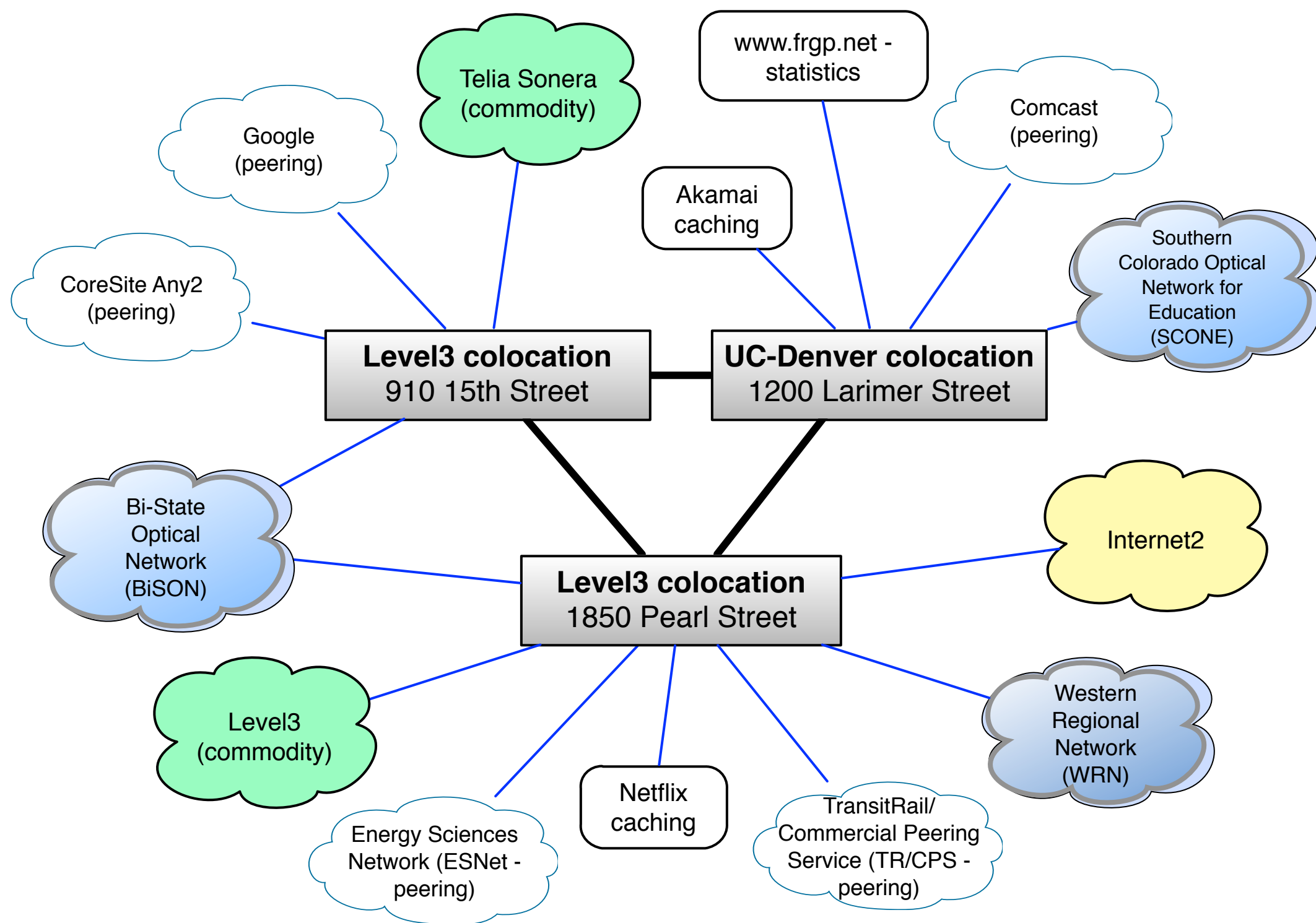




The FRGP enables advanced scientific research and education, supports experimental and production networks, fosters networking and application research, and facilitates interconnectivity among regional, national, and international high-performance research and education networks.

### FRGP participant and service connection overview



2014-07-30 (JC)

For over 14 years, the FRGP has advanced the research and educational goals of government, non-profit, and educational members in the region by establishing and maintaining a unique multi-state network infrastructure. The FRGP is owned and controlled by the FRGP member research and education community. The University Corporation for Atmospheric Research (UCAR) provides the management, engineering, and network operations center support for the FRGP.

<http://www.frgp.net>

[frgp-info@ucar.edu](mailto:frgp-info@ucar.edu)

# Front Range GigaPoP (FRGP)

The FRGP is a consortium of universities, non-profit corporations, government agencies and secondary participants who cooperate as part of a Regional Optical Network (RON) in order to share wide area networking services including the commodity Internet, Internet2, intra-FRGP, and peering connectivity.

FRGP participants typically enjoy reduced costs, shared expertise and services, increased buying power, and economies of scale. One of the main benefits the FRGP provides is aggregated and direct intra-member network access. This includes access to all participants, secondary connections behind primary FRGP members, as well as direct peering connections including Comcast, Google, CoreSite Any2, and the Energy Sciences network (ESnet).

The FRGP provides access to multiple commodity Internet service providers offering resiliency and diversity. Traffic aggregation and FRGP membership in The Quilt, Inc. provide cost savings for commodity Internet services. FRGP also participates in the commercial network peering program known as TransitRail (TR) / Commercial Peering Service (CPS). TR/CPS is designed to improve network performance through peering relationships with commercial networks to help members reduce the overall cost of, and reliance on, commodity Internet services.

The FRGP has supported a doubling in traffic growth every 2-3 years since inception. It currently serves approximately one million users whose organizations participate in our research and education community in Colorado and Wyoming.

The FRGP provides caching services as part of the Akamai and Netflix installations at the FRGP. The FRGP also provides connectivity to the Internet2 network - either directly for Internet2 members or via the US UCAN program (formerly known as SEGP) for qualifying community anchor institutions.

FRGP is a member of the Western Regional Network (WRN), a multi-state partnership providing robust, high-speed networking for research, education, and related uses through the sharing of network services among communities across the western United States. WRN provides cost savings by providing intra-region peering, efficient and cost-effective commodity Internet services, TR/CPS connections, and Internet2 services in addition to diverse backup connectivity options.

Front Range GigaPoP (FRGP)  
<http://www.frgp.net>

University Corporation for Atmospheric Research  
(UCAR)  
<http://www.ucar.edu>

Internet2  
<http://www.internet2.edu>

US UCAN (formerly SEGP)  
<http://www.usucan.org/>

[https://www.internet2.edu/vision-initiatives/  
initiatives/us-ucan/](https://www.internet2.edu/vision-initiatives/initiatives/us-ucan/)

[http://www.internet2.edu/products-services/  
advanced-networking/network-participants/](http://www.internet2.edu/products-services/advanced-networking/network-participants/)

The Quilt, Inc.  
<http://www.thequilt.net>

Western Regional Network (WRN)  
<http://westernregional.net>