



About QGIS 3.40

QGIS Project

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1 Preambulė	3
1.1 Kas naujo QGIS 3.40	4
2 Pratarmė	5
3 Conventions	7
3.1 GUI susitarimai	7
3.2 Teksto ir klaviatūros susitarimai	8
3.3 Nuo platformos priklausančios instrukcijos	8
4 Savybės	9
4.1 Duomenų peržiūra	9
4.2 Tyrinėkite duomenis ir kurkite žemėlapius	10
4.3 Duomenų kūrimas, keitimasis, tvarkymas ir eksportavimas	10
4.4 Duomenų analizė	11
4.5 Žemėlapių publikavimas internete	11
4.6 Papildykite QGIS funkcionalumą naudodami priedus	11
4.6.1 Baziniai priedai	11
4.6.2 Išoriniai Python priedai	12
4.7 Pythono konsolė	12
4.8 Žinomos problemos	12
4.8.1 Atvertų failų skaičiaus ribojimas	12
5 Pagalba ir palaikymas	13
5.1 Sąrašynai	13
5.1.1 QGIS naudotojai - qgis-users	13
5.1.2 QGIS vystytėjai - qgis-developers	13
5.1.3 QGIS bendruomenės komanda - qgis-community-team	13
5.1.4 QGIS vertėjai - qgis-tr	14
5.1.5 QGIS projekto valdymo komiteto (PSC) - qgis-psc	14
5.1.6 QGIS naudotojų grupės	14
5.2 Matrix / IRC	14
5.3 Komercinis palaikymas	14
5.4 Rikitai	14
5.5 Tinklaraštis	15
5.6 Priedai	15
5.7 Wiki	15
6 Talkininkai	17
6.1 Autoriai	17
6.2 Vertėjai	18

6.3	Vertimo statistika	19
7	Licenzių laikymasis	21
7.1	Appendix A: GNU General Public License	21
7.2	Appendix B: GNU Free Documentation License	24

Preambulė

Jus sveikina Geografinės informacinių sistemų (GIS) programinės įrangos QGIS dokumentacija. QGIS veikia pagal GNU General Public Licenzijos 2 arba bet kokią kitą vėlesnę versiją. Daugiau informacijos rasite [QGIS svetainėje](#).

Šio dokumento turinys parašytas ir patikrintas pagal paskutines autoriuų ir redaktorių žinias. Bet klaidų vis tiek gali būti.

Todėl autoriai, redaktoriai ir leidėjai nėra atsakingi už šios dokumentacijos klaidas ir galimas pasekmes. Mes raginame jus pranešti apie visas galimas klaidas.

Šis dokumentas parašytas naudojant reStructuredText. Jį galima rasti kaip reST šaltinių [github'e](#), ir interneše kaip HTML bei PDF per <https://www.qgis.org/resources/hub/#documentation>. Išverstos šio dokumento versijos taipogi gali būti peržiūrėtos ir atsisiustos iš QGIS projekto dokumentacijos sekcijos.

Daugiau informacijos apie pagalbą ruošiant šį dokumentą ir apie vertimą rasite [QGIS-documentation-guidelines](#).

Nuorodos šiame dokumente

Šiame dokumente yra vidinės ir išorinės nuorodos. Paspaudus vidinę nuorodą jūs pateksite į nurodytą dokumentą, o paspaudus išorinę nuorodą bus atvertas interneto adresas.

Dokumentacijos autoriai ir redaktoriai

Sąrašas asmenų, prisidėjusių prie šios dokumentacijos rašymo, peržiūréjimo ir vertimo: [Talkininkai](#).

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Internete: <https://www.qgis.org>

Šio dokumento licencija

Leidžiama kopijuoti, platinti ir/ar modifikuoti šį dokumentą pagal GNU Free Documentation License, 1.3 versijos ar bet kurios vėlesnės versijos, paskelbtos Free Software Foundation be jokių kintančių dalių, jokių pirmo puslapio tekstu ir jokių galutinių tekstu. Licencijos kopija pridėta [Priedas B: GNU laisvos dokumentacijos licencija - FDL](#).

1.1 Kas naujo QGIS 3.40

Šioje QGIS laidoje yra šimtai riktu pataisymų ir daug naujų savybių bei patobulinimų, lyginant su QGIS 3.34. Naujų funkcijų sąrašą rasite [vizualiam pakeitimų sąraše](#).

Mes rekomenduojame naudoti šią versiją, o ne ankstesnes.

Pratarmė

Jus sveikina puikusis Geografinių Informacinių Sistemų (GIS) pasaulis!

QGIS yra atviro kodo geografinė informacinė sistema. Projektas prasidėjo 2002 gegužę ir kaip SourceForge projektas buvo įkurtas tą pačią metų birželį. Mes sunkiai dirbome, kad sukurtume GIS programinę įrangą (kuri tradiciškai yra brangi nuosavybinė programinė įranga), prieinamą visiems, kas turi asmeninį kompiuterį.

QGIS šiuo metu veikia daugumoje Unix platformų, Windows ir macOS. QGIS sukurtas naudojant Qt įrankius (<https://www.qt.io>) ir C++. Tai reiškia, kad QGIS veikia greitai ir turi malonią, lengvai naudojamą naudotojo sąsają (GUI). Taipogi yra nepriklausomai kuriamos aplikacijos, kurios leidžia jums išsinešti QGIS į lauką. Šios aplikacijos veikia Android ir iOS.

QGIS stengiasi būti naudotojui draugiška GIS, teikti bazines funkcijas ir savybes. Pradinis projekto tikslas buvo sukurti GIS duomenų peržiūros programą. QGIS pasiekė savo vystymosi tašką, kai yra naudojamas kasdien GIS duomenų peržiūrai, duomenų įvedimui, sudėtingai GIS analizei ir sudėtingų žemėlapių pristatytmams, atlasams bei ataskaitoms. QGIS palaiko įvairiausius rastro ir vektorių formatus, naujų formatų palaikymą galima paprastai pridėti naudojant priedų architektūrą.

QGIS leidžiamas pagal GNU General Public License (GPL). Kuriant QGIS su šia licencija reiškia, kad jūs galite peržiūrėti ir keisti visą išeities kodą, taip pat garantuojama, kad jūs, mūsų laimingas naudotojas, visada turėsite prieigą prie GIS programos, kuri nekainuoja ir gali būti laisvai keičiama. Jūs turėtumėte gauti pilną licencijos versiją su jūsų QGIS kopija, taipogi ją galite rasti ir Priede *Priedas A: GNU bendra viešoji licencija - GPL*.

Patarimas: Šviežia dokumentacija

Paskutinę šios dokumentacijos versiją visada rasite QGIS svetainės dokumentacijos zonoje <https://www.qgis.org/resources/hub/#documentation>.

Conventions

Šiame skyriuje aprašomi bendri stiliai, kurie bus naudojami šiame vadove.

3.1 GUI susitarimai

GUI susitarimų stilių paskirtis - atkartoti GUI išvaizdą. Stilius atspindės išvaizdą, kai pelės žymeklis nėra užvestas ant elemento, kad naudotojas galėtų vizualiai peržiūrėti GUI ir rasti kažką kas atrodo panašiai į tai, kas matoma vadove.

- Meniu parinktys: *Sluoksnis* ► *Pridėti rastro sluoksnį* arba *Nustatymai* ► *Irankinės* ► *Skaitmeninimas*
- Irankis: Pridėti rastro sluoksnį
- Mygtukas : *Irašyti kaip numatyta(j)*
- Dialogo antraštė: *Sluoksnio savybės*
- Kortelė: *Bendra*
- Varnelė: *Braižyti*
- Pasirinkimo mygtukas: *Postgis SRID* *EPSG ID*
- Parinkite skaičių:
- Parinkite eilutę:
- Nurodykite failą: ...
- Parinkite spalvą:
- Slankiklis:
- Įvesties tekstas:

Šešėlis indikuoja paspaudžiamą GUI komponentą.

3.2 Teksto ir klaviatūros susitarimai

Šiame vadove taip pat yra su tekstu, klavišų komandomis ir programiniu kodu susiję stilai, rodantys skirtinges esybes, tokias kaip klasės ar metodai. Šie stiliai neatitinka realios QGIS teksto ar kodo išvaizdos.

- Nuorodos: <https://qgis.org>
- Klavišų kombinacijos: Spauskite **Ctrl+B**, reiškia paspausti ir laikyt Ctrl mygtuką ir tuo pačiu metu paspausti mygtuką B.
- Failo pavadinimas: **ežerai.shp**
- Klasės pavadinimas: **NaujasSluoksnis**
- Metodas: *classFactory*
- Serveris: *manoserveris.lt*
- Naudotojo tekstas: `qgis --help`

Kodo linijos vaizduojamos fiksuoto pločio šriftu:

```
PROJCS ["NAD_1927_Albers",
GEOGCS ["GCS_North_American_1927",
```

3.3 Nuo platformos priklausančios instrukcijos

GUI sekos ir nedideli teksto kiekiai gali būti formatuojami vietoje: Spauskite Failas X QGIS ► Išeiti QGIS uždarymui. Tai rodo, kad Linux, Unix ir Windows platformose jums reikia iš pradžių spausti meniu Failas, o tada, Išeiti, o štai macOS platformose jūs iš pradžių spaudžiate QGIS meniu, o tada Išeiti.

Didesni teksto kiekiai gali būti formatuojami kaip sąrašas:

- Darykite tą
- Darykite aną
- X Arba dar šitą

arba kaip pastraipos:

X Darykite šitą ir šitą. Tada darykite šitą ir tą, ir aną, bei šitą ir šitą, dar šitą ir aną.

Darykite šitą ir šitą. Tada darykite šitą ir tą, ir aną, bei šitą ir šitą, dar šitą ir aną.

Visame vadove matomos ekrano nuotraukos gali būti padarytos skirtingose platformose.

Savybės

QGIS siūlo būrį GIS funkcijų, kurias teikia bazinės savybės bei priedai. Paieškos juosta leidžia lengvai ieškoti funkcijų, duomenų rinkinių ir pan.

Žemiau pateiktinos trumpas šešių bendrų savybių kategorijų pristatymas, po kurio seka pirmos ižvalgos apie integruotą Python konsolę.

4.1 Duomenų peržiūra

Galite peržiūrėti įvairius vektorinius ir rastro duomenis (2D ir 3D), saugomus skirtingais formatais ir projekcijomis nekeičiant į vidinį ar bendrą formatą. Palaikomi formatai:

- Lentelės ir rodiniai su erdviniuose laukais, naudojant PostGIS, SpatiaLite ir MS SQL Spatial, Oracle Spatial vektoriniai formatai, palaikomi įdiegtos OGR bibliotekos, išskaitant GeoPackage, ESRI Shapefile, MapInfo, SDTS, GML ir daug kitų. Žiūrėkite skyrių `label_workingvector`.
- Rastro ir piešinių formatai, palaikomi įdiegtos GDAL (Geospatial Data Abstraction Library) bibliotekos, tokie kaip GeoTIFF, ERDAS IMG, ArcInfo ASCII GRID, JPEG, PNG ir daug kitų. Žiūrėkite skyrių `working_with_raster`.
- Tinklo duomenys (palaikomos TIN ir paprastos gardelės). Žiūrėkite skyrių `label_meshdata`.
- Vektorinės kaladėlės
- GRASS rastro ir vektoriniai duomenys iš GRASS duombazių (location/mapset). Žiūrėkite skyrių `sec_grass`.
- Internetiniai erdviniai duomenys, pateikiami kaip OGC žiniatinklio paslaugos, išskaitant WMS, WMTS, WCS, WFS ir WFS-T. Žiūrėkite skyrių `working_with_ogc`.

QGIS autentifikacijos infrastruktūra padeda jums valdyti žiniatinklio paslaugų ir kitų resursų naudotojus/slaptazodžius, sertifikatus ir raktus.

- Skaičiuoklės (ODS / XLSX)

Palaikomi laiko duomenys.

4.2 Tyrinėkite duomenis ir kurkite žemėlapius

Jūs galite kurti žemėlapius ir interaktyviai tyrinėti erdvinius duomenis draugišku GUI. Tarp daugelio naudingu GUI įrankių, yra:

- QGIS naršyklė
- Perprojektavimas vietoje
- 2D ir 3D žemėlapių braižymas
- DB tvarkyklė
- Spausdinimo išdėstymas
- Ataskaitos
- Peržiūros skydelis
- Erdvinės žymelės
- Anotacijos įrankiai
- Geoobjektų identifikavimas/pažymėjimas
- Atributų keitimas/peržiūra/paieška
- Nuo duomenų priklausomos geoobjektų etiketės
- Nuo duomenų priklausantys vektoriniai ir rastro simbolizavimo įrankiai
- Atlaso žemėlapių kūrimas su tinklelio sluoksniais
- Šiaurės rodyklė, mastelio juosta bei autorinių teisių etiketės žemėlapiams
- Projektų įrašymo ir atstatymo palaikymas

4.3 Duomenų kūrimas, keitimas, tvarkymas ir eksportavimas

Galite kurti, keisti, tvarkyti ir eksportuoti vektorinius ir rastro sluoksnius įvairiais formatais. QGIS palaiko:

- Vektorinio skaitmeninimo įrankius
- Galimybę kurti ir keisti įvairius failo formatus ir GRASS vektorinius sluoksnius
- Geo-koordinavimo įrankis vektorių ir nuotraukų pririšimui
- GPS įrankius importavimui ir eksportavimui GPX formatu, kitų GPS formatų konvertavimui į GPX arba įkėlimui/išėmimui iš GPS įrenginio (Linux'e, usrb: pridėtas prie GPS įrenginių sąrašo)
- OpenStreetMap duomenų vizualizaciją ir redagavimą
- Galimybę kurti erdvines duombazių lenteles iš failų su DB tvarkymo įskiepiu
- Pagarintą erdvių duomenų bazės lentelių tvarkymą
- Įrankius vektorinių atributų lentelių tvarkymui
- Parinkties įrašyti nuotraukas pririštas prie geografinės pozicijos
- DXF-Eksporto įrankis su pagerintomis galimybėmis eksportuoti stilius ir įskiepius CAD-tipo funkcijų vykdymui

4.4 Duomenų analizė

Galite vykdyti erdvinių duomenų analizę erdinėse duomenų bazėse ir kituose OGR palaikomuose formatuose. QGIS šiuo metu siūlo vektorinę analizę, rastro analizę, samplingą, geoapdorojimą, geometrijos ir duomenų bazės tvarkymo įrankius. Jūs taip pat galite naudoti integruotus GRASS įrankius, kuriuose yra pilnas GRASS funkcionalumas - daugiau nei 400 modulių (žiūrėkite skyrių sec_grass). Arba galite dirbti su Apdorojimo priedu, kuris teikia galingą geoerdvinės analizės karkasą, kviečianti vidinius ir trečiąjų šalių algoritmus iš QGIS, tokius kaip GDAL, SAGA, GRASS, OTB, R ir daugiau (žiūrėkite skyrių sec_processing_intro). Visos analizės funkcijos vykdomos fone, jums leidžiama testi darbą nelaukiant, kol baigsis apdorojimas.

Grafinis modeliuotojas leidžia jums kombinuoti / jungti funkcijas į pilną darbų eiga intuityvioje grafinėje aplinkoje.

4.5 Žemėlapių publikavimas interne

QGIS gali būti naudojamas kaip WMS, WMTS, WMS-C, WFS, IAPIF bei WFS-T klientas (žiūrėkite skyrių working_with_ogc). QGIS Serveris (žiūrėkite skyrių QGIS-Server-manual) leidžia jums publikuoti jūsų duomenis per WMS, WCS, WFS ir OAPIF protokolus interne naudojant žiniatinklio paslaugą.

4.6 Papildykite QGIS funkcionalumą naudodami priedus

QGIS galima pritaikyti jūsų konkretniems poreikiams naudojant priedų architektūrą ir bibliotekas, kurios gali būti naudojamos kuriant priedus. Jūs galite net kurti naujas aplikacijas su C++ ar Python'u!

4.6.1 Baziniai priedai

Bazinių priedų pavyzdžiai:

1. DB tvarkykla (sluoksnių ir duomenų bazių lentelių apsikeitimui į/iš, redagavimui ir peržiūrai; vykdyti SQL užklausas)
2. Geometrijos tikrinimas (ieško geometrijos klaidų)
3. Geoprišimo GDAL (prideda projekcijos informacija prie rastro naudojant GDAL)
4. GPS įrankiai (įkelia ir importuoja GPS duomenis)
5. GRASS (integruoja GRASS GIS)
6. MetaSearch katalogo klientas (bendravimas su metaduomenų katalogų paslaugomis, palaikančiomis OGC katalogų paslaugų žiniatinkliui standartą (CSW))
7. Redagavimas neprisijungus (leidžia keisti duomenis neprisijungus ir vėliau sinchronizuoti su duomenų baze)
8. Apdorojimas (erdvinių duomenų apdorojimo QGIS karkasas)
9. Topologijos tikrintojas (ieško topologijos klaidų vektoriniuose sluoksniuose)

4.6.2 Išoriniai Python priedai

QGIS siūlo didėjantį skaičių išorinių Python priedų, kuriuos teikia bendruomenė. Šie priedai laikomi oficialioje Priedų repozitoriojoje ir gali būti lengvai įdiegti naudojant Python priedų diegiklį. Žiūrėkite skyrių managing_plugins.

4.7 Pythono konsolė

Skriptų rašymui įmanoma pasinaudoti integruota Python konsole, kurią galite atidaryti: menuselection:*Priedai* → *Python'o konsolė*. Konsolė atsidaro kaip nemodalinis įrankių langas. Bendravimui su QGIS aplinka yra kintamasis `qgis.utils iface`, kuris yra `QgisInterface` egzempliorius. Ši sąsaja leidžia prieiti prie žemėlapio drobės, meniu, įrankinių ir kitų QGIS aplikacijos dalių. Jūs galite sukurti scenarijų, tada nutempti ir numesti jį į QGIS langą ir jis bus automatiškai įvykdytas.

Daugiau informacijos apie Python'o konsolę ir QGIS priedų programavimą bei aplikacijas rasite console ir PyQGIS-Developer-Cookbook.

4.8 Žinomos problemas

4.8.1 Atvertų failų skaičiaus ribojimas

Jei atveriate didelį QGIS projektą ir esate įsitikinę, kad visi sluoksniai yra tvarkingi, bet kai kurie sluoksniai pažymimi kaip blogi, jūs tikriausiai susidūrėte su šia problema. Linux (ir kitose OS analogiškai) yra atvertų failų riba procesui. Resursų apribojimai nurodomi procesui ir yra paveldimi. `ulimit` komanda, keičia apribojimus tik dabartiniam procesui; naujas apribojimą paveldės bet kuris vaikinis procesas.

Visus dabartinius `ulimit` apribojimus galite pažiūrėti paraše:

```
$ ulimit -aS
```

Jūs galite pažiūrėti dabartinį leidžiamą atvertų failų skaičių procesui šia komanda konsolėje:

```
$ ulimit -Sn
```

Norėdami pakeisti apribojimo skaičių **esamai sesijai**, turėsite naudoti kažką tokio:

```
$ ulimit -Sn #number_of_allowed_open_files
$ ulimit -Sn
$ qgis
```

Alternatyviai jūs galite naudoti naujesnį įrankį `prlimit`. Daugiau informacijos rasite <https://manpages.ubuntu.com/manpages/latest/man1/prlimit.1.html>

Norėdami pakeisti visam laikui

Linux sistemoje resursų apribojimai nustatomi prisijungimo metu modulio `pam_limits` pagal nustatymus, esančius `/etc/security/limits.conf` arba `/etc/security/limits.d/*.conf`. Jūs turėtumėte galėti keisti šiuos failus, jei turite root teises (arba per sudo), bet jūs turėsite prisijungti iš naujo, kad pakeitimai išsigaliotų.

Daugiau informacijos:

<https://www.cyberciti.biz/faq/linux-increase-the-maximum-number-of-open-files/> <https://linuxaria.com/article/open-files-in-linux>

Pagalba ir palaikymas

5.1 Sąrašynai

QGIS yra aktyviai vystomas ir todėl ne visada veiks taip, kaip jūs to tikite. Geriausias būdas ieškoti pagalbos yra prisijungti prie qgis-users sąrašyno. Jūsų klausimai pasieks platesnę publiką, o atsakymai bus naudingi ir kitiems.

5.1.1 QGIS naudotojai - [qgis-users](https://lists.osgeo.org/mailman/listinfo/qgis-user)

Šis sąrašynas naudojamas bendroms diskusijoms apie QGIS bei konkretiems klausimams apie diegimą ir naudojimą. Jūs galite prisijungti prie qgis-users sąrašyno šiuo adresu: <https://lists.osgeo.org/mailman/listinfo/qgis-user>

5.1.2 QGIS vystytojai - [qgis-developers](https://lists.osgeo.org/mailman/listinfo/qgis-developer)

Jei esate programuotojas, susiduriantis su techninėmis problemomis, jūs galite prisijungti prie sąrašyno qgis-developer. Tai vieta, kur žmonės gali prisijungti ir aptarti su QGIS susijusias UX (naudotojo patirties) ir patogumo problemas. Jūs galite prisijungti prie qgis-developers sąrašyno šiuo adresu: <https://lists.osgeo.org/mailman/listinfo/qgis-developer>

5.1.3 QGIS bendruomenės komanda - [qgis-community-team](https://lists.osgeo.org/mailman/listinfo/qgis-community-team)

Šiame sąrašyne aptariamos tokios temos kaip dokumentacija, kontekstinė pagalba, naudotojo vadovas, svetainės, tinklaraščiai, sąrašynai, forumai ir vertimo pastangos. Jei jūs irgi norite dirbti su naudotojo vadovu, tai puiki vieta, kur galite užduoti klausimus. Prenumeruoti šį sąrašyną galite adresu: <https://lists.osgeo.org/mailman/listinfo/qgis-community-team>

5.1.4 QGIS vertėjai - qgis-tr

Šis sąrašinas užsiima vertimais. Jei norite versti svetainę, vadovus ar naudotojo sąsają (GUI), tai puiki pradinė vieta užduoti klausimus. Ši sąrašyną galite prenumeruoti adresu: <https://lists.osgeo.org/mailman/listinfo/qgis-tr>

5.1.5 QGIS projekto valdymo komiteto (PSC) - qgis-psc

Šiame sąrašyne aptariami projekto valdymo komiteto klausimai, susiję su bendru QGIS valdymo ir kryptimi. Jūs galite prenumeruoti ši sąrašyną adresu: <https://lists.osgeo.org/mailman/listinfo/qgis-psc>

5.1.6 QGIS naudotojų grupės

Norint vietoje skatinti QGIS ir prisdėti prie jo vystymo, kai kurios QGIS bendruomenės organizuoja i QGIS naudotojų grupes. Šios grupės yra vietas, kuriose aptariamos vietinės temos, organizuojami regioniniai ir nacionaliniai naudotojų susitikimai, organizuojamas savybių sponsoravimas... Dabartinių naudotojų grupių sąrašą rasite <https://qgis.org/community/groups/>

Jūs galite prenumeruoti bet kurį iš šių sąrašynų. Prašome nepamiršti prisdėti prie sąrašynų atsakinėjant į klausimus ir dalinantis jūsų patirtimis.

5.2 Matrix / IRC

Matrix (<https://matrix.org>) - tai decentralizuotų pokalbių projektas. QGIS turi kambarį, kurį galima pasiekti pseudonimu #qgis:osgeo.org (tarp kitų), kuris susietas su libera.chat IRC kanalu #qgis.

Norėdami naudoti Matrix:

1. Sukurkite paskyrą (lengviausia tą padaryti matrix.org, bet jei turite OSGeo paskyrą, galite jūsų OSGeo id naudoti kaip matrix id)
2. Įdiekite klientą (lengviausia yra Elements, bet skaitykite daugiau informacijos apie [Matrix klientus](#)), ARBA tiesiog naršyklėje įveskite <https://matrix.to/#/#qgis:osgeo.org>

Norėdami naudoti IRC:

1. Įdiekite IRC klientą
2. Prisijunkite prie <irc://irc.libera.chat/#qgis> arba naršyklėje įveskite <https://web.libera.chat/?channels=#qgis>

5.3 Komercinis palaikymas

QGIS turi ir komercinių palaikymą. Daugiau informacijos rasite svetainėje <https://qgis.org/resources/support/commercial-support/>.

5.4 Riktai

Nors qgis-users sąrašinas naudingas bendriems „Kaip man padaryti XYZ su QGIS?“ tipo klausimams, jūs galite norėti pranešti mums apie QGIS riktus. Riktus galite registruoti naudodamai [QGIS riktu sistemą](#).

Turėkite omenyje, kad jūsų riktas nebūtinai bus tokio prioriteto, kaip jums norėtusi (priklausomai nuo rimtumo). Kai kuriems riktams pataisyti gali prireikti rimtų programuotojų pastangų, o darbo jėgos tam ne visada užtenka.

Naudojant tą pačią sistemą galima pateikti ir naujų savybių pageidavimus. Prašome išsitikinti, kad parenkate tipą Feature request.

Jei radote klaida ir ją pataisėte patys, galite pateikti Pokyčio prašymą [Github QGIS projektui](#).

Daugiau informacijos rasite puslapyje apie [riktus, savybes ir problemas](#) bei skyriuje [submit_patch](#).

5.5 Tinklaraštis

QGIS bendruomenė taipogi turi tinklaraštį <https://planet.qgis.org/>, kuriame yra įdomių straipsnių naudotojams ir programuotojams. Yra daug kitų QGIS tinklaraščių, o jūs galite prisidėti su savo QGIS tinklaraščiu!

5.6 Priedai

Svetainė <https://plugins.qgis.org> yra oficialus QGIS priedų portalas. Čia rasite sąrašą visų stabilių ir eksperimentinių QGIS priedų, esančių „Oficialioje QGIS priedų rezitorijoje“.

5.7 Wiki

Na ir pabaigai mes palaikome WIKI svetainę <https://github.com/qgis/QGIS/wiki>, kur rasite įvairios informacijos apie QGIS kūrimą, laidų planus, nuorodas į atsiuptymo puslapius, pranešimų vertimo patarimus ir dar daug kitko. Pažiūrėkite, ten galite rasti daug gėrybių!

Talkininkai

QGIS yra atviro kodo projektas, kurį kuria komanda pasišventusių savanorių ir organizacijų. Mes stengiamės būti draugiška bendruomene visų rasių, tikėjimų, lyčių ir gyvenimo stilių žmonėms. Bet kada galite [prisijungti](#).

6.1 Autoriai

Žemiau išvardinti žmonės, kurie paskyrė savo laiką ir energiją rašyti, peržiūrėti ir atnaujinti visą QGIS dokumentaciją.

Tim Sutton	Yves Jacolin	Jacob Lanstorp	Gary E. Sherman	Richard Duivenvoorde
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continues on next page

Table 6.1 – tėsinys iš praeito puslapio

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Marc Ducobu	Philip Albrecht	Dennis Milechin	Cody Martin	Savinaud Mickaël
Stefan Uhrig	Ariadni-Karolina Alexiou	Björn Hinkeldey	Benjamin Riley	MorriganR
Thayer Young	Shane Carey	Ian Turton	Emma Hain	Germán Carrillo
Jakob Miksch	Nicolas Boisteault	Bertrand Rix	Jorge Rosales	

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Dabartiniai vertimai pasiekiami deška:

Kalba	Talkininkai
Bahasa Indonezija	Emir Hartato, I Made Anombawa, Januar V. Simarmata, Muhammad Iqnaul Haq Siregar, Trias Aditya
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Kinų (supaprastinta)	Xu Baocai
Olandų	Carlo van Rijswijk, Dick Groskamp, Diethard Jansen, Raymond Nijssen, Richard Duivenvoorde, Willem Hoffman
Suomių	Matti Mäntynen, Kari Mikkonen
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Vokiečių	Jürgen E. Fischer, Otto Dassau, Stephan Holl, Werner Macho
Hindi	Harish Kumar Solanki
Italų	Alessandro Fanna, Anne Ghisla, Flavio Rigolon, Giuliano Curti, Luca Casagrande, Luca Delucchi, Marco Braida, Matteo Ghetta, Maurizio Napolitano, Michele Beneventi, Michele Ferretti, Roberto Angeletti, Paolo Cavallini, Stefano Campus
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Ukrainiečių	Alexander Bruy

6.3 Vertimo statistika

Bandymai versti QGIS 3.40 Ilgo laikotarpio laidą pateikiami žemiau. Tik kalbos, kurios pasiekė 5% versijos išleidimo metu bus publikuojamos čia.

Paskutinis atnaujinimas: 2025-05-20

Eilučių skaičius	Paskirties kalbų skaičius	Bendras vertimo procentas
31238	58	15.12%

Kalba	Išversta (%)	Kalba	Išversta (%)	Kalba	Išversta (%)
Albanų	0.56	Arabų	3.43	Azerbaidžaniečių	0.04
Baskų	1.11	Bengali	0.3	Bulgarų	2.52
Birmiečių	0.23	Katalonų	1.16	Kinų supaprastinta	25.43
Kinų tradicinė	1.39	Kroatų	0.23	Čekų	5.02
Danų	0.71	Olandų	100.0	Estų	2.53
Suomių	1.29	Prancūzų	82.74	Galisų	0.53
Kartvelų	0.23	Vokiečių	55.39	Graikų	0.39
Hebrajų	0.82	Hindi	0.39	Vengrų	17.48
Igbo	0.11	Indonezijos	3.78	Italų	95.64
Japonų	93.73	Kabyle	0.23	Korējiečių	95.17
Kurdų	0.29	Lietuvių	24.26	Makedonų	0.26
Malajų	0.15	Malajalamų	0.23	Marathi	0.2
Mongolų	0.23	N'ko	1.6	Norvegų Bokmål	2.66
Persų	0.72	Lenkų	13.02	Portugalų (Brazilijos)	62.71
Portugalų (Portugalija)	8.16	Rumunų	31.3	Rusų	25.39
Serbų	0.23	Slovakų	1.36	Slovénų	2.48
Ispanų	98.39	Švedų	1.15	Tagalogų	1.34
Tamilų	0.6	Telugų	0.04	Tai	0.23
Turkų	3.34	Ukrainiečių	2.69	Urdų	0.1
Vietnamiečių	1.5				

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Version 2, June 1991

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Version 1.3, 3 November 2008

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