Latvian HOWTO

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Ðî dokumenta mçríis ir kopîgiem spçkiem iegût latvieðu valodas atbalstu operâciju sistçmâ Linux. Note to English readers: The aim of this document is to describe GNU/Linux localization issues specific for Latvian users.

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1. Priekðvârds

Katrs Linux lietotâjs Latvijâ ir saskâries ar sekojoðu problçmu: mûsu iecienîtajai operâciju sistçmai nav latvieðu valodas.. Arî informâcijas par to, kâ Linuxam iemâcît runât ar mums latviski, ir vai nu ïoti maz, vai arî, ja kaut ko tomçr izdodas sameklçt, tâ ir lietotâjiem grûti saprotama, un ar latviskoðanas realizçðanu sâkas problçmas. Ðo problçmu tad arî kopâ centîsimies risinât.

Ðis Latvian−HOWTO ir tapis sadarbîbâ ar LL10NT (Latvian Localization Team), tâpçc, ja rodas kâdas problçmas vai jautâjumi sakarâ ar Linux latviskoðanas lietâm, griezieties pçc palîdzîbas LL10NT forumâ vai arî IRCnet kanâlâ #ll10nt. Savu iespçju robeþâs centîsimies rast risinâjumu. Protams, visi mîïi aicinâti arî piebiedroties LL10NT komandai un darboties tâ, lai latvieðu valodas atbalstu Linux operâciju sistçmâ padarîtu vçl plaðâku un labâku. Gribçtu vçl piebilst un atgâdinât, ka ðis Latvian−HOWTO ne tuvu nav perfekts un pabeigts, tâpçc vçlos, lai jûs ziòotu, ja atrodiet ðeit kâdu kïûdu. Neturiet arî sveci zem pûra, ja ziniet, kâ latviskoðanu Linuxâ varçtu padarît vçl efektîvâku un çrtâku.

Tâ kâ mums visiem ne seviðíi patîk lasît garus un apnicîgus tekstus par tçmu, kuru var pateikt pâris vârdos, pie tam visu vienmçr gribas âtri un uzreiz, centîðos ðo Latvian−HOWTO saglabât iespçjami îsâku un skaidrâku ar mçríi, lai jûs maksimâli îsâ laikâ varçtu strâdât Linuxâ, lietojot latvieðu valodu. Saturu mçìinâðu izklâstît viegli saprotamâ valodâ, lai pçc iespçjas padarîtu visai sareþìîto latviskoðanas procedûru vienkârðâku un saprotamâku katram.

Pats gan es dotajâ brîdî lietoju Linux Mandrake. Ceru, ka ðeit aprakstîtie padomi strâdâs bez problçmâm arî citos distributîvos. Katrâ ziòâ par savu latviskoðanas pieredzi (labu vai sliktu) darbâ ar citâm Linux distribûcijâm ziòojiet.

Latvian−HOWTO jaunâkâ versija atrodama http://linux.ma−1.lv/ll10nt.

Pateicos visiem tiem, kuri ar savâm idejâm, kritiku un atbalstu ir devuði ieguldîjumu gan ðî dokumenta pilnveidç, gan arî latvieðu valodas atbalstam atvçrtâ un brîvâ koda programmatûrâs.

Bet.. kâ Andris Maiziks aka Andzha ir teicis − neaizmirstiet, ka datori ir eksperimentâla zinâtne..

Tâtad − ieteikumi, labojumi un papildinâjumi laipni gaidîti... un uz priekðu!

2. Xlogi (Xwindow)

2.1 Nepiecieðamie faili

Lai realizçtu latvieðu valodas atbalstu X11 vidç, jums bûs nepiecieðami sekojoðie faili:

- `lv` (ja vçlaties rakstît ar labo Alt taustiòu)
- `lva` (ja vçlaties rakstît ar apastrofa ' taustiòu)
- `lvt` (ja vçlaties rakstît ar tildes ~ taustiòu)
- `Compose`

Tie atrodami ðeit: X−files.tar.gz

2.2 Liekam visu savâs vietâs

Tagad, kad vajadzîgie faili ir iegûti, nepiecieðams tos salikt îstajâs vietâs.

Piezîme: Ja lietojat kâdu no pçdçjâm XFree86 versijâm (sâkot ar 4.1.0), jûs jau varat latviski rakstît bez jebkâdas papildus failu modificçðanas, specifisko rakstzîmju iegûðanai izmanotojot labo Alt − lai ðo iespçju aktivizçtu, izpildâm komandu `setxkbdmap lv`.

Izvçlamies sev pieòemamâko speicâlâs rakstzîmes iegûðanas veidu un kopçjam attiecîgo failu norâdîtajâ direktorijâ, piemçram:

```
# cp lv /usr/X11R6/lib/X11/xkb/symbols/
```

Domâju, ka bûtu lieki atgâdinât, ka, lai veiktu nepiecieðamâs darbîbas, ir jâbût root tiesîbâm.

Lai aktivizçtu mçmâ taustiòa pareizu darbîbu, attiecîgajâ vietâ kopçjam failu `Compose`. Taèu ðeit ir viena nianse. Ja savu Linuxu esiet instalçjuði izmantojot anglisko saskarni, tad visticamâk, ka lokâles ir pçc noklusçjuma ieslçgtas iso8859−1 reþîmâ. Taèu, ja instalçjât tâ, ka instalâcijas process notika latvieðu valodâ, kâ to darîju es, tad lokâles pçc noklusçjuma jau pareizi ir ieslçgtas iso8859−13 reþîmâ. Izejot no jûsu konkrçtâs situâcijas tad arî tur kopçjam failu `Compose`. Ja ne nieka no augstâkminçtâ nesapratât, tad labâk iekopçjiet `Compose` abos lokâles variantos − droðs paliek nedroðs − un gan jau nekas slikts nenotiks.. ;−>

```
# cp Compose /usr/X11R6/lib/X11/locale/iso8859-1/
# cp Compose /usr/X11R6/lib/X11/locale/iso8859-13/
```

Kad tas ir izdarîts, izpildâm jau iepriekðminçto komandu `setxkbmap lv` (`lv` vietâ var bût arî `lva` vai `lvt` − atkarîbâ no jûsu izvçles) un mçìinâm kaut ko uzrakstît latviski.

Ja tests ir izdevies, tad jûs noteikti vçlçsieties saglabât latvieðu valodu Xwindow sistçmâ un padarît to pieejamu un izmantojamu arî pçc datora vai Xu pârstartçðanas, tâpçc papildus ir jâmodificç `/etc/X11/XF86Config−4` fails (ja lietojam XFree86 4.x.x) tâ, lai iegûtu `Option "XkbLayout" "lv"`. Piemçrs:

```
Section "InputDevice"
    Identifier  "Keyboard1"
```

```
    Driver      "Keyboard"
    Option      "AutoRepeat" "250 30"
    Option      "XkbRules"   "xfree86"
    Option      "XkbModel"   "pc105"
    Option      "XkbLayout"  "lv"
EndSection
```

Piezîme: Ja lietojat XFree86 3.x.x versiju, tâ kâ primâro izmantos failu `/etc/X11/XF86Config`. Piemçrs:

```
Section "Keyboard"
    Protocol        "Standard"
    XkbKeycodes     "xfree86"
    XkbTypes        "default"
    XkbCompat       "default"
    XkbSymbols      "us(pc105)"
    XkbGeometry     "pc"
    XkbRules        "xfree86"
    XkbModel        "pc105"
    XkbLayout       "lv"
EndSection
```

2.3 Fonti

No ðî brîþa latvieðu teksta ievades sistçmai vajadzçtu strâdât, taèu, lai gaidîtais rezultâts tiktu atbilstoði attçlots arî uz ekrâna, ir nepiecieðami fonti, kuri atbalsta iso8859−13 kodçjumu vai Unicode. Linuxâ iespçjams arî strâdât ar True Type fontiem. Detalizçtâka informâcija rodama *Font−HOWTO* vai vçl konkrçtâk *TrueType Fonts with XFree86 4.0.x mini−HOWTO*. Pagaidâm ðajâ dokumentâ fontu instalâcija aprakstîta netiks, jo uz doto brîdi tas ir ârpus Latvian−HOWTO uzdevuniem un mçríiem. Iespçjams, ka nâkotnç tiks iekïauts arî îsais eksperimentâlais kurss fontu instalçðanâ.

---

3. Konsole

Pirms pievçrðamies konsoles latviskoðanai, gribçtu piezimçt, ka konsole nav terminâlis X logos.. Konsoli iegûstam, piespieþot Ctrl+Alt+Fn, kur Fn − kâds no funkciju taustiòiem.

3.1 Nepiecieðamie faili

Ïoti iespçjams, ka visi minimâli nepiecieðamie faili konsoles latviskoðanai jau atrodas jûsu datorâ (`/usr/lib/kbd/keymaps/i386/qwerty/lv-latin7.kmap.gz` un `/usr/lib/kbd/consolefonts/tlat7.psf.gz` vai `lat7-14.psf.gz`) un neko papildus kopçt nav nepiecieðams. Ja jums to nav, tad noderçs ðî failu pakotne:

- konsole−files.tar.gz

3.2 Liekam visu savâs vietâs

Pieòemot, ka izmantojam piedâvâto failu pakotni, izpildâm:

```
# cp lv-latin7.kmap.gz /usr/lib/kbd/keymaps/i386/qwerty/
# cp lv.psf.gz /usr/lib/kbd/consolefonts/
```

Tagad jaunâs iespçjas ir nepiecieðams aktivizçt, tâpçc izpildâm:

```
$ consolechars -f lv -m straight-to-font
$ loadkeys lv-latin7
```

Piezîme: Tie, kuri izmanto jau esoðos failus, pie `consolechars` nomaina `lv` uz savu fontu, tâ vietâ rakstot, teiksim, `lat7-14`. Taèu es tomçr ieteiktu lietot fontu `lv`, jo tas labâk izskatâs tâdâs programmâs, kâ `mc` un citâs.

Tagad varam mçìinât veikt nelielu pârbaudi, lai redzçtu, vai latvieðu valoda strâdâ konsoles reþîmâ. Specifiskos latvieðu valodas simbolus iegûstam, lietojot AltGr (labo Alt taustiòu) kopâ ar nepiecieðamo rakstu zîmi.

Lai katru reizi nebûtu jâizpilda `consolechars` un `loadkeys`, varam izveidot augstâkminçto komandu saturoðu miniskriptu `lvkonsole` un pçc tam, lai to palaiþot viegli atrastu:

```
# cp lvkonsole /usr/local/bin
```

3.3 Latvieðu valoda kâ noklusçtâ konsoles valoda

Uzmanîbu! Zemâkaprakstîtais variants nestrâdâ perfekti, kaut arî îstais fonts un tastatûras karte ielâdçjas pareizi, specifiskâs rakstzîmes neattçlojas pareizi. Nepiecieðama `--acm straight-to-font` opcijas aktivizçðana. Ja kâds ir panâcis nevainojamu latvieðu rakstîbas darbîbu konsolç arî pçc datora pârstartçðanas, ziòojiet.

Bûtu ïoti neçrti katru reizi, kad vien mums ir nepiecieðama latvieðu valoda konsoles reþîmâ, izpildît `lvkonsole`. Lai konsolç varçtu vienmçr rakstît latvieðu valodâ, nepiecieðams izdarît nelielas izmaiòas sistçmas konfigurâcijas failos.

Tâpçc rediìçjam failu `/etc/sysconfig/i18n` tâ, lai sanâk

```
SYSFONT=lv
```

Un attiecîgi failu `/etc/sysconfig/keyboard`, lai iegûtu, ka

```
KEYTABLE=lv-latin7
```

Rezultâtâ latvieðu valodas atbalsts arî konsolç ir realizçts.

3.4 Daþu programmu pielâgoðana darbam latvieðu valodâ

Ðajâ nodaïâ tiks sniegta informâcija, kâ jâizmaina daþu lietojumprogrammu konfigurâcijas faili, lai tâs darbotos pienâcîgi latvieðu valodas reþîmâ. Piezîme – pats gan neesmu lielu daïu zemâkaprakstîto darbîbu veicis, tâ kâ... :–> ja darbojas vai nedarbojas, vai jums ir padomâ vçl kâdas lietderîgas programmu konfigurâcijas failu izmaiòas, kuras bûtu nepiecieðams veikt labâkas latvieðu valodas darbîbas nodroðinâðanai konsoles reþîmâ, rakstiet man.

bash:

Ja `/etc/inputrc` faila uzstâdîjumi atðíiras no zemâkparâdîtajiem, bûtu lietderîgi pievietot savam `~/.inputrc` failam:

```
set meta-flag on
set convert-meta off
set input-meta on
set output-meta on
```

Jebkurâ citâ gadîjumâ tam nebûs nozîmes.

elm:

Pievienojiet sekojoðo savam `~/.elm/elmrc` failam:

```
charset = iso-8859-13
displaycharset = iso-8859-13
textencoding = 8bit
```

Daþâm `elm` versijâm tas var nestrâdât. Varat iegût daïçju **MIME** atbalstu iekð `elm`, ja lietosiet `metamail`.

joe:

Palaidiet komandu kâ

```
joe -asis
```

vai pievienojiet savam `~/.joerc` failam:

```
-asis
```

metamail:

Iestâdiet sekojoðo mainîgo:

```
MM_CHARSET=ISO-8859-13
```

nn:

Uzstâdiet savâ `~/.nn/init` failâ:

```
set data-bits 8
```

pine:

Setup –> Config Atrodiet `character-set` un ierakstiet `iso-8859-13`.

Tas ir teorçtiski pareizs risinâjums, taèu pagaidâm var radît liekas problçmas jûsu korespondentiem, tâpçc var mçìinât `iso-8859-13` vietâ rakstît `windows-1257`.

rlogin:

Palaidiet komandu lîdzîgi kâ

```
rlogin -8 foo.bar.lv
```

sendmail:

Pievienojiet (vai atkomentçjiet) savâ `/etc/sendmail.cf` failâ:

```
O SevenBitInput=False
O EightBitMode=pass8
O DefaultCharSet=iso-8859-13
```

mc:

Options –> Display bits... Ieslçdziet `Full 8 bits output` un `Full 8 bits input`. Neaizmirstiet saglabât jauno konfigurâciju.

telnet:

Ievietojiet ðâda veida rindu savâ `~/.telnetrc` failâ katrai adresei, kurai vçlaties pieslçgties, lietojot `telnet`:

```
<hostname> set outbinary true
```

Piemçrs:

```
localhost set outbinary true
foo.bar.lv set outbinary true
```

tin:

Pievienojiet sekojoðo savam `~/.tin/headers` failam:

```
Mime-Version: 1.0
Content-Type: text/plain; charset=iso-8859-13
Content-Transfer-Encoding: 8bit
```

---

4. Netscape

Parasti problçmas, ar kâdâm lietotâjiem nâkas saskarties, izmantojot Netscape lielâ informâcijas tîmekïa pârlûkprogrammu, ir sekojoðâs – vai nu lapâs, kur vajadzçtu parâdîties tekstam latvieðu valodâ, ir redzamas daudzas jautâjumu zîmes, vai arî, ja iepriekðminçto problçmu kaut kâ ir izdevies novçrst, tad latvieðu burtu vietâ ir redzamas íeburiem lîdzîgas rakstu zîmes. Ðîs nepilnîbas tad kopîgiem spçkiem centîsimies novçrst. Protams, lai gûtu cerçto rezultâtu, arî bez latvieðu fontiem neiztikt. Ja nevçlaties mocîties ar Netscape latviskoðanu, variet lietot Mozilla, Galeon vai citus pârlûkus, kuriem latvieðu valodas pareiza attçloðana nevajadzçtu sagâdât problçmas.

4.1 Nepiecieðamie faili

Lai panâktu vçlamo rezultâtu Netscape latviskoðanas sakarâ, nepiecieðams mums bûs ðis skripts:

- NC_baltic

4.2 Liekam visu savâs vietâs

Lai varçtu ar skripta palîdzîbu veikt nepiecieðamâs izmaiòas citos failos, ir nepiecieðamas root tiesîbas. Pietam, lai varçtu `NC_baltic` skriptu "iedarbinât", vajag to pataisît palaiþamu:

```
$ chmod a+x NC_baltic
```

Kad tas ir izdarîts, palaiþam arî paðu skriptu:

```
# ./NC_baltic
```

Visur nekautrçjoties atbildam ar "yes"...

No ðî brîþa programmai Netscape vajadzçtu darboties kâ nâkas. Iestâdâm `Character set` kâ `Baltic (Windows 1257)` un visam vajadzçtu strâdât.

---

5. NLS

5.1 Latvieðu lokâles

Tâtad, lai tiktu pareizi attçloti laika, datuma, valûtas u.c. formâti un lai varçtu sekmîgi noritçt latvisko elementu ievieðana kâ GNOME & KDE, tâ arî atseviðíu citu programmu lietotâja saskarnç, nepiecieðams izveidot latvieðu lokâles. Iespçjams, ka latvieðu lokâles jûsu sistçmâ jau ir saliktas tâ, kâ vajag, ja lietojat Mandrake vai lîdzîgu distribûciju. Latvieðu lokâïu faili atrodas `/usr/share/locale/lv`. Par to, vai ir iestâdîtas latvieðu lokâles, pârliecinamies, izpildot komandu `locale` vai `echo $LANG`. Vai latvieðu lokâles ir pieejamas sistçmai, pârliecinamies, izpildot `locale -a|grep lv`. Ja latvieðu lokâles jums nav, uzstâdiet tâs, izmantojot jûsu distribûcijas piedâvâto pakotni. Ja tas nav iespçjams, latvieðu lokâles kompilçt varam arî paði:

```
# localedef -c -i lv_LV -f ISO-8859-13 lv
```

Lai sistçma zinâtu, ka ar ðo brîdi lietojamas ir latvieðu lokâles, rediìçjam savu `.bash_profile` failu (pieòemot, ka lietotâ èaula ir `bash`) un tam beigâs pievienojam

```
LANG=lv
LC_COLLATE=lv
LC_CTYPE=lv
LC_MESSAGES=lv
LC_MONETARY=lv
LC_NUMERIC=lv
LC_TIME=lv
LC_ALL=lv
export LANG LC_COLLATE LC_CTYPE LC_MESSAGES LC_MONETARY LC_NUMERIC LC_TIME LC_ALL
```

Visai sistçmai lokâles tiek definçtas RedHat un lîdzîgiem `/etc/sysconfig/i18n`, bet Debian lietotâjiem `/etc/environment` failâ.

Vai viss strâdâ, pârliecinâties varam, izpildot, piemçram, komandu

```
$ cal -m
```

5.2 Failu nosaukumi

Ðeit tiks sniegta informâcija par to, kâ aktvizçt failu nosaukumu pareizu attçloðanu latvieðu valodâ (tas gan vairâk attiecas uz tâdâm failsistçmâm, kâ FAT, ISO9660, ..)

```
# insmod nls_cp775
# insmod nls_iso8859-13
```

Ja augstâkminçtais neizdevâs, un arî paðâ kodolâ konkrçtais atbalsts jau nav iestrâdâts, bûs nepiecieðama kerneïa pârkompilâcija ar papildus opcijâm, kas pieejamas iekð *Filesystems > Native Language Support*, ISO−8859−13 un Codepage 775 atbalstam.

Rezultâtu varam pârbaudît ðâdi (Piemçrs):

```
# mount /dev/hda1 -t vfat -o codepage=775,iocharset=iso8859-13 /mnt/win_c
```

---

6. GNOME & KDE

6.1 GNOME

Tâ kâ viens no LL10NT projekta virzieniem ir arî GNOMEs po moduïu tulkoðana, tâpçc ðajâ sadaïâ tiks sniegta informâcija, kas ir jâdara ar po moduïiem, lai arî GTK+ lietotâja saskarne bûtu latvieðu valodâ. Protams, pagaidâm vçl ðeit latvieðu valodas atbalsts nav realizçts pilnîbâ. Tâpçc ðî nu ir tâ reize, kur arî jûs varat sniegt atbalstu ar savu lîdzdalîbu po moduïu tulkoðanâ − darbs bûs.

Vçl tikai nepiecieðami arî paði po moduïi, kuri iegûstami LL10NT Komandas GNOMEs statusa sekcijâ.

Liekam visu savâs vietâs

Lai po moduïi darbotos tâ, kâ mçs vçlamies redzçt tos darbojamies, nepiecieðams tos pârveidot par mo moduïiem:

```
$ msgfmt kautkâds.po -o kautkâds.mo
```

Tagad, kâ jau solîts, liekam nu jau jauniegûtos mo moduïus savâs vietâs:

```
# cp *.mo /usr/share/locale/lv/LC_MESSAGES/
```

6.2 KDE

Arî darbs pie KDE tulkoðanas rit pilnâ sparâ. Interesenti, kas vçlas lîdzdarboties sîkâku informâciju var uzzinât no Andzhas.

Îsa instrukcija problçmu novçrðanai

Bieþi vien atrisinâjums ir jaunâkâs `kde-i18n-lv` pakotnes uzlikðana, ar kuru tad arî tiek realizçts K Desktop Environment latviskais atbalsts.

Ja, rakstot specifiskâs latvieðu rakstzîmes KDE aplikâcijâs, to vietâ redzat jautâjuma zîmes, sava `.bash_profile` faila galâ pievienojam

```
export LANG=lv_LV.ISO-8859-13
```

vai arî sistçmas mçroga izmaiòu panâkðanai attiecîgi nomainâm mainîgâ `LANG` vçrtîbu failâ `/etc/sysconfig/i18n`.

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1. LIETOJAMÎBA UN TERMINI

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Derîgu Caurspîdîgo formâtu piemçri ietver tîru ASCII bez maríçjuma, Texinfo ievades formâtu, LaTeX ievades formâtu, SGML vai XML, lietojot publiski pieejamos DTD, un standartam atbilstoðs vienkârðs HTML, kas radîts cilvçciskai modifikâcijai. Necaurredzamie formâti ietver PostScript, PDF, patentçtçtus formâtus, kurus var lasît un rediìçt tikai patentçti teksta redaktori, SGML vai XML, kam DTD un/vai apstrâdes rîki nav vipârçji pieejami, un maðîniski ìenerçts HTML, kuru izveidojis kâds teksta redaktors tikai izvades nolûkâ.

"Titullapa" nozîmç drukâtâm grâmatâm, paðu titullapu plus tâdas turpmâkâs lapas, kuras nepiecieðamas, lai salasâmi saturçtu to materiâlu, kam ðî Licence pieprasa parâdîties titullapâ. Darbiem, kuru formâtos nav titullapas kâ tâdas, "Titullapa" nozîmç tekstu tuvu vissaredzamâkajam darba virsrakstam pirms teksta daïas sâkuma.

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Jûs varat arî aizdot kopijas pçc tâdiem paðiem nosacîjumiem, kâdi noteikti augstâk, un jûs varat publiskti izstâdît kopijas.

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Ja jûs publicçjat drukâtas skaitliski vairâk kâ 100 Dokumenta kopijas, un Dokumenta licences nosacîjumi pieprasa Vâku tekstus, jums kopiju vâkos skaidri un salasâmi jâiekïauj visi ðie Vâku Teksti: Pirmâ−Vâka Teksts uz pirmâ vâka un Aizmugurçjâ−Vâka Teksts uz pçdçjâ vâka. Abiem vâkiem arî skaidri un salasâmi jâidentificç jûs kâ ðo kopiju izdevçju. Pirmajâ vâkâ jâparâdâs pilnam nosaukumam, visiem nosaukuma vârdiem esot vienâdi izceltiem un saredzamiem. Jûs varat pievienot papildus materiâlu vâka tekstiem. Kopçðana ar izmaiòâm, kas skar tikai vâkus, kamçr tie satur Dokumenta nosaukumu un apmierina ðos nosacîjumus, citâdâ ziòâ var tikt uzskatîta par burtisku kopçðanu.

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- **C.** Norâdiet Modificçtâs Versijas Titullapâ izdevçja vârdu kâ izdevçju.
- **D.** Saglabâjiet visus Dokumenta autortiesîbu paziòojumus.
- **E.** Savâm modifikâcijâm pievienojiet atbilstoðu autortiesîbu paziòojumus blakus citiem autortiesîbu paziòojumiem.
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- **K.** Ikvienâ paragrâfâ ar nosaukumu "Pateicîbas" vai "Veltîjumi", saglabâjiet paragrâfa nosaukumu, visu tâ saturu un katra lîdzstrâdnieka pateicîbâs un/vai veltîjumos ietverto nozîmes nokrâsu.
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"Pateicîbas" un visus paragrâfus ar nosaukumu "Veltîjumi". Jums jâizdzçð visi paragrâfi ar nosaukumu "Indosaments".

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