

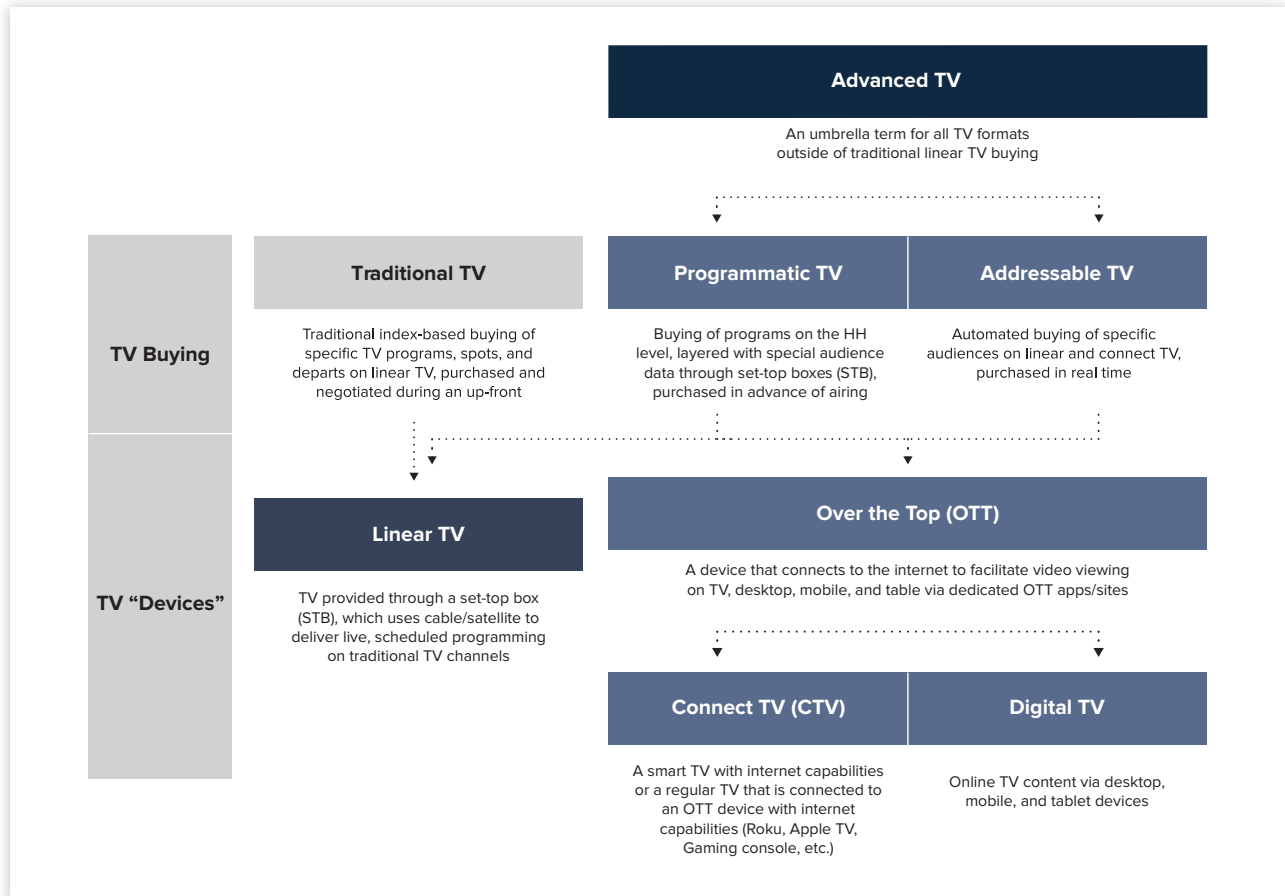
MEDIAMATH SELF SERVICE CTV

CONNECTED TELEVISION (CTV)

Any device that can be connected to a TV to allow for the delivery of video that's coming from the Internet as opposed to from coaxial cable or satellite.

ATV provides a great alternative to traditional linear TV, offering additional targeting and tracking capabilities without the hassle of upfront buys or minimum commitments.

In 2018, eMarketer estimated 182.6M CTV users alone, which represents 55% of the US population. That number is expected to increase by over 60% by 2022. Add consumers watching this inventory on desktop, mobile, or tablet devices and the scale for this channel starts to scale very quickly.



Running CTV with MediaMath

► Creatives

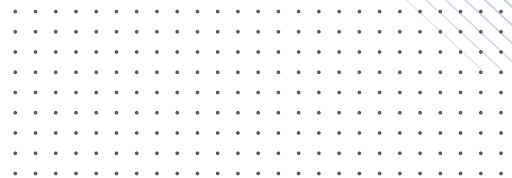
- CTV creatives must be high-quality VAST tags (must be VAST 2.0 or 3.0, not VAST 4.0).
 - » Only video creative will run in CTV supply. The CTV video upload process is the same as standard video. T1AS or 3PAS VAST tags are acceptable.
 - » Do not select the “Skippable” option and do not upload companion banners. These are not supported in CTV environments.

– T1AS video creative

- For maximum file compatibility, please use an .mp4 file type.

– 3PAS VAST tags

- VPAID tags are not accepted in CTV environments. As viewability measurement requires VPAID tags, this means viewability can not be measured in CTV environments.
- You can easily check if a 3PAS tag is VAST or VPAID by copying and pasting the tag URL into a browser, which loads the XML file for that tag. Search for the word “VPAID.” If the word “VPAID” exists in the XML file, the tag is VPAID. If it doesn’t, it’s a VAST tag.
- 3PAS VAST tags should contain an mp4 file type at the very least.
- Some 3PAS VAST tags contain special characters in the tag URL that “breaks” the URL, causing the video/VAST tag to fail to serve the creative properly. These special characters are commonly found as delimiters for bidder macros being passed back in the tag.
 - » The client should HTML encode these characters so that the bidder macros can be properly passed back in the tag and not break the tag.
 - » Common problematic special characters include:
 - » **Pipe character (|)**
 - » **Backwards comma (,) default in DCM tags**
- 3PAS impression trackers may be implemented in the T1AS/3PAS video in T1. Impression trackers for viewability will not work; the JavaScript required to run viewability measurement can not run in CTV environments.
- Deselect any active view measurement on the backend for DCM, which is the default when exporting tags.



- Click trackers may be uploaded, but they will not fire as a user cannot click on CTV environments.
- The same creatives used for standard online video campaigns can be used for CTV campaigns (providing they meet our specs).
- CTV is not a clickable environment (clicks can occur occasionally if users are accessing CTV via a gaming console).

▶ **Cost**

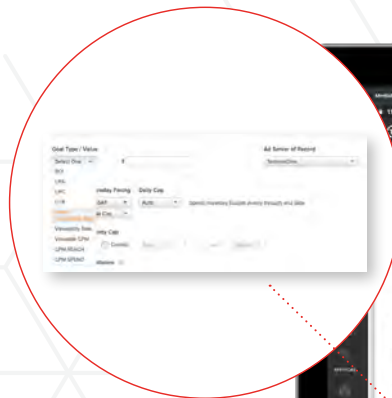
- Average clearing prices for CTV inventory range from \$25-\$50, varying by publisher and demand/time-of-day. When setting bid prices for CTV, MediaMath recommends bidding between \$60 and \$80, or higher. This does not mean the client will be paying \$60 to \$80 CPMs, the average total CPM including MediaMath fees is approximately \$40 across all CTV campaigns that MediaMath has run.

▶ **Inventory**

- CTV = OTT content watched on the TV screen, via a smartTV, connected device, or gaming console.
- CTV inventory is full-screen, fraud free, and 98%+ Viewable.
- Premium CTV inventory is only targetable through PMPs or MediaMath Curated Market.
 - All CTV inventory within Curated Market is premium and Full Episode Player (FEP), primarily longform.
 - Different partners and providers have different limitations and varying transparency levels/reporting offers.
 - As with any channel, more targeting layers = less scale, but this is truer of CTV than traditional channels.

Campaign Detail Settings

1. C1. Due to a number of differences between the way CTV campaigns are setup versus other types of media, MediaMath recommends running CTV in a T1 campaign separate from other channels/media.
2. Campaign goal type: CPM Spend
 - **a. Please note;** CPA and ROAS are not viable CTV campaign goals in T1. In addition, VCR as a goal-type is not necessary since CTV can not be skipped, so CTV naturally will have a very high VCR.
3. Avoid setting an impression daily cap as it can limit spending across all strategies within the campaign.
4. Pacing: set to ASAP, Manual.
5. DisableConnectedID(CID)forcross-devicetargeting,asCIDisnot currently set up for CTV.
6. T1 Fraud Filter should be turned off, otherwise bid requests will be rejected.
 - **Please note;** When making this adjustment you will receive an alert that “Disabling T1 Standard may cause the campaign to serve on inventory that could be considered highly undesirable;” however, as a value proposition, CTV inventory as a channel is 100% fraud free, which mitigates the need to filter for fraudulent impressions.
7. Frequencycap:shouldbesettoCustom:NoCap.
 - **Please note;** When making this adjustment you will receive an alert that “Setting frequency cap at the campaign level is recommended for optimal performance”, but to scale against CTV, campaigns can not have a frequency cap.
 - In some cases, campaigns are able to scale with a high campaign level frequency cap of at least Even50/day, but the frequency cap should always be removed at the strategy level.



8. Best practice is to turn off Minimize Ad Collision.
 - **Please note;** CTV impressions are served in the context of a livestream or full episode player, which does not provide the opportunity for other ads to appear on the same page, mitigating the need for ad collision minimizing.
9. Viewability cannot be measured in CTV. Deselect Post-Bid Measurement with Viewability.
10. In the Site Lists tab, a Curated Market app whitelist/blacklist can be applied. However, if your CTV campaign is running a mix of Curated Market and PMP, you should apply the Curated Market app lists to the Curated Market strategies, rather than at the campaign level.

Strategy Settings

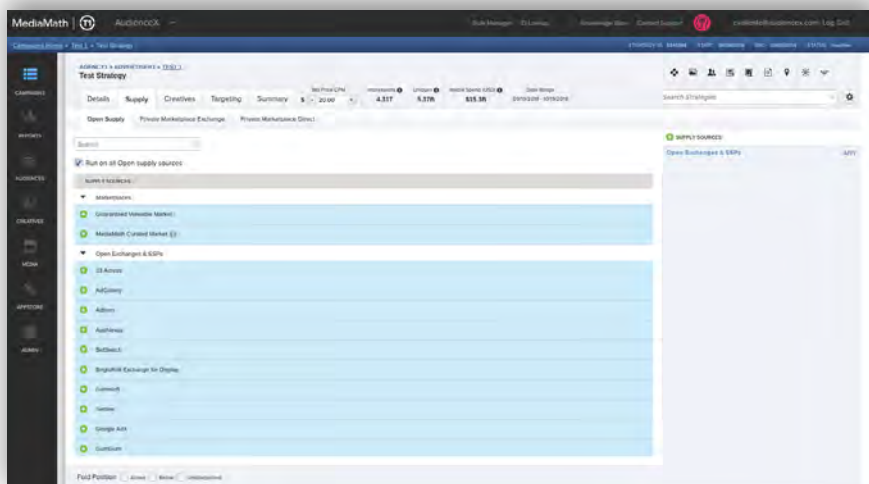
► Details Tab

1. **Select** the Video channel.
2. Goal type: CPM Spend
3. Bid price: When setting bid prices for CTV, MediaMath recommends bidding in the range of \$60 to \$80.
4. Enable optimization: Off.
5. Frequency cap: for the same reasons as the campaign-level frequency cap, **Select** Custom, No Cap.
6. Pacing: Monetary, ASAP.

► Supply Tab

- You can either target Open Supply (Curated Market) or PMP in one strategy, not both. If you are running both types of supply, please create separate strategies for each.
 - » **Please note;** While it is possible to run PMP strategies simultaneously with Curated Market, it is not recommended to run on the same publishers across both at the same time. This is to avoid bidding against yourself across strategies.
- Curated Market: select MediaMath Curated Market under the Open Supply tab.

- » You can either run across all of Curated Market (no other action needed), or
- » If you want to run on a subset of Curated Market CTV supply (e.g. a particular network or certain CTV apps), download the CTV app list from the support portal, and create a whitelist of all of the apps you want to run on.



- **Please note;** Whitelists (or blacklists) are uploaded in the Admin section of T1 > Site Lists tab. Whitelists are uploaded as .csv files. In order to whitelist (or blacklist) CTV apps, you must add the app IDs to a .csv file, appending “app:” in front of each app ID.
- **Navigate** to Strategy Setup, the uploaded whitelist should be applied to a particular strategy under the Targeting tab > Site Lists.

► Creatives tab

- Select the concepts in which the video creatives have been uploaded

► Targeting Tab

• Audience, My Data:

- » MediaMath can provide Audience Targeting for CTV campaigns, using 1st party, MediaMath Audiences, or certain TV-specific third party data, such as Vizio/Inscope and Comscore segments.
- » In order to implement Audience Targeting for your CTV campaign, contact your AUDIENCEX support Team with the following information, and the team will follow up with activation procedure.
 - Desired segments to be matched.
 - Audience size if available.
 - CTV spend level.
 - Flight start and length.

- Publishers of interest.
- Any additional targeting parameters.
- Service Level Agreement: 5 days for audience creation.
- Please note; Additionally, CTV is targeted at the household,
 - not at individual level. For these reasons, not all segments that were created for use in desktop and mobile will scale as well in CTV.Consider broadening your targeting parameters in this environment.
- **Contextual Targeting** is not currently available for CTV. Clients are able to shape contextual content through supply curation
- **Location:**
 - » Any geotargeting done via T1, such as country, state, DMA, zip code etc depends on an IP address being passed back in the bid opportunity by the supply/publisher, in order for MediaMath to match the IP back to a country/state/DMA/etc.
 - » Roku Ad Network and Hulu do not pass back IP address. Thus, if you are implementing targeting in T1, you can not buy from this inventory source.
- **Day Part Targeting:** is used to apply desired day and hour targeting.
- **Technology: Select** Connected TV as the Device Type.
 - » **Please note;** If you intend to run only on CTV, always select CTV, even if your supply source is already configured to only send through Connected TV supply. Since OTT publisher apps can be accessed on devices other than TVs (mobile, tablet, desktop, etc.), impressions will run across all of these devices if CTV is not selected.
- **Video Targeting:** options apply for regular programmatic video, They are not applicable to CTV. Do not enable them for CTV campaigns.