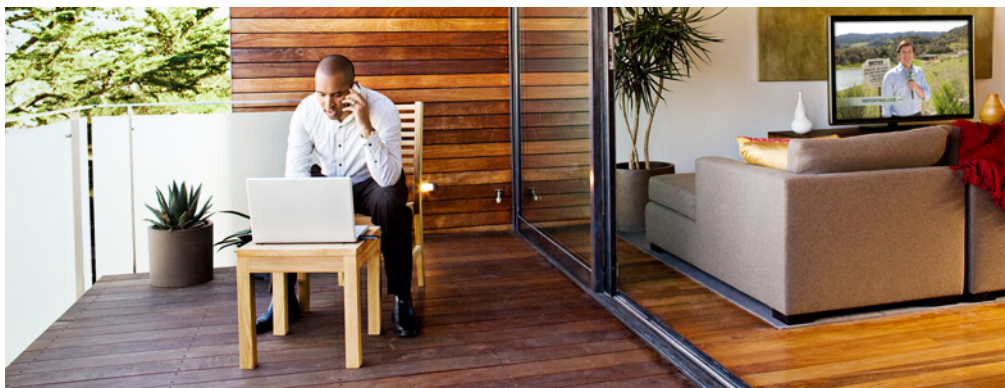


## Cisco Cable and Telco Service Provider Abstract Network (CT-SPAN) Tool



- Q.** Who should use the Cisco<sup>®</sup> Cable and Telco Service Provider Abstract Network (CT-SPAN) Tool?
- A.** The Cisco CT-SPAN Tool is designed for global service providers who want to estimate potential IP traffic growth and make high-level revenue estimates for residential services on their network, based on a combination of subscriber distribution and adoption of various residential services and applications over a 6-year period. Anyone interested in IP traffic growth and revenue projections can also use this modeling tool to create simulated or abstract cable or telco service provider scenarios to generate hypothetical IP traffic and revenue growth rates for educational or comparative purposes.
- Q.** What type of service provider subscribers and services does the Cisco CT-SPAN Tool take into account as part of the IP traffic estimation?
- A.** The Cisco CT-SPAN model takes into account traffic generated from a service provider's residential customers only. The model is a first step toward understanding the impact that residential customers might have on cable or telco networks, based on user-specified adoption of a variety of paid and unpaid services.
- Q.** What is a revenue-generating unit (RGU)?
- A.** RGU is a commonly used term in the cable and telecommunications industry. Each additional service that a customer subscribes to is counted as an RGU. (For example, if a customer subscribes to digital television and high-speed broadband services, that customer would be counted as two RGUs.) For the purpose of this model, even if a customer is generating minimal or no revenues from one of the two services that he or she subscribes to, that customer will still be counted as two RGUs because the customer could potentially use that service to generate IP traffic (or consumer network resources).

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- Q.** How does this modeling tool relate to Cisco's Visual Networking Index (VNI) Forecast?
- A.** While the [Cisco Visual Networking Index \(or Cisco VNI\) Forecast](#) is a detailed macro-level view of worldwide and regional IP traffic growth projections, the Cisco CT-SPAN model allows individual users to customize IP traffic values based on unique or personal requirements. The Cisco CT-SPAN model uses as default values the assumptions for regional usage and adoption, as well as bit rate per application, from the Cisco VNI Forecast. The Cisco VNI Forecast does not take into account the traffic generated from digital broadcast and time-shifted television, but the Cisco CT SPAN model does include those traffic types.
- Q.** What inputs are required for the Cisco CT-SPAN Tool?
- A.** You can enter as many or as few inputs as you want to. The model has seven regional versions (North America, Latin America, Western Europe, Central and Eastern Europe, Asia-Pacific, Japan, and Middle East and Africa), each with default values that can be used to generate an IP traffic estimate. For greater customization, the user can provide inputs for all or some of the following:
- Type of service provider: Cable or telco
  - Number and growth of subscribers across the three RGU categories: Broadband, dedicated voice over IP (VoIP), and digital television
  - Average revenue per user (ARPU) and ARPU growth rates
  - Application adoption within each service category
  - Average upstream and downstream broadband speeds
  - Number of network nodes, such as video headends
  - Number of local and national broadcast streams
  - Encoding and compression technology adoption and content availability: High-definition or standard definition, and MPEG 2 or MPEG4
  - User-defined service category and application, which you can use to include any other advanced application that has a major effect on the abstract network, but is not covered by the previous categories.
- At any point, users can use the Use Defaults button to reset all of the input values to default values.
- Q.** What outputs does the Cisco CT-SPAN Tool provide?
- A.** The tool generates quantitative traffic estimates in gigabytes for residential subscribers and various nodes of the service provider network. The tool also provides estimates of revenue projections for RGU categories. To help put the IP traffic estimates in perspective, there is a qualitative translation of annual subscriber IP traffic estimates in terms of some real-world comparative metrics such as hours of audio and video content, number of DVD or digital photos, average traffic generated on a per capita basis, and number of trips around the Earth. Both the quantitative as well as qualitative estimates are calculated, including and excluding broadcast data.
- Q.** What if I have more questions about the Cisco CT-SPAN tool?
- A.** A step-by-step [user guide](#) is accessible from within the Cisco CT-SPAN Tool. If your questions are not answered by this resource, please direct your inquiry to [ask-span@cisco.com](mailto:ask-span@cisco.com), and a subject matter expert will respond.



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