



TAKE CONTROL OF  
THE MEDIA

# Over The Top / On Demand

*How Community Media Centers can leverage  
the MetroEast Access America TV app*

## Overview

All community media stations are faced with dwindling franchise fees as cable subscribers go “Over The Top” (OTT) with Internet-only access. This leaves MetroEast and every Community Media Center with the existential need to find other outlets besides cable subscriptions, staying true to our PEG mission (Public, Education, and Government access), leveraging the new while supporting the old to help us better serve our communities while become financially self-sufficient.

MetroEast is developing a Progressive Web App (PWA) that uses modern web browser capabilities to run both online *and offline* on mobile devices and PCs. In addition, to running in a web browser, the app can be turned into a stand-alone executable that can run on devices such as Roku, Apple TV, Amazon TV, and Amazon Fire TV.

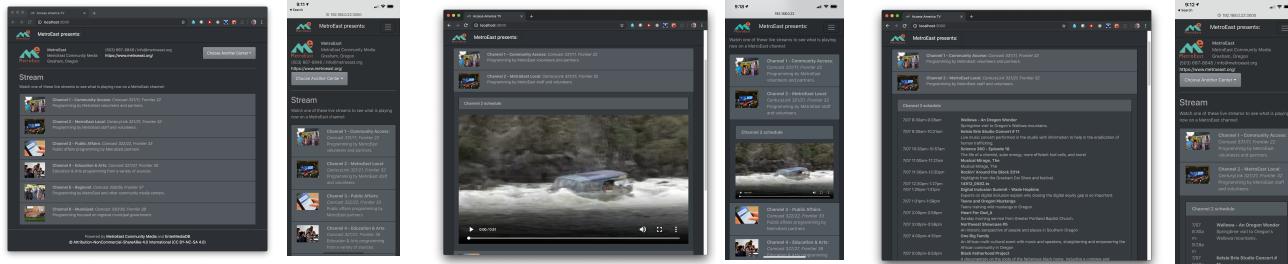
There are two versions of the app, one for OTT feeds of our six channels, including schedules, and the other OTT & VOD (Video On Demand), which will allow our viewers to search for content that interests them in many different ways, such as Title, Language, Genre, and much more. We intend for the OTT version to be deployed in 3Q19, while the development of the OTT & VOD version continues with an anticipated release in 2Q20. Native versions for devices and app stores will be rolled after that release.

Because the app is being released as Open Source Software, any other Center can adopt it and easily distribute it with their streaming channels and schedules as the default when it is downloaded from their website. The only thing that will need to change is a very simple configuration file. Furthermore, if that configuration file is loaded into our Digital Asset Management System (DAM), *all* apps from Centers that share their data will be updated automatically with the live streams from every participating Center.

This paper describes how the MetroEast Access America TV app can be leveraged by any participating Center to create a new national network of Community Media Center streaming channels.



# What Does OTT Look Like?



The left pair of screenshots show the current Center and its channels in an “accordion” for both the desktop and a smartphone. The button next to the Center info allows the user to view another Center’s channel streams. The middle pair of screenshots show the video player and the schedule accordion, while the right pair show the schedule for the selected channel. If a center only has a single channel, just the video player and schedule accordion will be shown.

There will be some minor changes before release, such as Currently Playing and Next Up. We also want to add a Donate button, to allow users to support our efforts.

# What Do We Think VOD Will Look Like?



1. On startup, a 4 second animated GIF will play (#1), allowing time to load in the background. If the user has already logged in (#2), the animation will be replaced with a small number of Featured Content videos (#3), otherwise the animation will be replaced by the Stream page (#4).

2. The login page will allow users to set up an account and have their current settings portable between devices, so content and experience remains consistent across the desktop, mobile devices, and set-top boxes. All user data will be encrypted and all European GDPR rules will be followed - user data belongs only to the user, not us or anyone else.
3. In Featured Content (#3), Explore (#5), and Library (#7), below each video are three small buttons: Save, Download, and Love. Save and Love save a reference to the content in the Library, while Download saves the content on that device only.
4. Stream is equivalent to Stream in the current OTT version of the app.
5. Explore allows the user to search all fields from a single text entry. Although this is very friendly, if there are hundreds of Centers sharing their content, the amount of content returned will be overwhelming.
6. The Advanced Search accordion exposes a variety of fields and options for searching. The Genre accordion allows users to specify the types of content they want to see.
7. Library holds all of the Saved, Downloaded, and Loved content. Once Saved or Downloaded content is viewed, the user is asked if they want to keep Saved or Downloaded. Loved content is assumed to be Saved or Downloaded until the Love tag is cleared.
8. Info has help pages about the app and limited static (unchanging) information about the Center.

Of course, since these are wireframes, they will undoubtedly change as features are implemented. But this is what we intend to deliver.

## How Does It Work?

The Access America TV app is not a stand alone app, but requires a Digital Asset Management (DAM) system to provide the content that the user wants to experience. We have chosen the EnterMedia DAM (<https://entermediadb.org>) because it is Free Open Source Software (like our app) that allows any Community Media Center to share their content seamlessly with other Centers so users can find content not only from MetroEast, but from any other Community Media Center using the framework we have developed.

Almost everything in this app is "data-driven", pulling the needed data out of a copy of the EnterMediaDB Digital Asset Management (DAM) system.

Users will access the app from their Center's web server, with the option to save the app to their desktop computer or mobile device (since it is a Progressive Web App, it does not need to go through the vendor's app store). When the user runs the app, it will always start with their "home" Center, even if they watch content from other Centers.

## How Can Other Centers Join The Network?

For the OTT version of the app, any Center can specify a very small amount of information in a `defaults.json` file that includes some basic station info and a pointer to a publicly accessible HLS feed (a URL with a .m3u8 file extension), the automation type and a URL of the XML or JSON schedule feed. The DAM will poll the schedule every 24 hours and parse and deliver the schedule data to the app. This prevents any automation system from becoming overwhelmed with schedule requests.

For the OTT & VOD version of the app, participating Centers will need to have a copy of the EnterMediaDB DAM. EnterMedia can host an instance for you, if needed. Please connect with EnterMedia if you wish to implement this for your Center (their contact info is below). Christopher Shanti Burkey of EnterMedia and I will be discussing this at a Birds of a Feather session at the 2019 Alliance for Community annual conference.

## What New Features Are Planned For The OTT & VOD Version?

Our goal for this app is to fully support all aspects of our PEG (Public, Education, and Government) mission while adding a variety of revenue streams to help us make the transition to our OTT future.

We have ambitious goals that need as many Centers to participate as possible. We start with serving the Public by sharing content between stations, so Hmong families in our Rockwood neighborhood can watch programming in their heritage language that originates from Fresno or Minneapolis. We also intend to fully support Closed Captions on VOD content, generated by the EnterMediaDB system. **Every** Center has content that people across the country would like to view, no matter how small the niche audience may be.

For Education, we would like to see high school journalism classes offer video versions of their school news in a dedicated section of the app. We would also like to see Premium Content, such as Continuing Education credit classes, offered in conjunction with our local Community College, as well as Master Classes.

For Government, we would like to be able to build the ability for users to not only watch official meetings through the app, but also be able to submit live video testimony with the app providing their home address that is geofenced to be within the agency's service area. For users who commute long distances to work, this will offer them a chance to participate in local government and local democracy more actively.

Along with offering users access to our content, we also want to be able to expand our income streams that goes beyond cable access and user fees. Premium Content in various forms appears to have very good potential. Another is being able to offer sponsorships at a network, center, genre, series, and individual episode level.

If we all work together, we can learn from each other and we can find new ways to not only survive, but to thrive in our Brave New World of Over The Top and Video On Demand.

For more information, please contact:;

Ron Braithwaite  
Interim C.I.O.  
MetroEast Community Media  
(503) 267-3250  
[ron@metroeast.org](mailto:ron@metroeast.org)

Christopher Shanti Burkey  
President/CEO  
EnterMedia, Inc.  
(513) 542-3401  
[cburkey@entermedia.org](mailto:cburkey@entermedia.org)