

## aCSTV - antiX Umuganda woroshye wa TV Itangira

### Serivisi:


Porogaramu ikoreshwa muburyo bworoshye bwo kwakira imiyoboro ya tereviziyo yo mu karere iboneka nkamakuru akoresheje interineti. Guhitamo sitasiyo no kugenwa na porogaramu ya porogaramu ni ubuntu. Sitasiyo zishobora kwakirwa ku rwego mpuzamahanga nazo zirashobora kongerwaho, mugihe zidahagaritswe nuwitanga serivisi binyuze kuri *GeoIP kubihugu* bivugwa.

Umuyoboro wa interineti urasabwa kwakira imiyoboro.

- Tangira kwakira:  
Gutangira kwakira TV, kanda kamwe muri buto ya sitasiyo (kanda ibumoso bwimbeba kanda).  
Icyitonderwa: Birashobora gufata amasegonda 12 kugirango ishusho ya TV igaragare. Bitandukanye na tereviziyo ya analogue, aho guhinduranya porogaramu ikajya mu bindi byabereye mu bice by'isekonda, ndetse no mu mateka ya mateka, hamwe no kwakira imibare ihuza seriveri ihuza serivisi itanga serivisi igomba kubanza gushyirwaho hakoreshejwe interineti. Mubyongeyeho, amakuru yinjira agomba guhindurwa mumasegonda make kugirango ashoboze gukina nta kibazo, nabyo bitera gutinda gutangira ishusho nyayo yo gukina. Uburebure bwigihe buterwa nibintu byinshi, harimo igihe cyo gusubiza seriveri ya serivise itanga serivisi hamwe n'umuvuduko wo gutunganya PC.
- Hindura sitasiyo:  
Guhindura indi gahunda, kanda indi buto ya sitasiyo.
- kwakira TV:  
Kugira ngo uzimye umuyoboro uriho, kanda »Kanda« buto.
- muri gahunda:  
Kugirango usohoke aCSTV, kanda urufunguzo rwa »Gusohoka« (cyangwa "b").
- Porogaramu ibanziriza gahunda:  
Ibiriho byerekanwa birashobora kugaragara muri mushakisha hamwe na »Gahunda yo kureba« buto . Serivisi yifuza itanga irashobora gushyirwaho kubuntu mumiterere.
- Ifoto yerekana:  
Ifoto yerekana »buto ikora ifoto yerekana ifoto ya TV iriho ubu. Ifoto ibitswe mububiko bwabitswe mumiterere munsu yizina rya dosiye Ifoto- <Kohereza> - <Itariki> - <Igihe> .png . Urugero: Ifoto yerekana-Arte-03.10.2021-17: 14: 22.png
- Igikorwa cyo gufata amajwi:  
Tangira kwandika porogaramu iriho hamwe na »Video yo gufata amashusho« buto . Ikimenyetso gitukura cyo kugenzura kigaragara mumiterere yumurongo. Kanda kumashusho ya ACCV yafashwe ifungura amakuru ikiganiro. Ukuri kwamakuru ariyongera hamwe nigihe cyo kwiruka cyashize. Amajwi yabitswe munsu yizina rya dosiye Broadcast Recording- <Kohereza> - <Itariki> - <Igihe> .ts mububiko bwerekanwe munsu ya Igenamiterere.  
Imiterere ya dosiye .ts irashobora gukinishwa na mpv , kurugero . Urugero: Kwandika amajwi-Phoenix-03.10.2021-16: 02: 31.ts  
Kurangiza gufata amajwi hamwe na "Hagarika gufata amajwi" buto. Ibi

birangiza gufata amajwi kandi gahunda iriho ikomeje kwakirwa. Kubwimpamvu za tekini, kwerekana gahunda iriho kuri ecran birahagarikwa kumasegonda make mugihe *utangiye* no *guhagarika gufata amajwi*. Kugirango uhindure ubundi buryo bwa dosiye, reba »*Dutandukanye*«.

- Guhindura urutonde rwa sitasiyo

Akabuto umukoro wa sitasiyo ya buto mu kiganiro nyamukuru gishobora guhinduka ukoresheje  buto, usomye mu rundi rutonde rwateguwe . Ububiko busanzwe kurutonde rwa sitasiyo ni `~ / .config / aCSTV`, ariko dosiye irashobora gusomwa mububiko ubwo aribwo bwose bufite uburenganzira bwo kwandika. Amadosiye yintangarugero mubihugu byinshi urashobora kuyasanga mububiko / `usr / local / lib / aCSTV / Stationslisten` kandi birashobora no gukopororwa intoki kuva aho ngaho mububiko bwa ACSTV. Bimwe mubibuga biri kururu rutonde birashobora kwakirwa kwisi yose, ibindi birahagarikwa na geo kandi birashobora kwakirwa mugihugu kibereye. Urutonde rwumuyoboro usomwe muri iki gihe rushobora kuvugururwa mu buryo bwikora muri menu ya Igenamiterere.

- Amagambo magufi no kugenzura imbeba:

Imikorere ikurikira itangwa mugihe cyo gukina ukoresheje urufunguzo rwa MPV nimbeba:

*Amategako rusange*

- Ereka kandi uhishe kanda -
- Hindura hagati yuburyo bwuzuye bwa ecran nuburyo bwa idirishya: kanda inshuro ebyiri kumashusho yerekana amashusho. (nanone: f)
- Gukosora ingano ya videwo (imipaka yumukara): Alt + Alt -
- Gukosora amajwi / amashusho yerekana neza: Ctrl + Ctrl -
- Hindura ingano yo gukina: 9 0
- Ikiragi / kutavuga: m
- Amashusho yo gukosora Gamma: 6 5
- Ishusho yerekana amashusho: 4 3
- Itandukaniro ryerekana amashusho: 2 1
- Ishusho yuzuye amashusho: 8 7
- Kuruhuka no gukomeza gukina: kanda iburyo hejuru yishusho. . \_

- Kwihuta imbere / gusubiza inyuma (1 amasegonda): Guhindura ift Guhindura →

- Kwihuta imbere / gusubiza inyuma (amasegonda 5): ← →

Kwihuta imbere / gusubiza inyuma (1 min): ↑ ↓

(Ihute imbere kandi usubize inyuma muri buffer, cyane cyane nyuma yo gukoresha imikorere yo guhagarara)

- Ifoto yerekana: buto mumwanya wo kugenzura aCSTV cyangwa s (Ifoto iracyari mububiko bwerekanwe mumiterere ya ACSTV)

- Gufata amashusho ya gahunda iriho: buto muri panel ya ACSTV Kwihutisha / kwihutisha gukina (10%): []

- K̄wihuta gukina bisanzwe: umwanya winyuma
- Shiraho kandi uhagarike umugozi utagira iherezo (AB): l
- Hindukira kurindi videwo (niba ihari): Shift -
- Hindukira kurindi jwi ryamajwi (niba rihari): #

*Imikorere yamakuru:*

- Inzira no gukina birambuye Shift i
- Buffer yuzuza urwego nu mwanya wo gukinisha mububiko bwa buffer: Shift cyangwa bisa
- Reba Inzira ya URL F8
- Erekanama amakuru yerekana amajwi, amashusho na subtitles F9

*Ibiranga insanganyamatsiko (niba bihari)*

Gushoboza / guhagarika insanganyamatsiko: v  
 Hindura hagati yuburyo butandukanye: j J.  
 Guhuza subtitles hamwe nishusho ya videwo: z Z.

### **Igenamiterere:**

Igenamiterere rya ACSTV ryose rirashobora guhinduka nyuma yo gukanda »Igenamiterere« buto.

- Kugabanya igipimo cyamakuru ya videwo:

Hamwe nogushiraho igipimo ntarengwa cyo gukina muri kbps, amakuru yatanze na seriveri arashobora guhuzwa nubushobozi bwo gutunganya mudasobwa yakoreshejwe n'umurongo wa interineti.

1. Imipaka ukurikije imikorere ya PC. Ubunararibonye bwerekanye ko intoki imwe-32-bit ya Pentium-M hamwe na 1.7 GHz ishobora kubyara byibuze 3000 kbps nta nkomyi. Nibyiza rero kubishyira hafi yagaciro kuri PC nkiyi. aCSTV ihitamo amakuru meza aboneka kumurongo utanga serivise iri muni yagaciro ntarengwa. Agaciro kari hejuru karashobora kwinjizwa kuri mudasobwa zikomeye, hamwe no hasi kubadafite intege nke.
2. Imipaka ukurikije ubushobozi bwo kohereza bwa enterineti. Ukurikije ubuziranenge bwihuza rya interineti (cyangwa birashoboka ko WLAN), birashobora kuba ngombwa kugabanya indangagaciro ziri muni yimikorere ya PC, urugero kugeza 1800 ) . Bishoboka. Indangagaciro zo hasi zisubiramo ishusho ntoya, mugihe indangagaciro zo hejuru zitera guta ishuri. Ibiganiro byinshi byakozwe na tereviziyo ya rubanda yo mu Budage kuri ubu biratangaza ku gipimo cya  
 325k , 581k, 635k, 969k, 1020k, 1130k, 1790k,  
 1807k, 2120k, 3256k, 3544k, 3990k, 7290k,  
 ariko ibiciro byose ntabwo biri ku miyoboro yose iboneka. Ukurikije utanga serivise, bamwe mubatangaza amakuru ku giti cyabo bahura n'ihungabana kenshi mugihe cyimpera mugihe cyo kohereza, nubwo igipimo cyamakuru cyashyizweho neza. Mu bindi bihe byumunsi, kwakira iyi sitasiyo byongeye gukora neza.

- Guhitamo ecran ya TV Mugaragaza  
amashusho ya TV asohoka arashobora kugenwa mumiterere. Niba, nkurugero, televiziyo ihujwe na PC nka ecran ya kabiri kandi igashyirwaho uko bikwiye, ishusho ya TV irashobora kwerekanwa kuri TV mugaragaza nimeru ya ecran ihuye. icyitonderwa: Kubara bitangirira kuri zeru, ni ukuvuga »0« ni ecran ya mbere, »1« icya kabiri nibindi. Ntarengwa ya ecran 32 zishobora gukemurwa.
- Ubwoko bwuzuye bwa ecran / idirishya ryuburyo  
Iri genzura rishobora gukoreshwa kugirango umenye niba ishusho ya TV yatangiye nka ecran yuzuye cyangwa nkidirishya. Urashobora guhinduranya inyuma no hagati yuburyo bwuzuye bwa ecran nuburyo bwamadirishya umwanya uwariwo wose ( *kanda inshuro ebyiri* kumashusho ya TV iriho cyangwa ukande *urufunguzo "F"* ).
- Gukina imbere yambere  
Hamwe niyi sanduku urashobora kumenya niba ishusho ya TV igomba guhora igaragara imbere cyangwa niba ishobora gutwikirwa nandi madirishya. Iyerekana irashobora guhinduka umwanya uwariwo wose ukoresheje imiterere yimiterere yumurongo wibikorwa → Igice , kimwe nurufunguzo rwo guhuza *"Shift T"* .
- Ububiko bwibikoreshe kumafoto yerekana amashusho na videwo  
Winjire mububiko aho amajwi n'amafoto bigomba kubikwa mumwanya wabigenewe. Ububiko busanzwe bujyanye na sisitemu y'imikorere ya antiX bwarateguwe , bwerekanwa na \$ XDG\_PICTURES\_DIR / na \$ XDG\_VIDEOS\_DIR / .  
Umukoreshe winjiye agomba kuba yanditse kwandika kububiko bwihariye.
- Hindura urutonde rwintoki  
Urutonde rwa sitasiyo yatumijwe muri iki gihe irashobora guhindurwa intoki. Ibyanditswe bishya birashobora kongerwaho, ibyanditsweho birashobora gusibwa cyangwa guhinduka. Amazina yombi ya sitasiyo hamwe na seriveri ijyanye nayo irashobora guhindurwa. Imirongo itangirana na hash (#) irahagarikwa kandi ntigaragara kuri kanda.
- Kuvugurura urutonde rwa sitasiyo mu buryo bwikora  
Urutonde rwa sitasiyo yasomwe muri iki gihe rushobora kuvugururwa mu buryo bwikora hamwe na buto *"Kuvugurura"* . Umuyoboro wa interineti uhari urakenewe kubwibi. Ubuyobozi bwihariye bwigihugu buri gihe buravugururwa nabakorera bushake bo mumushinga *IPTV.org* . Mugihe cyo kuvugurura urutonde rwa sitasiyo mu buryo bwikora, urashobora gukoresha igenzura rya *"Kugenzura ihuza kuri sitasiyo"* kugirango ukureho izo sitasiyo zidashobora kwakirwa aho uri. Iyi nzira irashobora gutwara igihe kinini (cyane cyane mugihe cyurutonde runini rwimiyoboro), kubera ko igisubizo kiva kuri seriveri kigomba gutegereza kuri buri muyoboro. Niba ibuze cyangwa yibeshye, aho kugirango yange kwangwa neza, ihuriro rigomba kwemererwa kurenza igihe uwagutumye icyaha ashobora gutabwa.


## **Dutandukanye:**

### Ibikorwa

Byingirakamaro socat , feh, buffer, mpv, yd-dlp, sed, xdotool, wmctrl igomba

gushyirwaho. Ibi birahita byizerwa mugihe ushyizeho ukoresheje Debian installation pack. Niba ibyo bice byabuze, urugero mugihe cyo kwishyiriraho intoki, aCSTV ntabwo izakora.

### Umubare wurutonde rwumuyoboro

Hamwe numuyoboro munini cyane urutonde rufite imiyoboro irenga 40-50, gutunganya na ACSTV bigenda bitinda. Kubikorwa byihuse kandi bizigama umutungo, ugomba kwemeza ko urutonde rwumuyoboro rugarukira kubyinjira bisabwa mubyukuri, kandi ko uhagarika (tanga ibitekerezo) cyangwa ukuraho ibyanditswe byose birenze urugero muguhindura "*Guhindura umuyoboro wurutonde*". Umubare ntarengwa wimfunguzo zishobora gutangwa ni 264, ukurikije umubare winyuguti kuri buri zina. Birashoboka ko klawi yubunini itagishobora kugaragara neza kuri moniteur nto. Ibindi bikorwa byose byinjira murutonde rwikirenga birengagijwe. Urutonde runini rwumuyoboro rushobora kugabanywamo amadosiye menshi ukoresheje umwanditsi wanditse nka *Geany* cyangwa *Leafpad*, ushobora gutoranywa ukoresheje buto ya "*Guhindura umuyoboro wurutonde*" (agashusho: ) kuri kanda.

### Imiterere ya dosiye no guhindura

dosiye zabitswe muburyo bwa *.ts* zirashobora gukinishwa neza na *MPV* muri *antiX*. Niba ubyifuza, urashobora gukoresha *ffmpeg* kugirango uhindure inyandiko zabitswe zafashwe kuva kumiterere ya *.ts* ujya mubindi bikoresho bya dosiye. Guhindura mugihe cyo gufata amajwi birashoboka gusa kuri sisitemu ikomeye cyane kandi ntabwo igenewe ACSTV. Kubera ko nanone bidashoboka guhanura imiterere ya sitasiyo izohereza, hakenewe ubushakashatsi buke mugihe uhinduye nyuma. Niba imiterere yakiriwe idahuye nimiterere yintego, yaba videwo cyangwa amajwi yerekana amakuru arimo, cyangwa byombi, bigomba kongera gushyirwaho kodegisi, bitabaye ibyo birahagije kubisubiramo bidahindutse muburyo bwifuzwa.

Ingero:

- kuri *Matroska*, nta kongera gushiraho  
ffmpeg -i './filename.ts' -map 0 -c kopi './filename.mkv'
- kuri *mp4*, nta kongera gushiraho  
ffmpeg -i './filename.ts' -map 0 -c kopi './filename.mp4'
- Niba amakuru yamakuru yoherejwe na tereviziyo kandi akabikwa muri dosiye ya *.ts* ntaho ahuriye nimiterere yatoranijwe (urugero *mp4*), iri hinduka ntirikora kandi ritanga ubutumwa bwikosa gusa. Muri uru rubanza, videwo irashobora kongera gushyirwaho kodegisi:  
ffmpeg -i './filename.ts' -c: v libx264 -c: kopi './filename.mp4'
- Cyangwa ongera ushireho amashusho n'amajwi:  
ffmpeg -i './filename.ts' -c: v libx264 -c: aac './filename.mp4'

Ukurikije imbaraga zo kubara za PC, ingano ya dosiye n'ubwoko bwa re-kodegisi, gutunganya birashobora gufata igihe.