

# IOSXR304 (CISCO IOS XR BROADBAND NETWORK GATEWAY IMPLEMENTATION AND VERIFICATION) 1.0

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## Objetivo

After taking this course, you should be able to: Describe the architecture and function of the Cisco IOS XR Broadband Network Gateway Configure and verify Authentication, Authorization, and Accounting (AAA) in a Broadband Network Gateway deployment Define policies to control subscriber traffic Establish and verify subscriber sessions Prioritize subscriber traffic using QoS Implement subscriber features Deploy redundancy for subscriber sessions

## Público Alvo

System installers System integrators System administrators Network administrators Solution designers

## Pré-Requisitos

Before taking this course, you should have the following knowledge and skills: Experience working with Cisco IOS XR Software-based platforms Basic understanding of routing protocols and Multiprotocol Label Switching (MPLS) Basic understanding of AAA functions

## Carga Horária

32 horas (4 dias).

## Conteúdo Programático

- Outline
- Broadband Network Gateway Overview
  - BNG Architecture
  - BNG Software and Hardware Requirements
- Configuring and Verifying Authentication, Authorization, and Accounting
  - AAA Overview and Operation
  - RADIUS Operation and Configuration
  - DIAMETER Operation and Configuration
- Activating Control Policy
  - Control Policy Overview
  - Creating and Activating Class Maps and Policy Maps
  - Defining Dynamic Templates
- Establishing Subscriber Sessions
  - Subscriber Session Overview
  - Establishing IPoE and PPPoE Sessions

DHCP Operation  
Subscriber Interface Neighbor Discovery  
Static Session and Session Limits  
BGP Subscriber Support  
Deploying Quality of Service  
Quality of Service Overview and QoS Feature Support  
RADIUS Based Policing  
Share Policy Instances and Merged Policy-Maps  
Configuring Subscriber Features  
Managing Control Plane Traffic  
Controlling Packet Forwarding  
Providing Multicast Services  
Routing and Traffic Mirroring on Subscriber Sessions  
BNG Geo Redundancy and XML Support  
Geo Redundancy Overview and Deployment Models  
Configuring and Verifying Geo Redundancy  
XML Support

Lab outline

Configuring and Verifying Authentication, Authorization, and Accounting  
Activating Control Policy  
Establishing Subscriber Sessions  
Configuring QoS  
Configuring Subscriber Features  
Configuring BNG Geo Redundancy