# Viacom HD Channel Down-conversion via AFD - Frequently Asked Questions

This is for informational purposes only and subject to having the necessary down-convert rights pursuant to your affiliation agreement.

#### 1. Can I down-convert all Viacom HD services?

a. Yes, except MTV Live and subject to having the rights pursuant to your affiliation agreement and following the instructions provided by Viacom, you can down-convert all Viacom HD Simulcasts you have the right to receive to create SD feeds.

#### 2. How are linear channel feeds distributed today

- a. While previous SD channel authorizations were using the Arris DigicipherII platform, all authorization as of August 1, 2017 will be on the Cisco PowerVu platform either as SD feed or derived from an HD down-convert.
- b. HD channels are transmitted using Cisco PowerVu platform, including BET HD which is now available on Cisco PowerVu.

# 3. Are the original SD feeds going away?

a. Not at this time

# 4. What are the advantages of using the HD channels to create SD versions?

- a. More control over output bit rates
- b. Higher video quality
- c. Opportunity to reduce the number of IRDs being used

# 5. What equipment do I need?

- a. Cisco D9858/D9859 transcoding IRD if down-converting at receiver, or 9854 with SDI out (please see technical specifications on viacomaffiliate.com for the IRD down conversion settings).
- b. Cisco D9854/D9824 (MPEG4 pass-through) + encoding/decoding equipment downstream of the IRDs.
- c. D9800: Please consult with your Cisco Channel Partner regarding which model D9800 will best suit your needs. For use with Viacom services, D9800 units must be designated for the Viacom pool and cannot be used for both Viacom and non-Viacom services at the same time.

#### 6. What aspect ratio should I apply?

- a. Viacom transmits Active Format Description (AFD) flags on HD Simulcasts that specify which aspect ratio to apply. Either the IRD or downstream decoder will need to be set correctly in order to respond accordingly to the AFD commands. Aspect ratios are either 4:3 or 16:9.
- b. Only in the absence of AFD, letterbox would be the default format output.

# 7. Are the HD and SD channels configured differently?

- a. Any down-converted SD feed will have the transport stream characteristics of the HD feed
- b. Analog DTMF tones are not supported on the HD or HD down-converts. Only DPI (SCTE35) signaling will be used.

# 8. What is not changing?

- a. 608/708 Captioning.
- b. VChip rating data.
- c. DPI signaling data.
- d. Dialnorm data.
- e. SAP where available.

#### 9. What do I need to do to initiate a down conversion of an HD feed?

- a. Confirm you have the necessary rights to down-convert pursuant to your affiliation agreement. If not, you will need to sign an amendment granting such rights.
- b. Notify <u>signalauthorization@viacom.com</u> of the headend location where down-convert will take place, the services to be down-converted and the intended down-convert start date.
- c. Visit <u>www.viacomaffiliate.com</u> to view technical information on the tuning parameters for the feeds to be used for down converting and authorization instructions.

#### 10. Who can I contact with any questions regarding AFD?

a. Signalauthorization@viacom.com

# 11. Will I need multiple ISEs authorized in order to output HD and SD

a. If you are transcoding HD from MPEG4 to MPEG2 and also down-converting HD to SD within the IRD then you will need two separate ISEs authorized for the same HD feed.

#### 12. What services can I down-convert?

(Provided you have the right to receive such HD feed)

Service	Feed	Location
ВЕТ	HD East	G14 T20
ВЕТ	HD West	G14 T20
Centric	HD East	SES1 T11
Centric	HD West	SES1 T11
CMT	HD East	AMC10 T3*
CMT	HD West	SES11 T20
Comedy Central	Caribbean HD	AMC10 T3*
Comedy Central	HD East	SES11 T20
Comedy Central	HD West	AMC10 T3*
Logo	HD East	SES11 T20
Logo	HD West	SES11 T20
MTV	HD East	AMC10 T3*
MTV	HD West	SES11 T20
MTV2	HD East	SES1 T11
MTV2	HD West	SES1 T11
Nick Jr	HD East	SES1 T11
Nick Jr	HD West	SES1 T11
Nickelodeon/Nick at Nite	HD East	SES11 T20
Nickelodeon/Nick at Nite	HD West	AMC10 T3*
Nicktoons	HD East	SES1 T11
Nicktoons	HD West	SES1 T11
Paramount Network	Caribbean HD	AMC10 T3*
Paramount Network	HD East	AMC10 T3*
Paramount Network	HD West	SES11 T20
Paramount Network Canada HD	Canada HD	SES11 T20
TeenNick	HD East	SES1 T11
TeenNick	HD West	SES1 T11
TV Land	HD East	SES1 T11
TV Land	HD West	SES1 T11
VH1	Caribbean HD	AMC10 T3*

VH1	HD East	SES11 T20
VH1	HD West	AMC10 T3*

<sup>\*</sup>All services on AMC10 T3 will be transitioning to SES-1 T20, effective November 14<sup>th</sup>, 2017