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Tashkent International University of Education
Turin Polytechnic University in Tashkent

PROCEEDINGS

of the MMIT'25 International Conference

TA'LIMNING ZAMONAVIY USULLARI VA
INNOVATSION TEXNOLOGIYALAR

MODERN METHODS AND INNOVATION
TECHNOLOGIES IN EDUCATION

СОВРЕМЕННЫЕ МЕТОДЫ И
ИННОВАЦИОННЫЕ ТЕХНОЛОГИИ
В ОБРАЗОВАНИИ

29 May 2025, Tashkent, Uzbekistan

MAQOLALAR TO'PLAMI
СБОРНИК СТАТЕЙ



TASHKENT INTERNATIONAL UNIVERSITY OF EDUCATION

International Scientific and Practical Conference
"Modern Methods and Innovative Technologies in Education"

Tashkent International University of Education

Beeline HUAWEI



Tashkent International University of Education

PROCEEDINGS

of the MMIT'25 International Conference

Ta'limning zamonaviy usullari va innovatsion texnologiyalar

Modern methods and innovation technologies in education

**Современные методы и инновационные технологии в
образовании**

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GEOUTR DASTURIDA OPTIK KIRISH TARMOQLARI ABONENTLARIGA XIZMATLAR KO'RSATISH

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Annotatsiya. GeoUtr dasturida optik kirish tarmoqlari abonentlariga xizmat kórsatish bo'yicha "O'zbektelekom" AK tomonidan Optik tolali ulanish tarmoqlari video, audio va yuqori tezlikdagi Internet kabi katta hajmdagi ma'lumotlarni uzatishda asosiy rol o'ynaydi. Shuningdek, ular tarmoq infratuzilmasini yanada kengaytirish va modernizatsiya qilish imkoniyatini beradi.

Kalit so'zlar: *GeoUtr, abonent, dastur, mijoz, geolokatsiya, manzil, texnologiya, GPON.*

PROVISION OF SERVICES TO SUBSCRIBERS OF OPTICAL ACCESS NETWORKS IN THE GEOUTR PROGRAM

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Abstract. For the provision of services to subscribers of optical access networks in the GeoUtr program, JSC "Uzbektelecom" Optical fiber networks play a key role in the transmission of large amounts of data, such as video, audio, and high-speed Internet. They also provide an opportunity for further expansion and modernization of the network infrastructure.

Keywords: *GeoUtr, subscriber, application, client, location, address, technology, GPON.*

Kirish

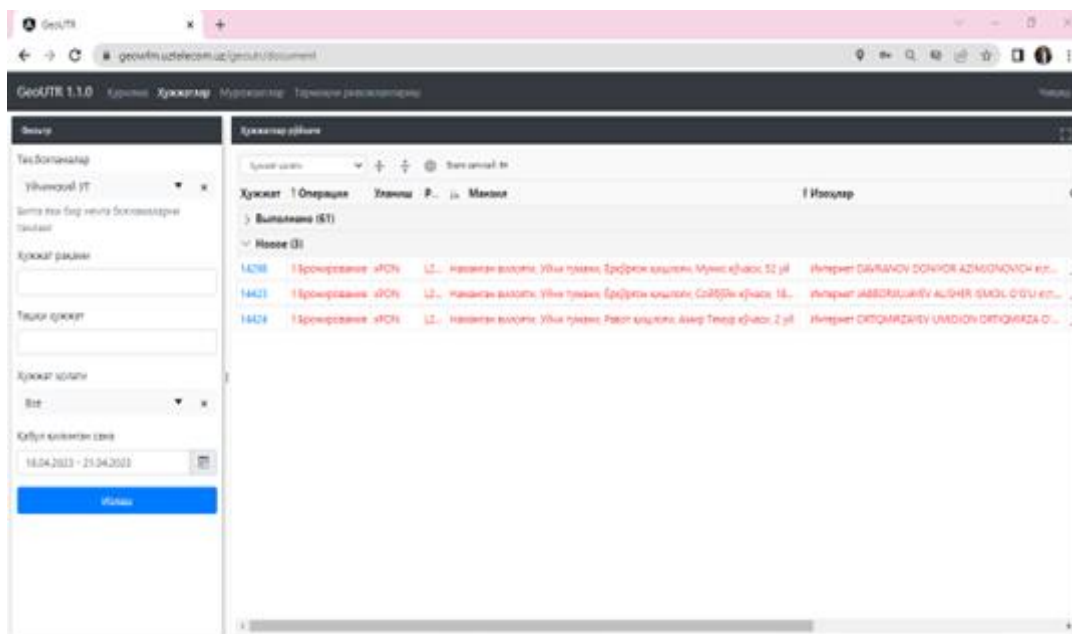
"O'zbektelekom" AK tomonidan ishlab chiqilgan GEOUTR dasturi quyidagicha ishlaydi. Ushbu dastur orqali ishlash mijozni keng polosali ulanishga ulashni yanada qulayroq qiladi.

SBMS dasturi orqali bemorning pasport ma'lumotlarini kompyuterga kiritganda, u avtomatik ravishda GeoUtr dasturiga o'tkaziladi [1]. Mijozning manzilini aniqlash uchun quyidagi amallarni bajaring (1-rasm).

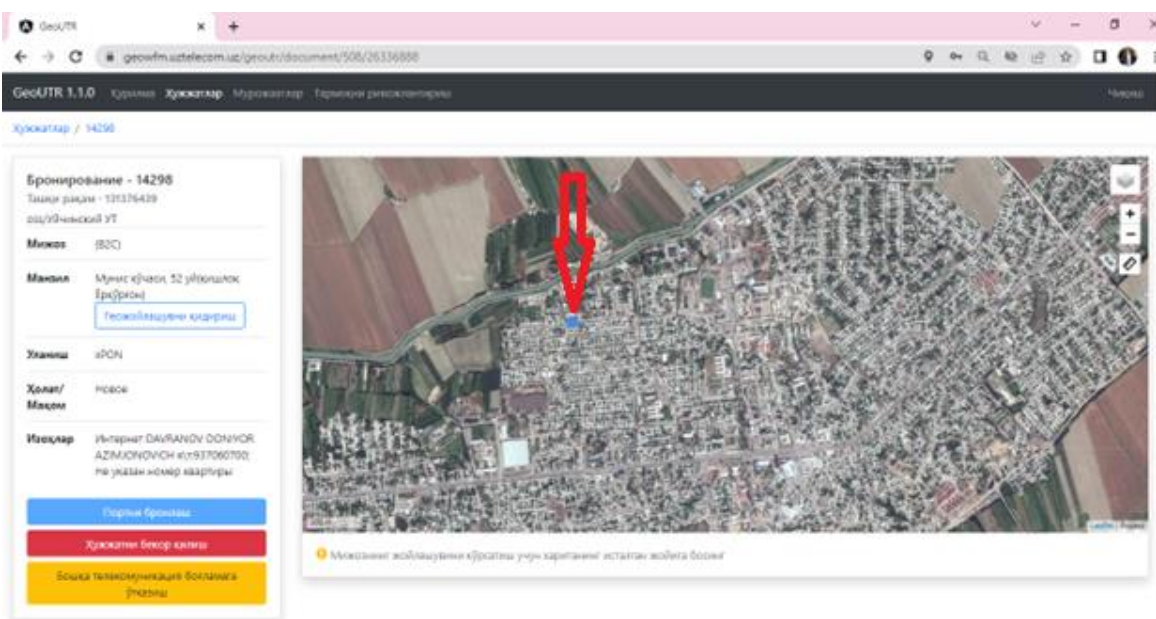
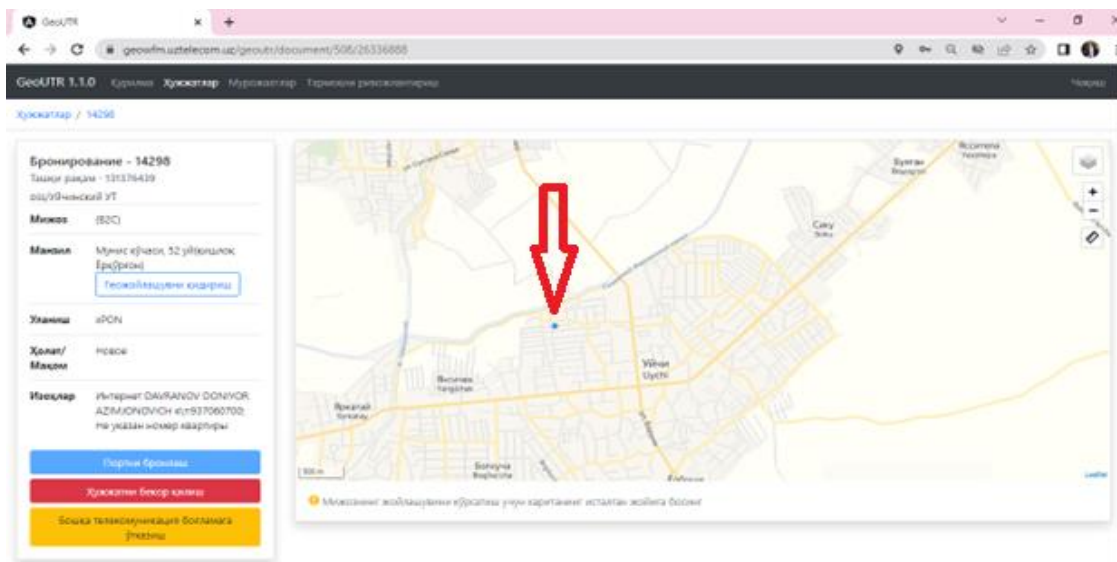
Hujjat No 14298 Davranov Danier Azimjonovich, st. Munis, 58 uy, Namangan viloyati, Uychi tumani, Yorgorgon qishlog'i.

Hujjat raqamini bosganingizda, ushbu dastur avtomatik ravishda kvartiraning geolokatsiyasini aniqlaydi (2-rasm).

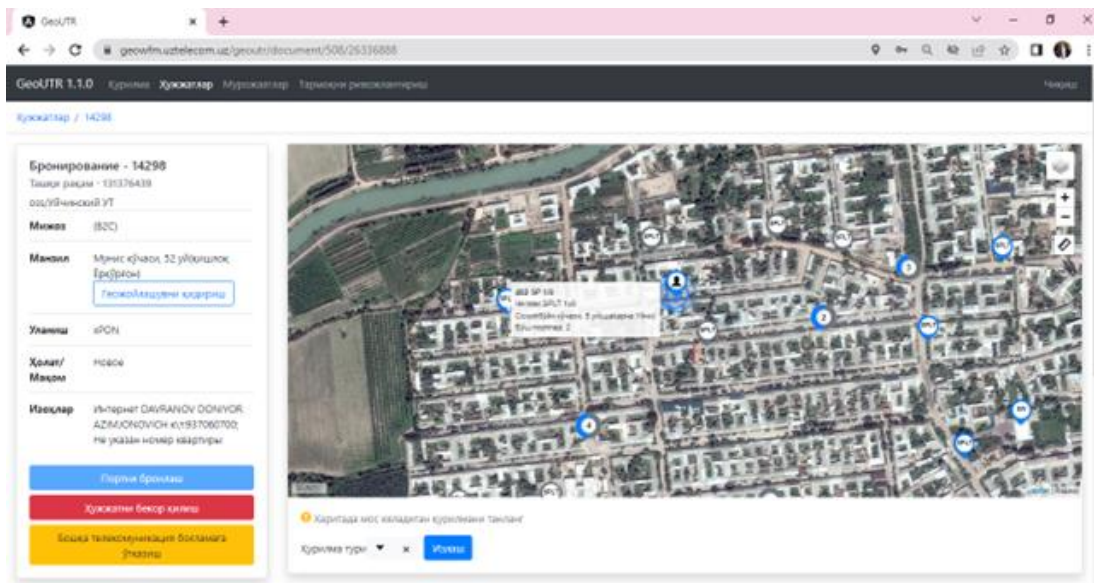
Mijozning manzili va kvartirasini aniqlagandan so'ng, biz hududda va eng yaqin bepul portlarda qanday GPON va Siwitch texnologiyalari mavjudligini ko'rib chiqamiz (3-rasm).



1-rasm. Manzilni aniqlash

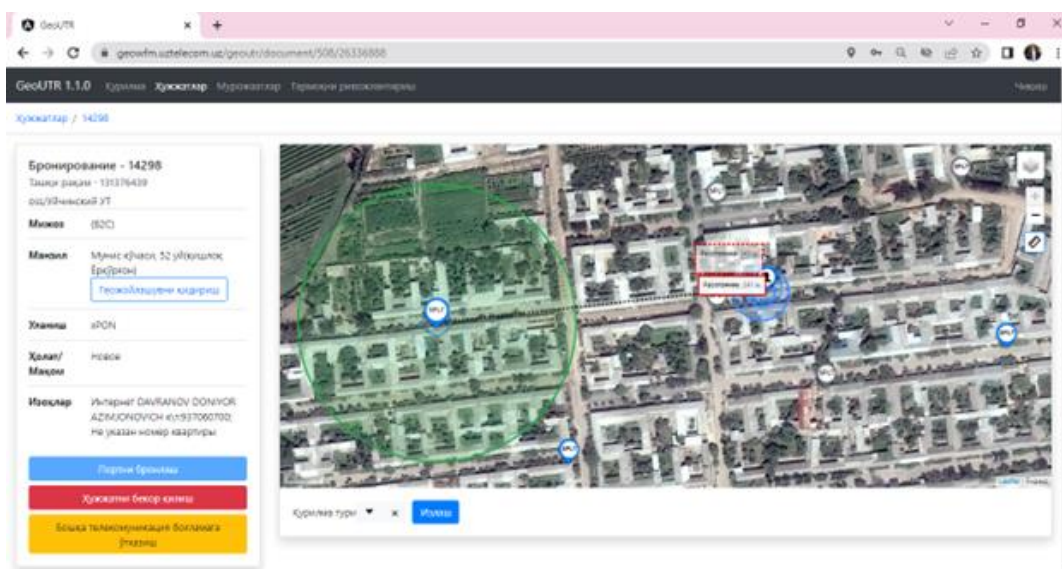


2-rasm. Xonaning geolokatsiyasini aniqlash .



3-rasm. Bepul portlarni ko'rsatish

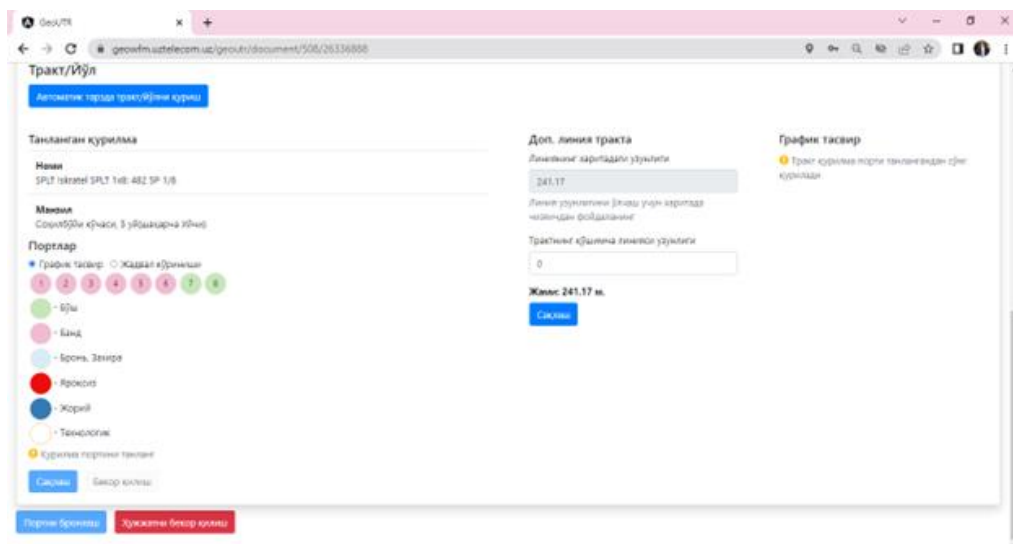
Ko'rib turganingizdek, chegarada Iskratel texnologiyasi mavjud GPON va 1/8 da 2 bo'shliqni ko'rsatadi. GeoUtr ning yana bir afzalligi shundaki, u kabelning chodirdagi 1/8 ajratgichdan mijozning uyigacha bo'lgan masofani bilish imkonini beradi [2]. Buning uchun tugmani bosib, kompyuter sichqonchasi yordamida bo'sh 1/8 ajratgichdan mijozning tanasigacha bo'lgan masofani o'lchang (4-rasm).



4-rasm. Masofani aniqlash

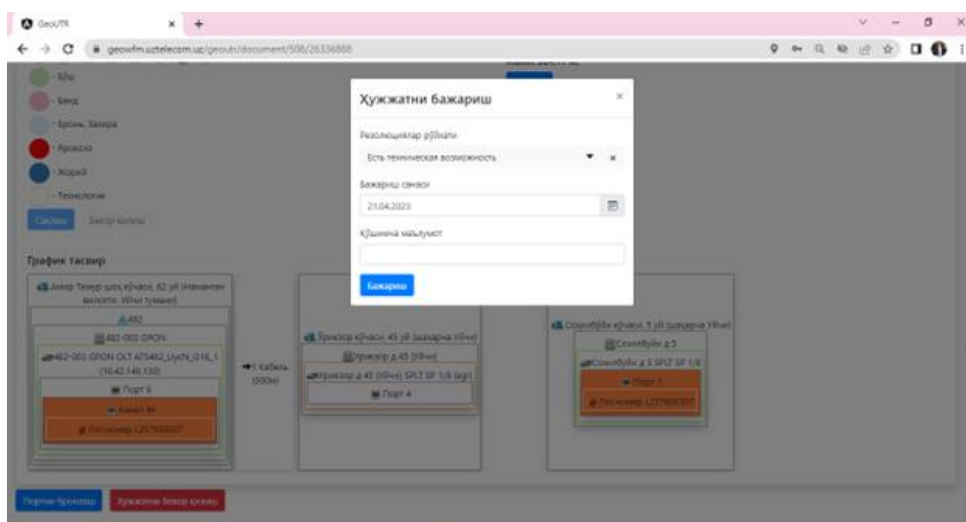
Ko'rib turganingizdek, ko'rsatilgan kabel uzunligi 241, 243 m.

Keyingi bosqichda biz ushbu bo'sh 1/8 splitter uchun obunani bron qilamiz. Ulanishimiz kerak bo'lgan selitruga sichqonchani chap tugmachasini bir marta bosib. Ekranda texnik ma'lumotlar paydo bo'ladi (5-rasm).



5-rasm. Abonentni bron qilish

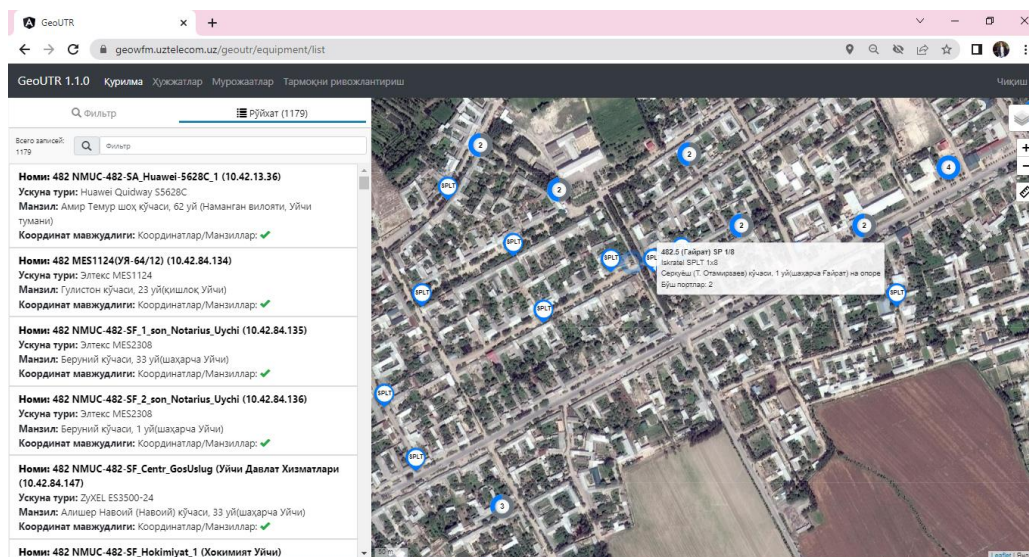
1/8 ajratgichda bo‘sh portni tanlang va portni band qilish menyusini bosing.



6-rasm. Portni belgilang

Ushbu bosqichdan so‘ng buyurtma avtomatik ravishda texnik xodimga yuboriladi. Belgilangan port va 1/8 ajratgichlar texnik tomonidan Internetga ulanish uchun ishlatiladi [3].

Bundan tashqari, GeoUtr dasturida mintaqalar bo‘yicha filtrlash orqali biz 1/4 1/8 ajratgichlar o‘rnatilgan qurilmalarning manzillarini, ulangan abonentlarning texnik ma'lumotlarini, qanchasi bo‘sh yoki bandligini bilib olamiz. Biz buni kichik hududda ko‘rishimiz mumkin [4].



7-rasm. Texnik ma'lumotlarni oling

Optik tolali ulanish tarmog‘i texnologiyasini tahlil qilishdan olingan xulosa shuni ko‘rsatadiki, bu texnologiya yuqori tezlikda va ishonchli ma'lumotlarni uzatish vositasidir. U bir qator afzalliklarga ega, jumladan, yuqori o‘tkazuvchanlik, past kechikish va shovqinlarga qarshilik. Optik tolali ulanish tarmoqlari video, audio va yuqori tezlikdagi Internet kabi katta hajmdagi ma'lumotlarni uzatishda asosiy rol o‘ynaydi. Shuningdek, ular tarmoq infratuzilmasini yanada kengaytirish va modernizatsiya qilish imkoniyatini beradi

Adabiyotlar ro‘yxati

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4. Glen Kramer. Ethernet Passive Optical Networks. – Mc GRAW –HILL PROFESSIONAL ENGINEERING. 2005.-308pp.



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