

KUDIZA CHAKUKIÑA NSAÑU YAHAFONI NIKOMPYUTA



KUHAKWILA AKWAKUHAKWILA

Himutayi Watalañã ha Wuswa wa Wantu

Ku Musela wa Africa



NSAŊU YIDI MUNAKA KAMUKANDA

Kuhakwila Akwakuhakwila ashimuna: Nzhila yapela nawa yayiwahi hakwila kompyuta hela foni yenu yikali yakiñewa nawa yekala nayozelu yawana yakuzatisha munzhila yapela.

Kuhakwila Akwakuhakwila hi Mutayi watalaña ha Wuswa wa Wantu ku Musela wa Africa.

Twafwilaña kukolesha mudimu wawantu ahakwilañaku wuswa wawantu (HRDs) mukabeta kezhima kuhitila mukukehesha kuzeyazeya kwawu hawubanzhi wakuyikabisha nikukolesha wuswa wawu kulonda ahakwileñaku chiwahi wuswa wawantu. Kuhakula Akwakuhakwila azatilaña mu Burundi, Djibouti, Eritrea, Ethiopia, Kenya, Rwanda, Somalia (hamu nampata ya Somali), South Sudan, Sudan, Tanzania, ni Uganda.

Ha **Wukwashi waswayiswayi** mwani talenu

<https://www.defenddefenders.org/get-help/> hela

Temeshelulu nshiña yetu yazatikaña mpinji yezhima

+256-783-027611 Temeshenu nsañu ICT

Helpline/Signal/WhatsApp ha +256-787-556560

KUKIÑEWA KWEKINA

Tukuyilezha maluña imwatela kutala mumakina enu kulonda mwiluki neyi makina enu nimaakawunti ninsañu yenu yakiñewa.

Windows



Masetiñi amavulu munateli kuyiwana swayi hakutachikila. Hakwila muwanuhu, chintenu Mbutawu ya Windows > mu Search Box > Sonekenu nenu Control Panel > Chintenu ha Systems and Security > Talenu chidi Window Defender Firewall, Bitlocker Drive Encryption kulonda mwiluki chikupu nenu yakwambula.



Mac

Yenu hambutawu ya Apple (>) System Preferences, chintenu Security & Privacy, kuhiñahu chintenu General. Neyi munakukeña nsañu yikwawu hakwambula masetiñi akukiñewa, yenu: <https://apple.co/365i2KA>



Android

Yenu ha 'Settings'. Abulenu yuma yidi neyi pasiwedi/bawometiliki, zhimenu lokesheni neyi chinakukeñeka. Neyi munakukeña nsañu yikwawu hachakwambula masetiñi akukiñewa mu Android, yehu ha: <https://nr.tn/3f1BQ9J>



iPhone

Yenu ha Settings > Chintenu ha ID & Passcode nawa sonekenu pasikodi yenu. Kufumahu yenu kwishina mumoni neyi USB Accessories yinetezhewi wanyi neyi sikilini yakukiya, dichi ilukenu chikupu nenu masetiñi akuzhima. Neyi munakukeña nsañu yikwawu yenu ha:

<https://zd.net/3nXf94p>, ni <https://apple.co/2J1bc03>



KUHEMBELA NSAŃU KWACHEŃI

Kuhembela nsaŃu kwacheŃi, hiku hembela kwacheŃi nsaŃu yikwawu yimu kwe ti. Ch u mich i ch in ayi mu kwila n awu neyi muzhimbesh nsaŃu chidi neyi foni yinabaluki indi kwizhi anayiyi, dikwila nawu himunazhimbeshi nsaŃuku.

Hakuhemba nsaŃu ha Windows & Mac:



Google Drive Sync hichozelu chachiwahi muloŃa ahanaŃa iluŃa dakushika ku 15 GB chawaana.



Microsoft OneDrive niwena ahanaŃa iluŃa dakushika ku 5GB chawaana nawa yazatikana chiwani neyi mwazatishaŃa yuma yawa Microsoft Office.



Dropbox, Degoo, ni Sync.com niwena ahanaŃa maluŃa anyanya nawa chapela kuyizatisha. Chikuwaha neyi mukutonda yozelu yinayiteleli (neyi muneluki wanyi, tachikenu na Google Drive!) nawa ilukenu chikupu nenu munachinti



hakwila yuma nsaŃu yenu anakuyihembela kwacheŃi neyi muya haintaneti.

Mafoni:

iPhone / iPad: Yenu mu SetiŃi > Apple ID (nzhila yidi hewulu) > Tondenu foni yenu > iCloud Backup

Android: Yashiyashana kuzhifoni ninyitapu, ilaŃa yavula kuzatika naakawunti ya Google yidi hafoni. Chintenu hasetiŃi yafoni > chintenuSystem > Backup > Ambulenu hanakwila nawu backup. Neyi munakukeŃa

nsaŃu yikwawu yenu ha: <https://bit.ly/3nXhHQ1>

KUKIŃEWA HAINTANETI



Kuhukula NsaŃu ha Intaneti

Hinzhila yawukelikeli yakuhukwilamu nsaŃu yalema yazatishaŃa antu haintaneti. **Babalenu namaimelu akweti**



- NsaŃu yimunabuli kukuhwelela
 - Yinasonekuwu nayiluwa
 - Kuyimusha mwidim dimunabuli kwiluka
 - Yinakuyilezhawu nawu mwakuli chakadi kuumba mpinji
- Neyi munakukeŃa nsaŃu yikwawu yenu ha: <https://bit.ly/3666qq1> ni <https://bit.ly/3q5EIT1>



Kuhukula nsaŃu hakukutemeshela foni

Antu ahukulaŃa nsaŃu kuhitila mukutemeshela foni(Kuhukula nsaŃu nezu = kuhukula nsaŃu haintaneti) Neyi munakukeŃa nsaŃu yikwawu yenu ha: <https://nr.tn/3q3hknN>

Hakwila mumo ni neyi antu amakwawu anawani nsaŃu yenu, zatishenu mawebisayiti adi neyi [ThreatCrowd.org](https://www.threatcrowd.org), [HaveIBeenPwnded.com](https://www.haveibeenpwned.com), ni [OSINTFramework.com](https://www.OSINTFramework.com) kulonda mukeŃi izhina dimwazatishaŃa haintaneti, imewu, nambala yanshiŃa niizhina denu. Munateli kuhayama nsaŃu yimukuwana!

Neyi muwana yuma yimunabuli kukeŃa kumwekesha kudi antu:

- Himpenu masetiŃi ahaintaneti yimunawani nsaŃu yenooyu.



- Himpenu yuma yakusha haintaneti kumbidi, muloŃa nsaŃu yeniyi yakalaŃa kuyizhima neyi yidi haintaneti.



KUSONEKA MUNZHILA YAKALA KUTAÑEWA

Ikina denu datela kwikala nansaŋu yakala kutañewa kudi kala muntu:



Windows:

Chintenu Windows > mu Search Box > Sonekenu Manage Bitlocker > Abulenu Bitlocker. Sonekenu nsaŋu yakuwana nachu yuma neyi yinazhimbali mu Password Manager (yinaashimunewi hefu dinalondeluhu) hadaha mukayikeña kumbidi!

Neyi munakuzatisha Windows yakadi chozelu cha Bitlocker, munateli kutala ha VeraCrypt, chozelu chakuzatisha hakusoneka nsaŋu munzhila yakala kutañewa kudi kala muntu yawana yidi aha, <https://bit.ly/3q2Ndho>.



Mac:

Chintenu hadi Apple () > System Preferences, kufiñahu chintenu ha Security & Privacy > Chintenu FileVault > Abulenu FileVault. Neyi munakukeña nsaŋu yikwawu yenu ha <https://apple.co/39ir7ld>



Android:

Yenu ha Settings > Security > Encryption > Chintenu Encrypt Phone. Neyi munakukeña nsaŋu yikwawu, yenu ha <https://bit.ly/39isi47>



iPhone:

Yenu ha Settings > FaceID/Touch ID Passcode > Abulenu Passcode > Sonekenu Setiñi yapasikodi yenu pasikodi / pasiwedi yikuhemba foni yenu munzhila yikubula kutañewa kudi kala muntu – chozelu chachiwahi!



MAPASIWEDI NINZHILA ZHIYEDI ZHAKWILUKILAMU

Chozelu chatalaña pasiwedi chikuhemba nikuyikwasha kutañewa zhipasiwedi zhazhiza zhamaakawunti enu ezhima (online). Ch in ayi mu kwila n awu mu ku zatish a pasiwedi yayile h in an kash i, yakiñewa, yambu kaku hawe bisayiti yidi ye z h i m a chakadi kuyan uka!



Zatishenu LastPass hela Bitwarden neyi hakuhebela pasiwedi haintaneti muloña yikweti yozelu yayiwahi yakuzatisha chawana yekala hazhipulogilamu zhazhivulu. Yikwawu yimunatili kuzatisha chakadi intaneti hi PasswordSafe hela KeePass.



Nzhila zhazhivulu zhakwilukilamu zhavula kutenawu nawu Nzhila zhiyedi Zhakwilukila hinhila yakwilukilamu pasiwedi yakeñekaña muntu kuzatisha yuma yiyedi hela yayivulu yakwilukilahu hakwila yatweshi kuzatisha

Progiramu hela akawunti yahaintaneti. Zatishenu chozelu chakwilukilahu chidi neyi Authy hela Google Authenticator chatela kutambwila makodi mu SMS. Munateli kwikala na Authy hamakina amavulu kuhitila mukusha 'Allow Multi Devices'– chinayi mukwila nawu, kwambukaku nayozelu ya Google hela Microsoft yakwilukilahu, mukwiluka chikupu nenu mukwikala namakodi enu hakompyuta, foni, tabuleti nimakina ezhima imwazatishaña.

Mwatela kwikala namaakawunti amavulu imunakukeña mu Progiramu ya Pasiwedi nizhinhila zhiyedi Zhakwilukilamu – ilaña neyi munakukeña kufuukulahu swayi, ilenu mwenimu naakawunti yenu ya imewu nikwezhima kumwahembelaña nsaŋu yalema yakudama kuwuswa wawantu.



FONI NIKUHANJEKA

Kutemesha ma Meseji:

Whatsapp , Signal  ni Telegram  yezhima yazatishaña yuma yakubula kwiluka antu nsañu yimunakuhanjeka nawa mwatela kuyimona neyi yozelu yakuhanjekelahu yakiñewa.

Antu amakwawu amonaña neyi WhatsApp hiyakiñewa chikupuku, ilaña chumichi chinayi mukwila nawu kuhanjeka kwakweni kwakuzhinda, (kwakuzhinda), ilaña kwashindamena hayuma yisatu chazatishañawu antu chozelu chenichi:

- Bayi mutemesha meseji mumazanvu mudi antu imwabula kwiluka nikukuhwelela – mwatela kuhanjika nawantu antesha mpinji yezhima
- Yozelu yikwawu yashaña mpinji yatela kuzhima meseji yayeni chimwahita kapinji
- Yozelu yikwawu yidi neyi **Wire** yinateli kuyitezha kuhanjeka nawantu chakadi kwiluka nambala yawu yafoni yayeni

Chikuma chalema chakwila nawu zatishenu chozelu chimu hakachi kaniyi nawa **Neyi chinatwesheki bayi muzatisha SMS** – swetze-e neyi mutoñozhoka nenu anakuyilondalonda, hiyakiñewaku, nawa chaswayi kuwana mameseji enu kudi akwanetiweki imwazatishaña hela akwanshimbi amakwawu.

Iyi yozelu yezhima yekala cheñi hazhikompyuta nihawebisayi, dichi munteli kuyizatisha hakutesha mafayilo ninsañu yayivulu kulonda mubuli kuzatisha imewu.



FONI NIKUHANJEKA

Imewu:

Imewu yekala yakiñewa wanyi, dichi mwatela kubabala neyi munakuyizatisha hayuma yinakukeñeka kukiñewa,

chiña neyi musambila kuzatisha izhi nzhila- talenu ifu dinafumuhu dinakuha ha WhatsApp, Signal, Wire ni Telegram hakuhosha hanzhila zhapela nawa zhakiñewa zhinateli kutukwasha kufiñisha imewu munkeñelu yayivulu.

PGP hinzhila yavula kuzatishawu hakukiya imewu, ilaña chekala chakala nankashi kwila mwenimu kudi antu abula kwinzhilila - kafwampi neyi mweluka dehi chakuzatisha nsapi zhenu zha PGP mwatela kudiwula iyi nsañu!

He la ch o ch u , mu yaaka yamako n u an tu an aku zata n año vu ku lo n d a kuzatisha PGP nankashi nayozelu yidi neyi Mailvelopeni FlowCrypt.



Mailvelope ayizatishaña kumaprogramu ezhima aimewu chidi neyi gmail ni yahoo. Mukuwana chakuzatisha izhi nzhila ha: <https://bit.ly/3fDBiBX>



Nzhila yimu yavula kuzatishawu yitukulezha antu azatisha Gmail hikuzatisha chozelu chatenañawu nawu FlowCrypt. Yenu ha [FlowCrypt.com](https://bit.ly/3fDBiBX) nawa londelenu nzhila zhapela yakwila insito hakwila mumoni chimunateli kuzatishaña imewu yakukiña muzhiminiti zhakadi kushika ku 5!



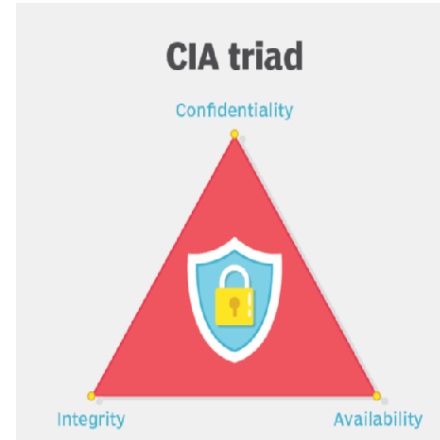
YUMA YAKUFUUKULA



Zatishenu ora yimu hela zhiyedi nakushakama nakompyuta nifoni yenu, nakutala mumasetiñi enu nimaakawunti. Chumichi chinateli kuyikwasha, swetze-neyi yenu akunjikawu mudimu weniwu hamudimu wenu, kulonda mufuukuluhu chakuza chiwahi (SMART)

Munateli kuwana nzhila zhahivulu mwatalisha izu dakwila nawu SMART haintaneti, ilaña zhemenañaku nsañu yalema yadifwana: Nkeñelu yayiwahi diyi yapela yimwatela kuzatisha kulonda mumoni chimunakuya hambidi, yaleñelaña antu alema kumona nawu mudimu wunakuya hambidi, nawa yakwashaña ezhima adi nambadi kusha maana hachuma chatela kuzatewa, hampinjinyi nawa muntwinyi wukweti mudimu wenowu.

**Neyi munakukeña nsañu yikwawu,
talenu ha Kusakilalaku nawa munakoleki
hakukiñi mudimu niikina denu!**
<https://www.projectsmart.co.uk/smart-goals.php>



KUZHINDA, KASHINSHI NI KUWANIKEWA YUMA YISATU YA

Kuzhinda, kashinshi nikuwanikewa, yumiya ayiluka cheñi neyi yuma yisatu (*Confidentiality, integrity and availability CIA triad*), himutayi waloñeshawu kulonda kulombola nshimbi yansañu yakusweka mukachi kachipompelu. Mutayi weniwu mpinji yikwawu awutenaña nawu [AIC triad] (*availability, integrity and confidentiality*) kulonda chibuli kumwekana neyi anakutena mutayi wa (*Central Intelligence Agency*). Hela chakwila yuma yamuniyi yuma yisatu diyu yuma yisatu yaswezha kulema yakeñekana hakudikiña musañu yamakompyuta, ankuluñaña akuhwelela nawu yuma yisatu ya CIA yakeñekaña kuyitwala hambidi kulonda yizatikeña chiwahi.

Muniwu mukuku wamazuz, nhsohelu yakwila nawu **kuzhinda** hinshimbi yakañeshaña antu kwikala nansañu, **kashinshi** hikukuhwelela chikupu nawu nsañu yeniyi yalala nawa atela kuyikuhwelela, nawa **kuwanikewa** hikukuhwelela nawu nsañu yeniyi anateli kuyiwana kudi antu etezhewa kuzatisha nsañu yeniyi.

Kuzhinda, kashinshi, kuwanikewa

Iyi yuma yisatu yinalondeluhu diyu yuma yalema yatuña yuma yisatu ya CIA:

- **Kuzhinda** dikwila nawu azataña nañovu kulonda kuzhinda nsañu yalema hakwila muntu yabula kwitezawu yawani nsañu yeniyi. Nsañu ayihembaña kwesekezha nakutoha nimutapu wawubanzhi wunateli kumwekana neyi nsañu yeniyi yiholokela mumakasa amuntu watama. Anateli kushahu nshimbi yakola chikupu hela nehi kwesekezha namutapu wenowu.
- **Kashinshi** kabombelamu kuhemba nsañu yeniyi chakadi kuyihimpa, yalala nawa yinateli kukuhwelelawu yaaka yezhima. Nsañu hiyatela kuyihimpaku neyi anakuyitwala kwacheñi, nawa atela kuzata nañovu kulonda muntu wabula lusesa yabuli kuhimpa nsañu yenoyu (chakutalilahu, kufumpa nshimbi yakazhindilu)
- **Kuwanikewa** dikwila nawu nsañu yatela kwikalaku kala mpinji nawa atela kuyiwana kudi antu atezhewa. Chumichi chabombela kuhemba chiwahi makina nimatala mwahembelañawu nsañu yeniyi

Kuzhinda

Chakutalilahu chachiwahi hanzhila zhazatishanawu hakwila amoni chikupu nawu anazhindi nsañu hikwikala nanaambala yaakawunti hela kukisañana manambala neyi munakuzatisha nsañu yanyambawulu haintaneti. Kusoneka nsanu munzhila yikubula kutañawu kudi kala muntu hinhila yikwawu yavula kuzatishawu hakuzhinda. Mazhina ahakompyuta nimapasiwedi diyi nzhila yinakuzatika; nzhila zhiyedi zhakwilukilahu (*two-factor authentication, 2FA*) anakuyizatisha dikalu. Nzhila zhikwawu zhinabombelumu kwiluka na

Yinjikizhilo yamuntu (Biometric verification) niyuma yikweti yinjikizhilo yakala kwiluka hela yabula kukala chikupu.

hakompyuta.

Kashinshi

Nzhila zhenizhi zhabombela chetezhawu muntu kushinkula nsañu yenoyu hakompyuta nikuyizatisha. Kubombelahu, yipompelu yatela kushaku yinjikizhilo yatela kuyikwasha kwiluka neyi nsañu yinahimpewi hamuloña wakubula kukuyikwata kudi muntu chidi neyi (*electromagnetic pulse, EMP*) hela neyi kompyuta yinafwi.

Kuwanikewa

Chumichi chazatikaña chiwahi neyi mwiluka chikupu nenu munakuhemba chiwahi makompyuta, kuloñesha makompyuta chakadi kuumba mpinji neyi chinakukeñeka nikuhemba chiwahi (*operating system, OS*) kulonda yibuli kukisika. Chikuswezha cheñi kuwaha neyi mukwilaña apudeti sisitimu yenu.

Chaaku chachiwahi chakuzatisha yuma yisatu ya CIA

Hakuzatisha yuma yisatu ya CIA, chipompelu chatela kulondela yaaku yayiwahi yekalaku. Yaaku yikwawu yisatu yambulawu muniyi nsañu yisatu yabombelamu:

Kuzhinda

1. Nsañu atela kuyizatisha kwesekezha nayuma yetezhewa munsañu yakuzhinda yachipompelu. Nsañu atela kuyisoneka munzhila yakubula kutañawu kudi kala muntu kuzatisha 2FA.
2. Kuhemba nsañu yakatataka yandandanda yawantu amonaña nsañu yeniyi nichetezhawu muntu kushinkula nsañu yenoyu

Kashinshi

Kwiluka chikupu nenu akwanyidimu eluka nshimbi nikwovwahila yuma yakeñekaña kulonda kukeheshaku yiluwa yawantu. Zatishenu masofutiweya abakapu niakuwana nachu nsañu yazhimbala.

Hakwila mwiluki chikupu nenu kashinshi kanakuzatishewa, zatishenu, *version control, access control, security control, data logs* ni *checksums*.

Kuwanikewa

Zatishenu nzhila zhakukañesha zhidi neyi *redundancy, failover* ni *RAID*. Ilukenu chikupu nenu sisitimu nimaapulikesheni akwila apudati.

Zatishenu *network* hela *server monitoring systems*.

Ilukenu chikupu nenu mukweti yuma yakuwaninahu nsañu nikutwalekahu kuyizatisha hakwila muyizatishi neyi munazhimbeshi nsañu (*data recovery* ni *business continuity (BC)*).

CIA triad (Lunda) Yuma yisatu ya CIA

Confidentiality -- [kuzhinda](#)

Integrity -- [kashinshi](#)

Availability -- [kuwanikewa](#)

