
Broadband Acceleration Grant

Project Proposal

Prepared for Clay County



TWIN VALLEY

twinvalley.net

22 West Spruce
Miltonvale, KS 67466
800.515.3311

Twin Valley Overview

Twin Valley is an industry leading communications and information technology firm delivering residential and business solutions to communities in north central Kansas. Founded in 1947, Twin Valley serves 23 communities across 10 counties with Internet, TV, and voice services that are supported by our 35 locally based employees.

Our passion is to provide the same level of technology available in highly populated areas to our rural neighbors with superior, hometown customer care. To accomplish this, Twin Valley technologies include fiber to the premises, ADSL/VDSL, and advanced fixed wireless technologies to 5,300 homes and businesses.

I. Executive Summary

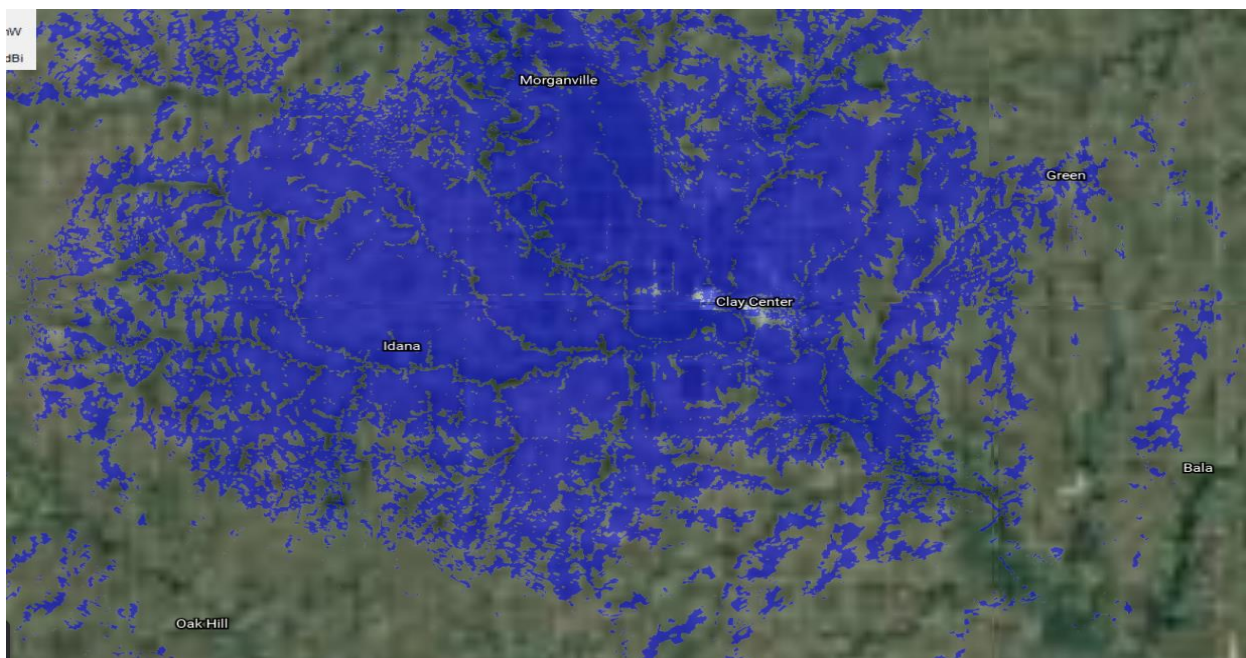
The objective of this proposal is to demonstrate how Twin Valley can significantly expand Telemedicine, Distance Learning, and Telework capabilities, allowing for increased community resilience by designing, implementing and helping fund a fixed wireless network that will connect underserved rural areas of Saline and Ottawa Counties.

According to FCC 477 data and recent RDOF eligible auction areas, 143 homes in the proposed service area have less than 25/3 Mbps service to their homes or businesses. This disqualifies these households from utilizing telemedicine, telework for public employees, and distance learning options which have growing in importance due to the pandemic. This negatively impacts the ability of governing bodies to provide vital public services to a significant part of the county.

With the help of the Kansas Broadband Acceleration Grant, Twin Valley will design, implement and help fund the most fiscally responsible solution to deploy broadband service to these homes in rural Clay County. By strategically using already existing tower infrastructure, adding another pole, and utilizing industry leading fixed wireless technology that allows for speeds up to 50/8, our network design meets the needs of people in the area today and into the future.

II. Description/Proposed Service Area

The proposed service area for this project will cover the rural areas of Clay Center and Idana in Clay County Kansas. Twin Valley's proposed improvements will deliver at least 25/4 speeds to 143 homes that are currently unserved in rural Clay County with at least 25/4 speeds. 127 of these unserved homes will be able to get up to 50/8 speeds. See map below.



III. Project Goals and Community Need

The goal of this project is to provide reliable broadband connections to the homes in rural Clay County that have been overlooked in the past. Current fixed wireless and copper connections to 143 homes provide less than 25 Mbps and do not meet the needs of the families that live there.

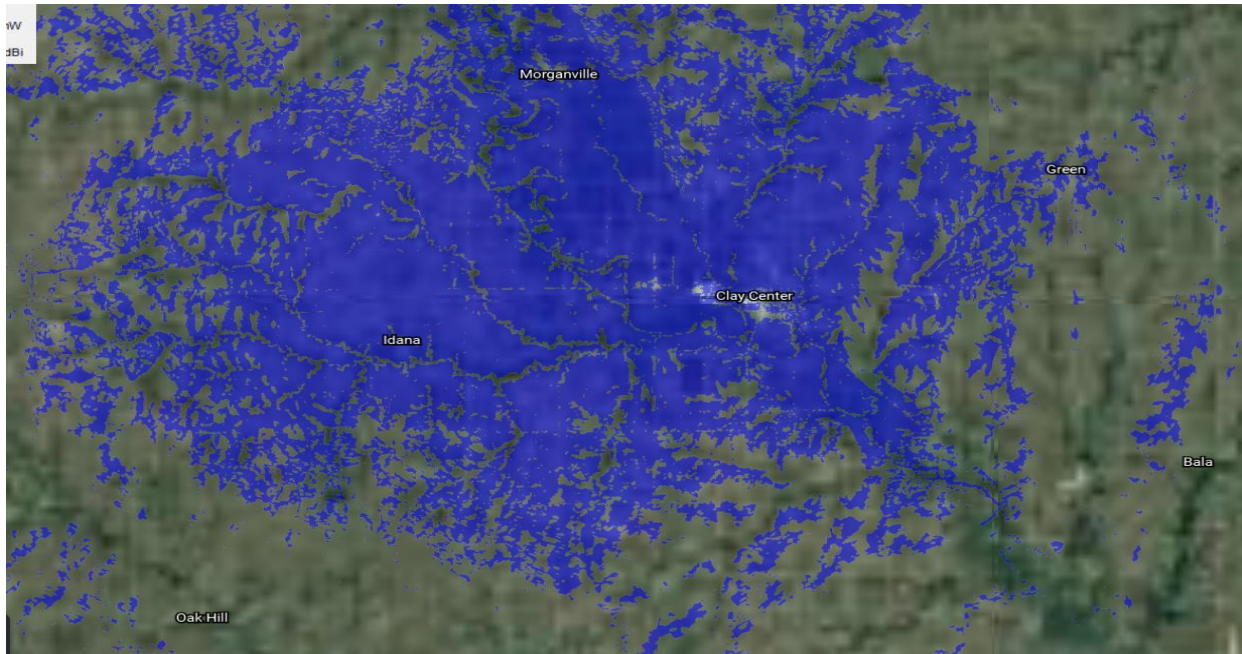
These rural homeowners require greater than 25/3 Mbps connectivity to access essential services like telemedicine, remote education, online banking, home security, entertainment, video conferencing, and remote work. It is a common complaint from people with inadequate broadband that they continually can't do basic things like stream a show without having to interrupt someone else in the home that is already using the internet. With Twin Valley's proposed services, these people will be able to access these essential services and connect with their friends, family, schools, and communities.

IV. Proposed Infrastructure and Partners

Proposed Improvements

A professional engineer, at our partner Vantage Point Consulting, has performed Radio Frequency Analysis and Design to allow for next generation Fixed Wireless technology deployments to serve residents with speeds up to 50/8. Twin Valley is submitting the showings within this application, with the understanding that broadband services can and will be delivered well beyond the -78dBm threshold specified within the Technical Planning Guide.

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Partners

Pole Manufacturer/Installation – **MUSCO** – 100 1st Ave W, Oskaloosa, IA 52577

Tower Climbers/Installation – **Finish Towers** – 1700 Hawkeye Dr. Ste D, Hiawatha, IA 52233

Engineering – **Vantage Point** – 2211 N Minnesota St, Mitchell, SD 57301

Equipment Sales – **CTIconnect** – 2001 Broadway, Suite 600, Riviera Beach, FL 33404

Broadband Acceleration Grant

Project Proposal

Prepared for Riley County



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Twin Valley Overview

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I. Executive Summary

The objective of this proposal is to demonstrate how Twin Valley can significantly expand Telemedicine, Distance Learning, and Telework capabilities, allowing for increased community resilience by designing, implementing and helping fund a fixed wireless network that will connect underserved rural areas of Riley County.

According to FCC 477 data and recent RDOF eligible auction areas, 55 homes in the proposed service area have less than 25/3 Mbps service to their homes or businesses. This disqualifies these households from utilizing telemedicine, telework for public employees, and distance learning options which have growing in importance due to the pandemic. This negatively impacts the ability of governing bodies to provide vital public services to a significant part of the county.

With the help of the Kansas Broadband Acceleration Grant, Twin Valley will design, implement and help fund the most fiscally responsible solution to deploy broadband service to these homes in rural Riley County. By strategically using already existing tower infrastructure, erecting a new pole and utilizing industry leading fixed wireless technology that allows for speeds up to 50/8, our network design meets the needs of people in the area today and into the future.

II. Description/Proposed Service Area

The proposed service area for this project focuses on homes around the west side of Tuttle Creek Lake. There are 55 unserved location in this proposal that will be capable of 25/4 or greater with this proposal. The 55 homes do not currently have access to 25/3 or greater speeds. These are homes that can not currently be reached with our CERG application build in Riley County. See map below for details.



III. Project Goals and Community Need

The goal of this project is to provide reliable broadband connections to the homes in rural Riley County that have been overlooked in the past. Current fixed wireless and copper connections to 55 homes provide less than 25 Mbps and do not meet the needs of the families that live there.

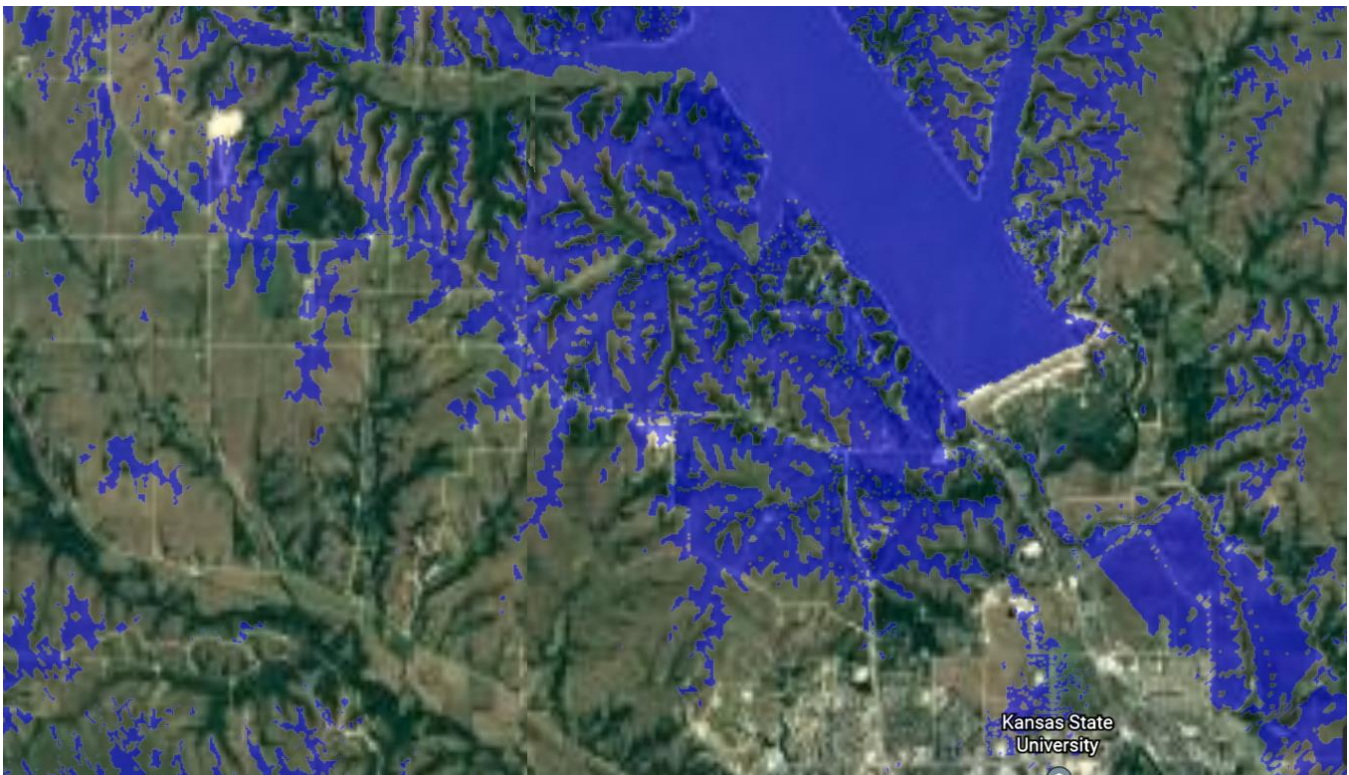
These rural homeowners require greater than 25/3 Mbps connectivity to access essential services like telemedicine, remote education, online banking, home security, entertainment, video conferencing and remote work. It is a common complaint from people with inadequate broadband that they continually can't do basic things like stream a show without having to interrupt someone else in the home that is already using the internet. With Twin Valley's proposed services, these people will be able to access these essential services and connect with their friends, family, schools, and communities.

IV. Proposed Infrastructure and Partners

Proposed Improvements

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The solution will provide 55 homes that are currently unserved with speeds up to 25/4. 50 of these unserved locations will be able to get speeds up to 50/8.



Partners

Pole Manufacturer/Installation – Musco – 100 1st Ave W, Oskaloosa, IA 52577

Tower Climbers/Equipment Installation – Finish Towers – 1700 Hawkeye Dr. Ste D, Hiawatha, IA 52233

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Prepared for Saline and Ottawa Counties



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I. Executive Summary

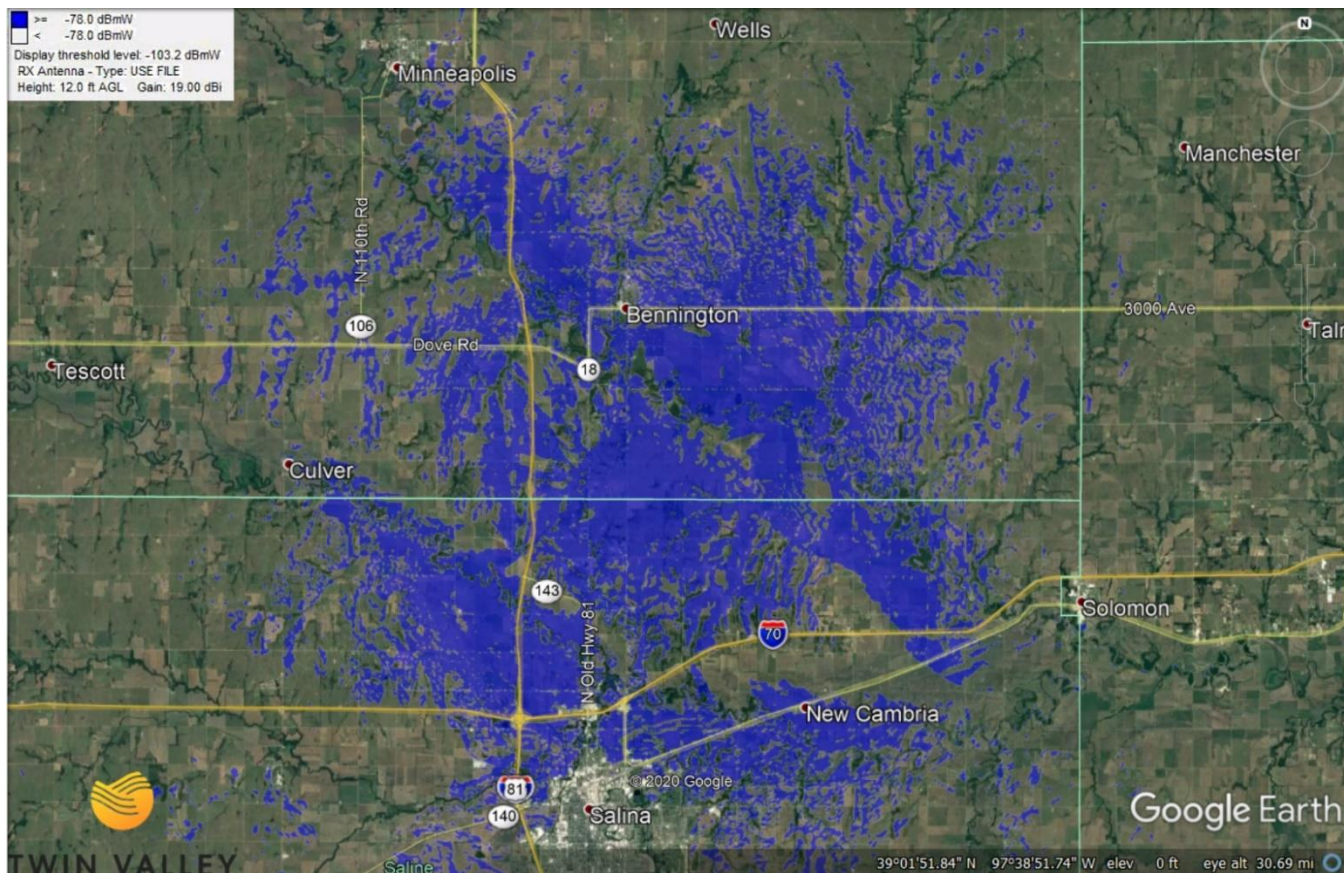
The objective of this proposal is to demonstrate how Twin Valley can significantly expand Telemedicine, Distance Learning, and Telework capabilities, allowing for increased community resilience by designing, implementing and helping fund a fixed wireless network that will connect underserved rural areas of Saline and Ottawa Counties.

According to FCC 477 data and recent RDOF eligible auction areas, 246 homes in the proposed service area have less than 25/3 Mbps service to their homes or businesses. This disqualifies these households from utilizing telemedicine, telework for public employees, and distance learning options which have growing in importance due to the pandemic. This negatively impacts the ability of governing bodies to provide vital public services to a significant part of the county.

With the help of the Kansas Broadband Acceleration Grant, Twin Valley will design, implement and help fund the most fiscally responsible solution to deploy broadband service to these homes in rural Saline and Ottawa Counties. By strategically using already existing tower infrastructure and utilizing industry leading fixed wireless technology that allows for speeds up to 50/8, our network design meets the needs of people in the area today and into the future.

II. Description of the Location

The proposed service area for the Rural Saline County project will be in the rural areas between Salina and Bennington, KS. It will also reach into southwest portions of Rural Ottawa County. The solution will provide 154 homes that are currently unserved with speeds up to 25/4. 117 of these unserved locations will be able to get speeds up to 50/8. See proposed coverage area below



III. Project Goals and Community Need

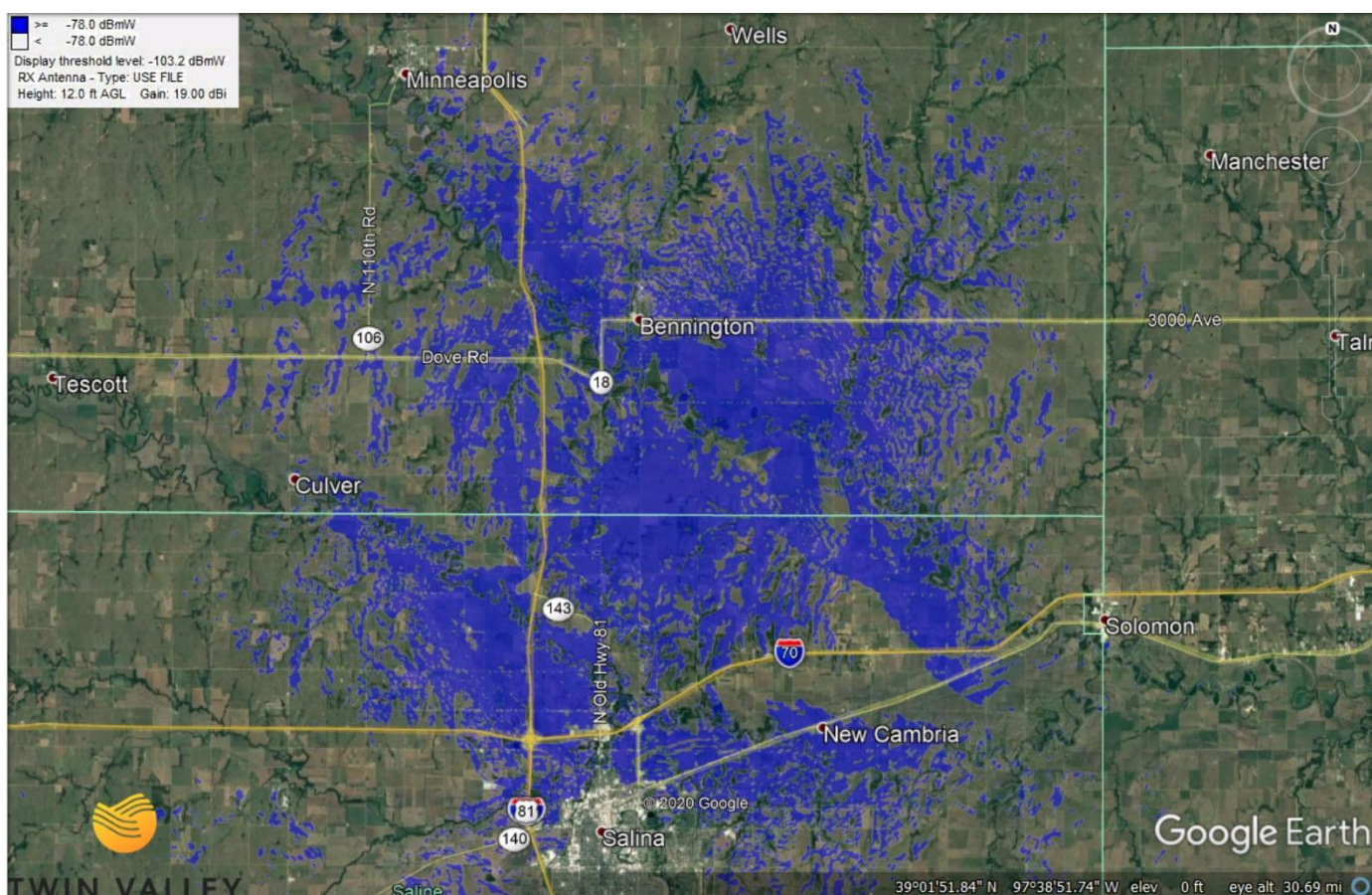
The goal of this project is to provide reliable broadband connections to the homes in rural Saline and Ottawa counties that have been overlooked in the past. Current fixed wireless and copper connections to 154 homes provide less than 25 Mbps and do not meet the needs of the families that live there.

These rural homeowners require greater than 25/3 Mbps connectivity to access essential services like telemedicine, remote education, online banking, home security, entertainment, video conferencing and remote work. It is a common complaint from people with inadequate broadband that they continually can't do basic things like stream a show without having to interrupt someone else in the home that is already using the internet. With Twin Valley's proposed services, these people will be able to access these essential services and connect with their friends, family, schools, and communities.

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