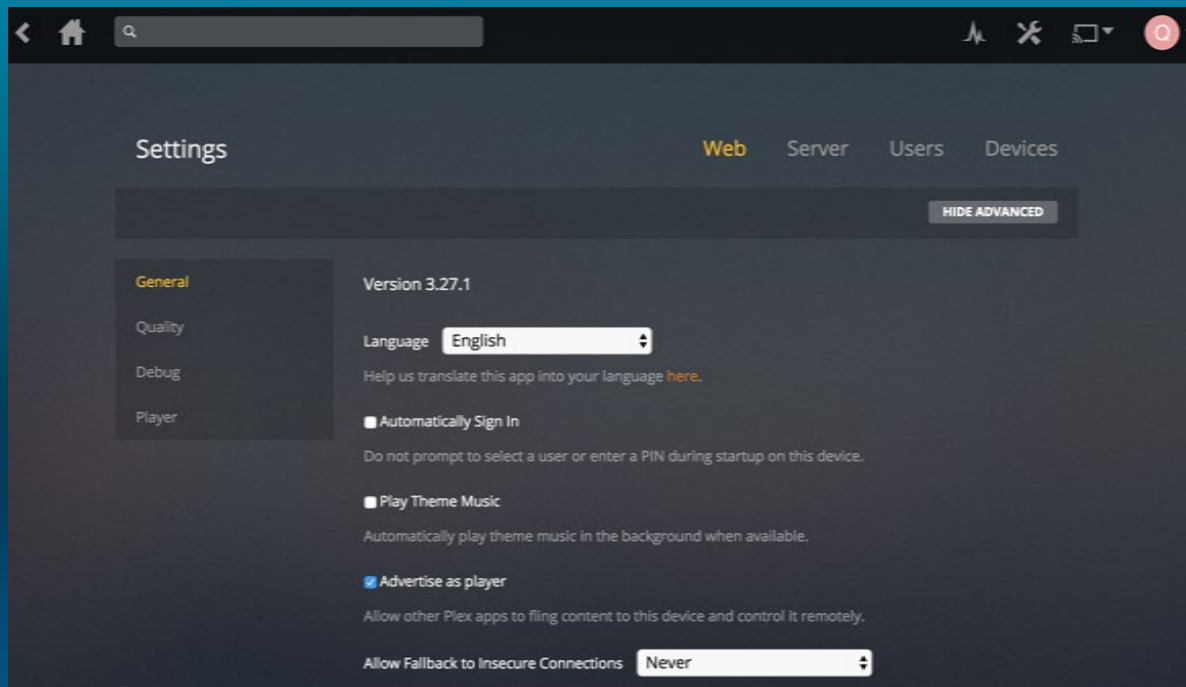
PLEX Web UI

Introduction of Plex web UI



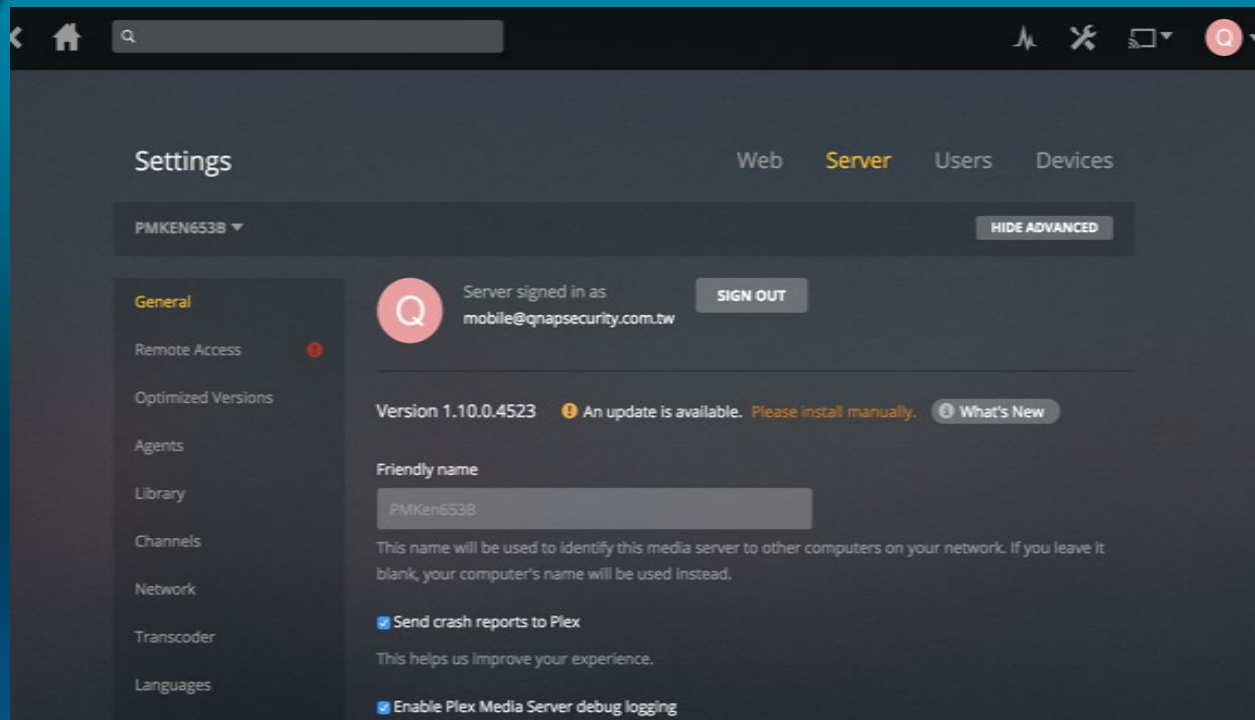
Plex Settings

Web browser setting



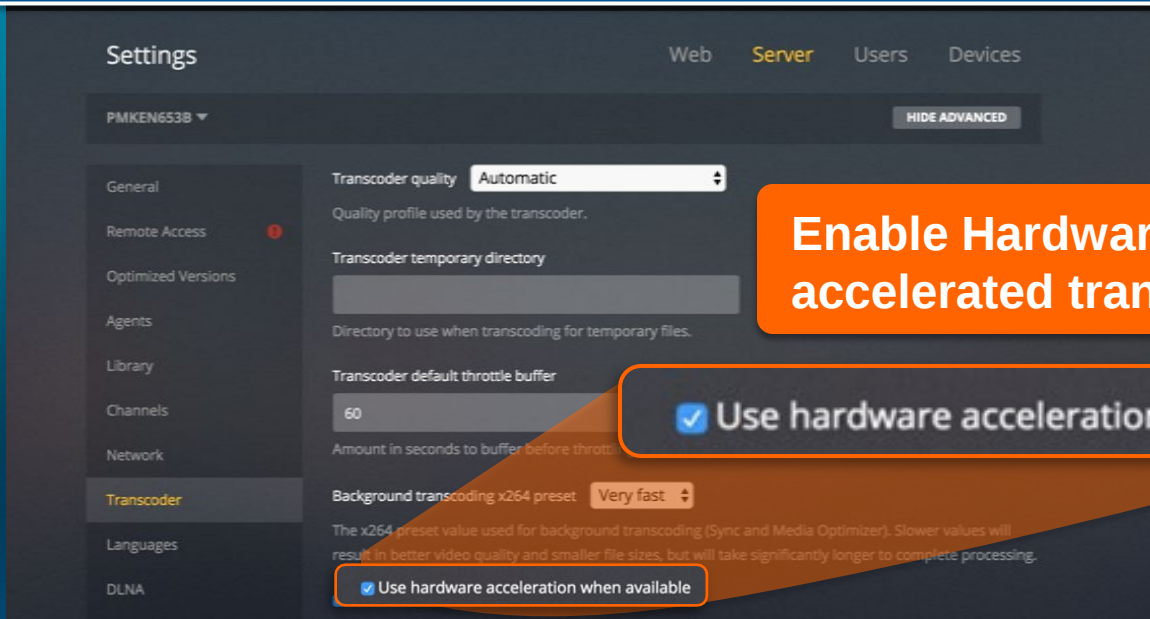
Plex Settings

Server



Plex Settings

Server - Hardware-accelerated transcoding



Enable Hardware-accelerated transcoding

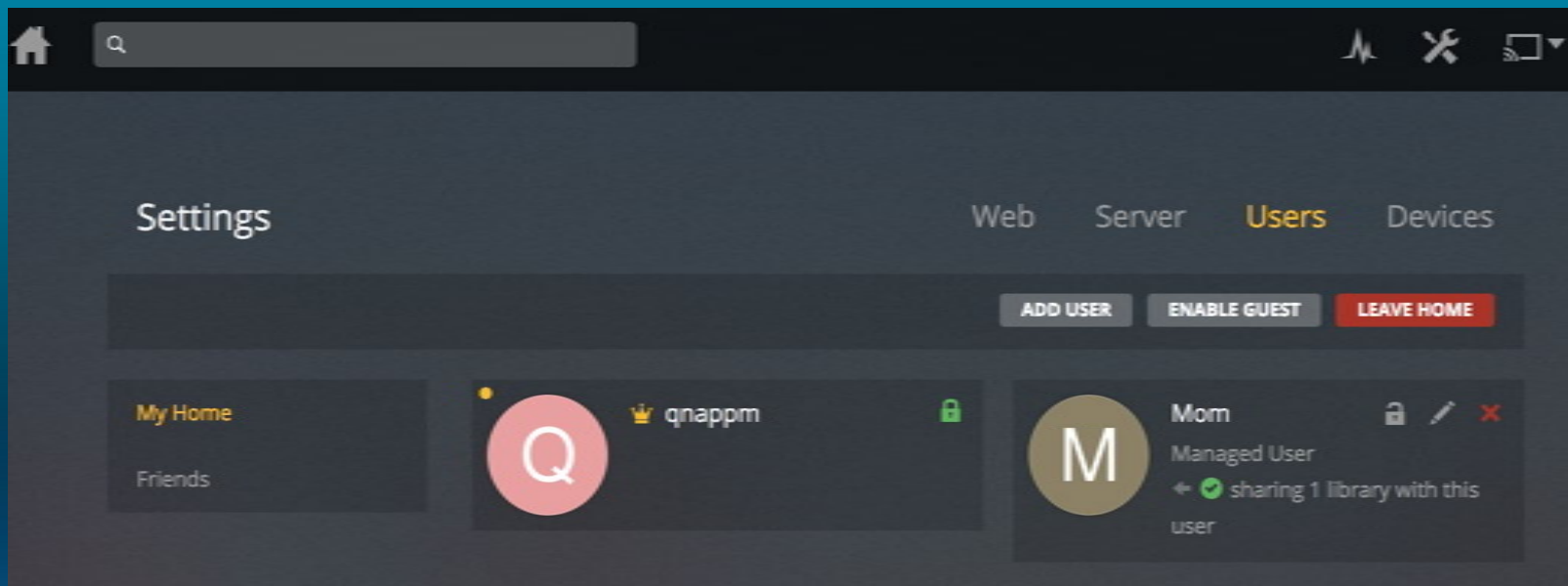
☒ Use hardware acceleration when available

☒ Use hardware acceleration when available

Only for Plex Pass

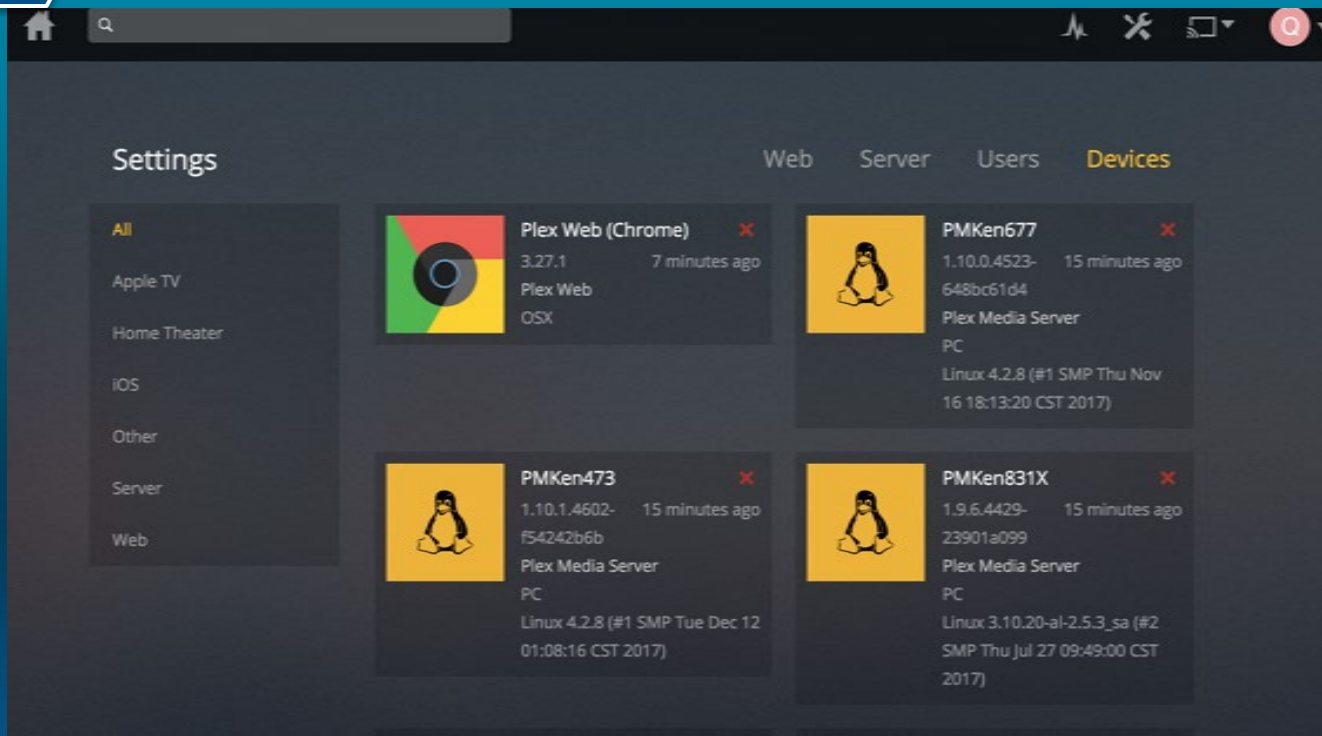
Plex Settings

Users



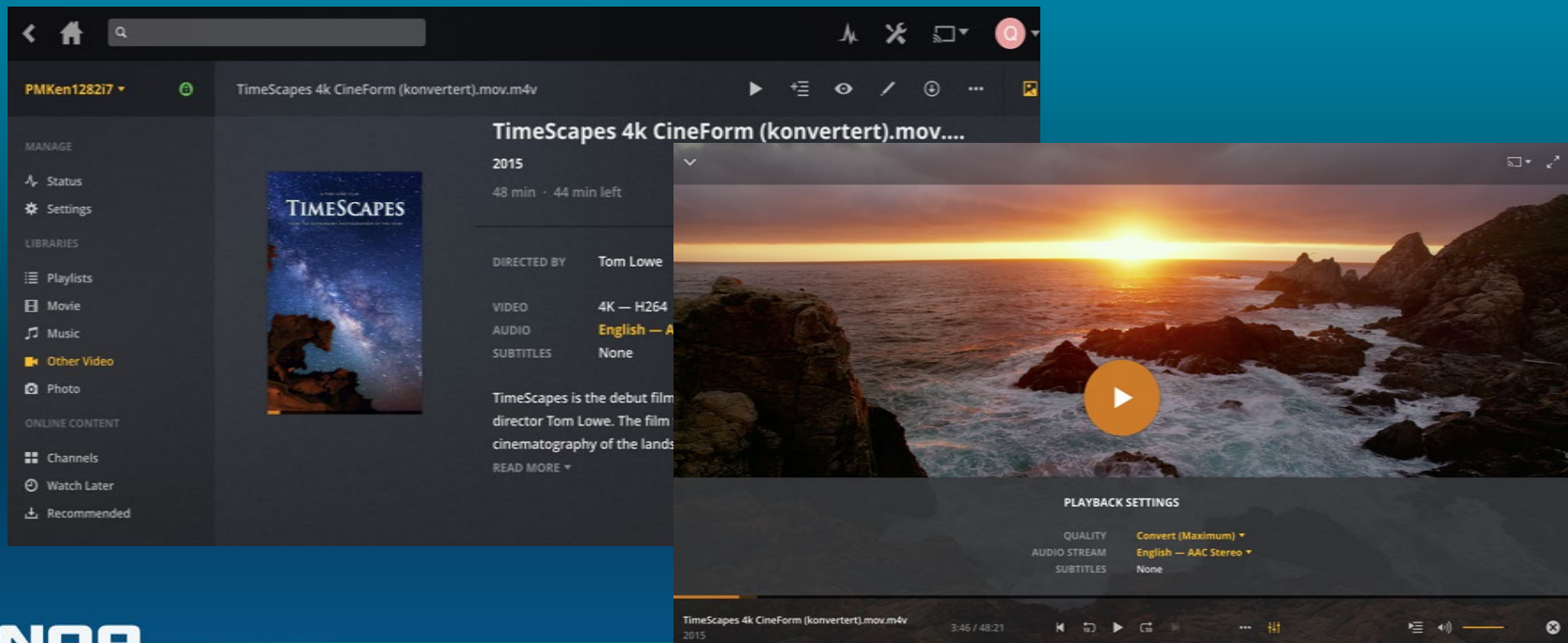
Plex Settings

Devices



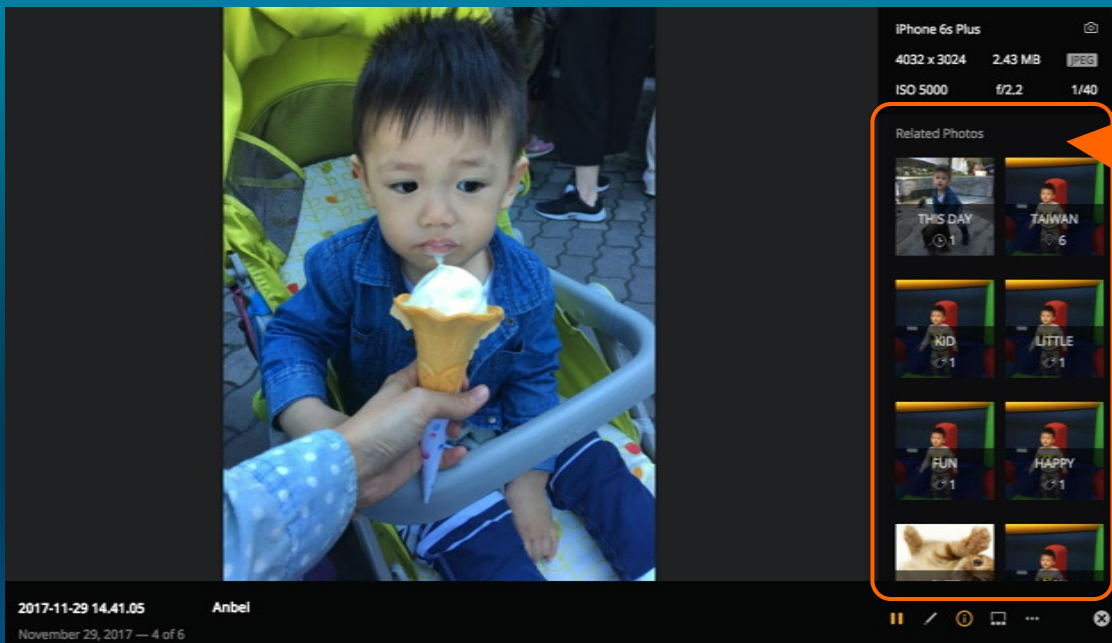
Plex - Web

Play videos via web browser



Plex - Web

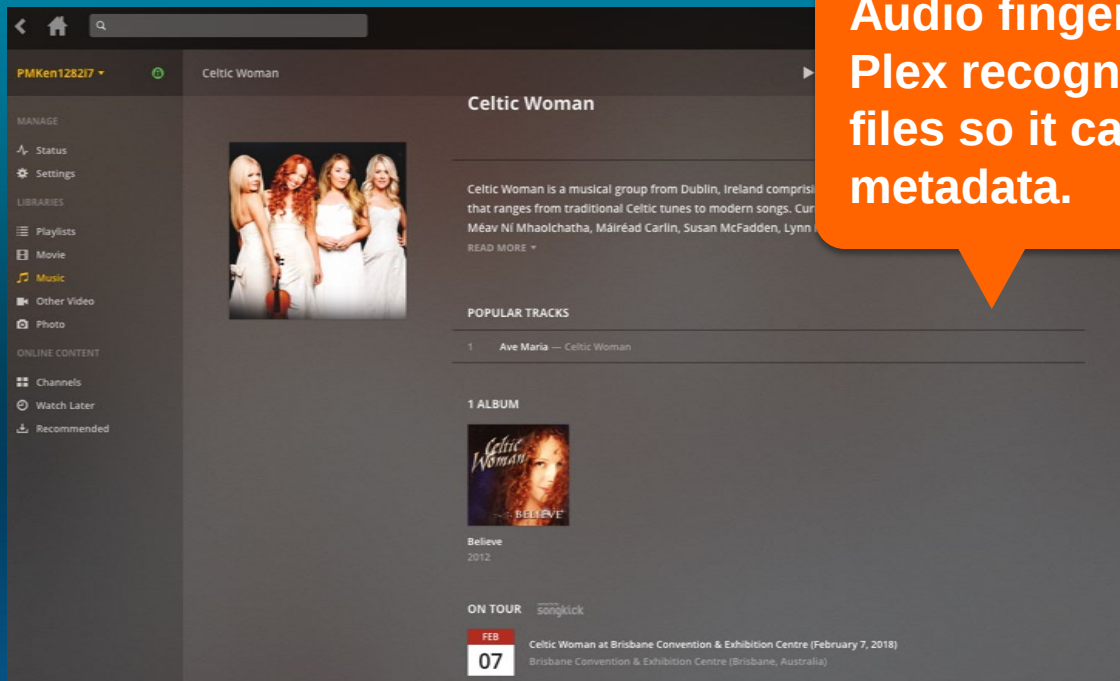
Play photos via web browser



Automatic
photo-tagging

Plex - Web

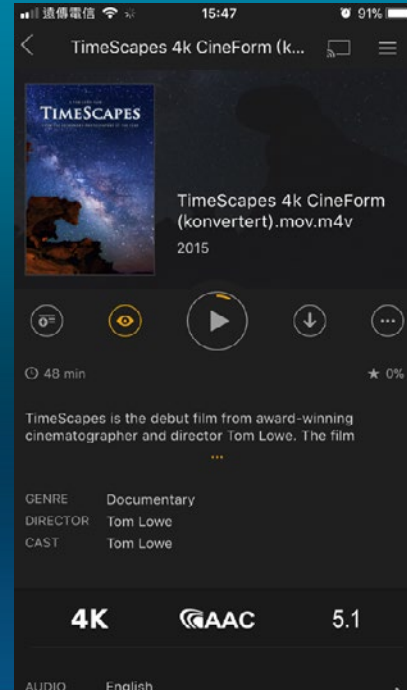
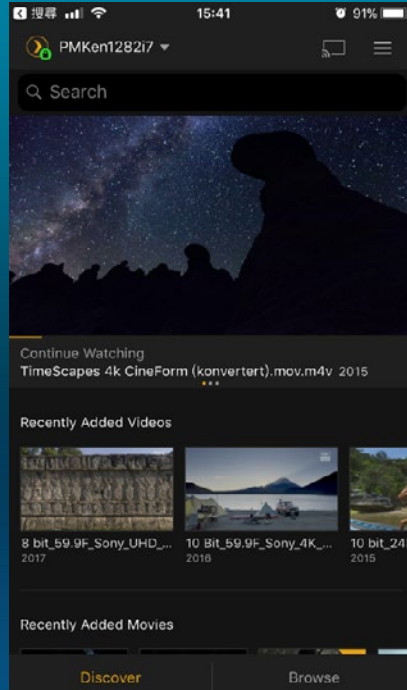
Play music via web browser



Audio fingerprinting helps Plex recognize your music files so it can find premium metadata.

Plex - Apps

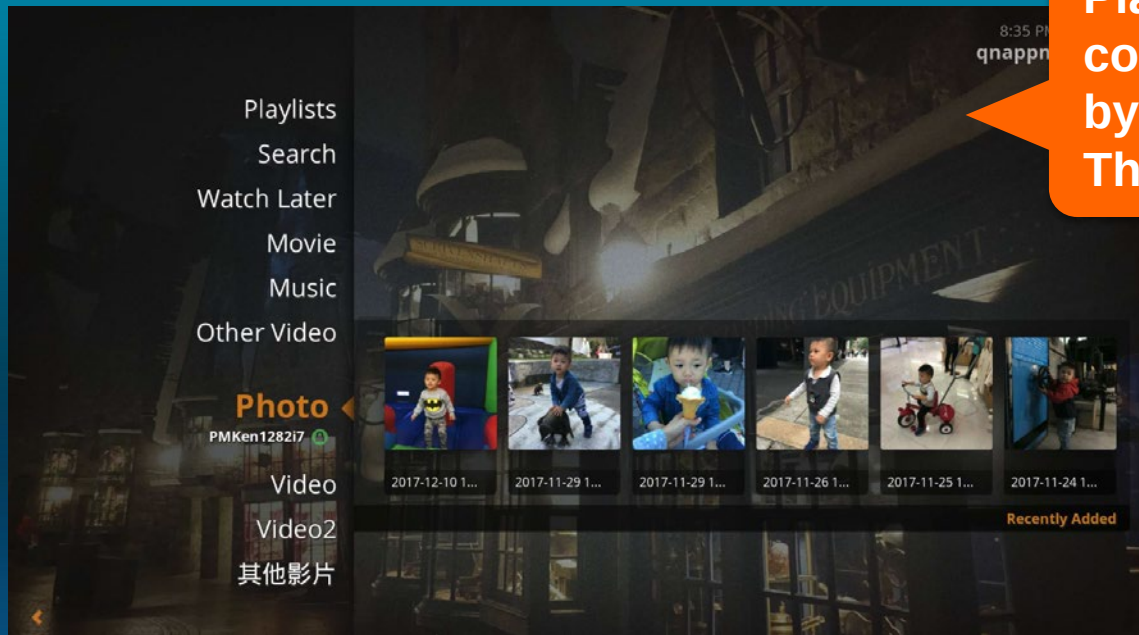
Play multimedia contents via Plex apps



Local playback

PLEX Home Theater

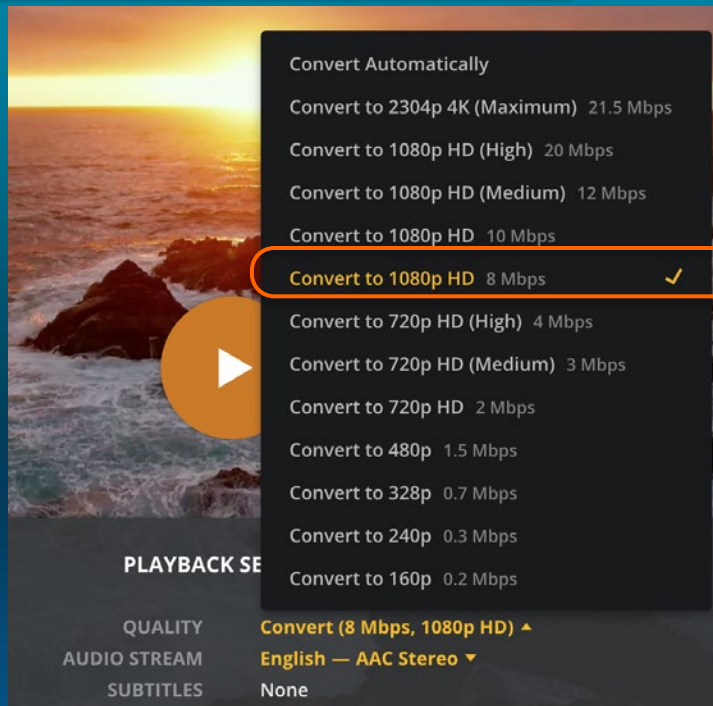
Play multimedia
contents directly on TV
by using Plex Home
Theater on HD Station



Transcoding

Realtime transcode

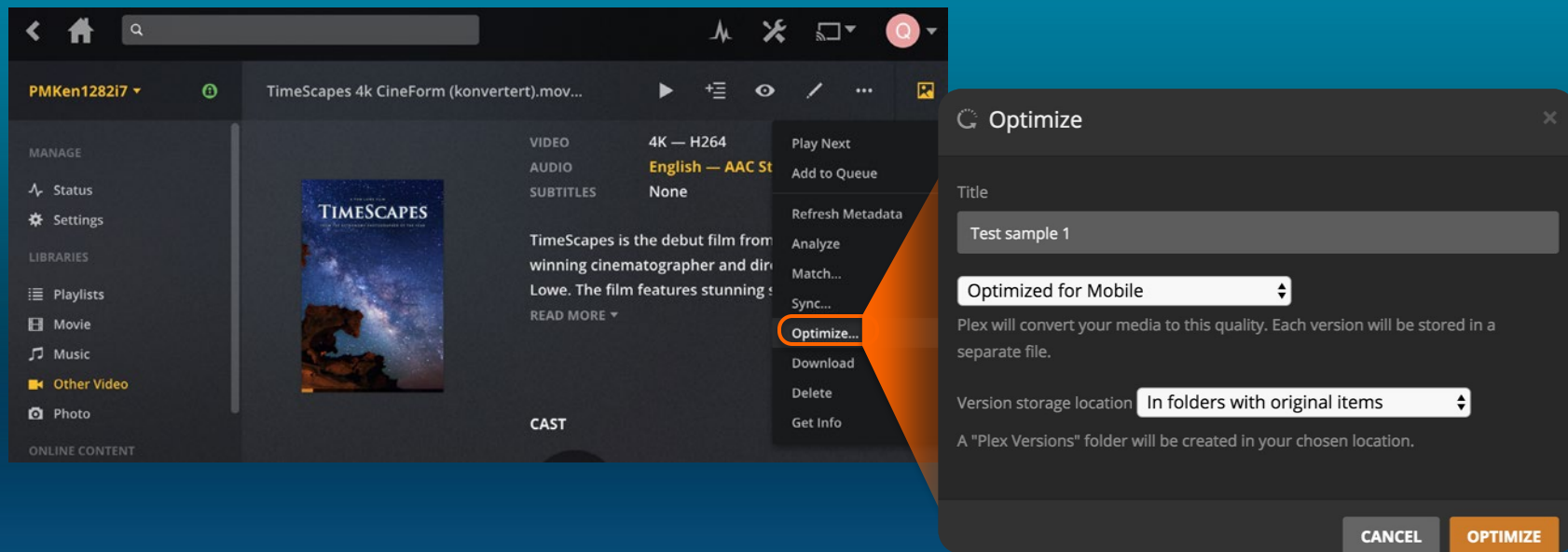
Realtime transcode option



Video quality:
The higher the resolution selection, the greater the network bandwidth required.

Offline transcode

Set up a offline transcoding process



The screenshot displays the Plex web interface. On the left is a sidebar with navigation options: MANAGE (Status, Settings), LIBRARIES (Playlists, Movie, Music, Other Video, Photo), and ONLINE CONTENT. The main area shows a video titled "TimeScapes 4k CineForm (konvertiert).mov...". Below the title, technical details are listed: VIDEO (4K — H264), AUDIO (English — AAC St), and SUBTITLES (None). A description states: "TimeScapes is the debut film from winning cinematographer and director Terrence Malick. The film features stunning cinematography and a score by John Williams." An orange arrow points from the "Optimize..." option in the context menu to the "Optimize" dialog box on the right.

Optimize

Title: Test sample 1

Optimized for Mobile

Plex will convert your media to this quality. Each version will be stored in a separate file.

Version storage location: In folders with original items

A "Plex Versions" folder will be created in your chosen location.

CANCEL OPTIMIZE

Tips

Naming rule - Movie

Movie's file naming format : MovieName (release year).ext

Example :

/Movies

/Avatar (2009)

Avatar (2009).mkv

/Batman Begins (2005)

Batman Begins (2005).mp4

Batman Begins (2005).eng.srt

poster.jpg



For more information, please visit PLEX official website:

<https://support.plex.tv/hc/en-us/categories/200028098-Media-Preparation>

Tips

Naming rule - TV shows

TV show's file naming format :

Single-Episode Files -> **ShowName** - s**SeasonNumber**e**EpisodeNumber**.ext

Multi-Episode Files -> **ShowName** - s**SeasonNumber**e**EpisodeNumber**-e**EpisodeNumber**.ext

Example :

/TV Shows

/Grey's Anatomy

/Season 01

Grey's Anatomy - s01e01.avi

Grey's Anatomy - s01e02 - The First Cut is the Deepest.avi

/Season 02

Grey's Anatomy - s02e01.avi

Grey's Anatomy - s02e02-e07.mkv

Tips

Naming rule - Music

PLEX will use the embedded ID3 tag metadata priority.

For those do not have the embedded metadata:

Music's file naming format :

ArtistName - AlbumName/TrackNumber - TrackName.ext

Example :

/Music

/Pink Floyd - Wish You Were Here

01 - Shine On You Crazy Diamond (Parts I-V).m4a

02 - Welcome to the Machine.mp3

03 - Have a Cigar.mp3

QNAP

See you

PLEX
>

