CLEUR-2019-Barcelona

## **Instructors:**

Akshat Sharma, Mikhail Korshunov

# **IOS-XR Programmability**

30 Labs Reserved for this Session Friday

Sandbox Technical Contacts:

Dan Klingler

Lab: IOS XR Programmability-101

## **VPN Connection Information:**

If you don't have Cisco's AnyConnect VPN Client installed on your system, you can download it here: <a href="https://developer.cisco.com/site/sandbox/anyconnect/">https://developer.cisco.com/site/sandbox/anyconnect/</a>

Use Cisco's AnyConnect VPN Client to connect to your private lab using this information:

VPN Network Address	VPN Username	VPN Password
devnetsandbox-emea-gwy.cisco.com:20263	EventUser	HQED

#### **Lab System Information:**

#### Development Linux System:

IP Address: 10.10.20.170

Username/Password: [admin/admin]

**SSH Port**: 2211

### IOS-XRv9000 R1:

IP Address: 10.10.20.170

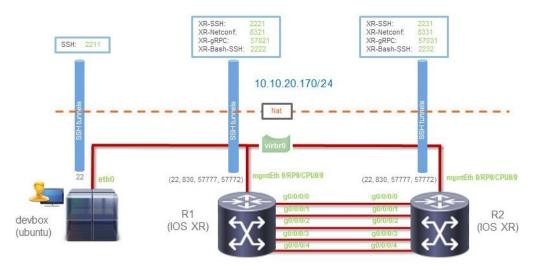
**Username/Password**: [admin/admin] **Management IP**: 10.10.20.170

XR SSH Port: 2221 NETCONF Port: 8321 gRPC Port: 57021 XR-Bash SSH Port: 2222

## IOS-XRv9000 R2:

**IP Address**: 10.10.20.170

Username/Password: [admin/admin]
Management IP: 10.10.20.170



Lab: IOS XR Programmability-102

## **VPN Connection Information:**

If you don't have Cisco's AnyConnect VPN Client installed on your system, you can download it here: <a href="https://developer.cisco.com/site/sandbox/anyconnect/">https://developer.cisco.com/site/sandbox/anyconnect/</a>

Use Cisco's AnyConnect VPN Client to connect to your private lab using this information:

VPN Network Address	VPN Username	VPN Password
devnetsandbox-emea-gwy.cisco.com:20264	EventUser	СКҮВ

#### **Lab System Information:**

#### Development Linux System:

IP Address: 10.10.20.170

Username/Password: [admin/admin]

**SSH Port**: 2211

### IOS-XRv9000 R1:

IP Address: 10.10.20.170

**Username/Password**: [admin/admin] **Management IP**: 10.10.20.170

XR SSH Port: 2221 NETCONF Port: 8321 gRPC Port: 57021 XR-Bash SSH Port: 2222

## IOS-XRv9000 R2:

**IP Address**: 10.10.20.170

Username/Password: [admin/admin] Management IP: 10.10.20.170



Lab: IOS XR Programmability-103

## **VPN Connection Information:**

If you don't have Cisco's AnyConnect VPN Client installed on your system, you can download it here: <a href="https://developer.cisco.com/site/sandbox/anyconnect/">https://developer.cisco.com/site/sandbox/anyconnect/</a>

Use Cisco's AnyConnect VPN Client to connect to your private lab using this information:

VPN Network Address	VPN Username	VPN Password
devnetsandbox-emea-gwy.cisco.com:20265	EventUser	XAFJ

#### **Lab System Information:**

#### Development Linux System:

IP Address: 10.10.20.170

Username/Password: [admin/admin]

**SSH Port**: 2211

### IOS-XRv9000 R1:

IP Address: 10.10.20.170

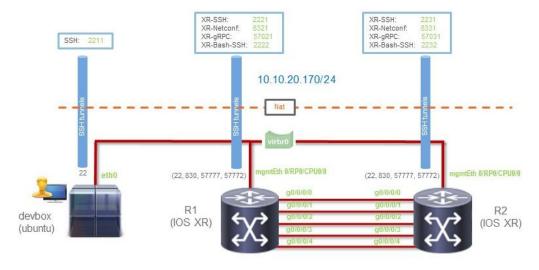
Username/Password: [admin/admin] Management IP: 10.10.20.170

XR SSH Port: 2221 NETCONF Port: 8321 gRPC Port: 57021 XR-Bash SSH Port: 2222

## IOS-XRv9000 R2:

**IP Address**: 10.10.20.170

Username/Password: [admin/admin] Management IP: 10.10.20.170



Lab: IOS XR Programmability-104

## **VPN Connection Information:**

If you don't have Cisco's AnyConnect VPN Client installed on your system, you can download it here: <a href="https://developer.cisco.com/site/sandbox/anyconnect/">https://developer.cisco.com/site/sandbox/anyconnect/</a>

Use Cisco's AnyConnect VPN Client to connect to your private lab using this information:

VPN Network Address	VPN Username	VPN Password
devnetsandbox-emea-gwy.cisco.com:20266	EventUser	GKTC

#### **Lab System Information:**

#### Development Linux System:

IP Address: 10.10.20.170

Username/Password: [admin/admin]

**SSH Port**: 2211

### IOS-XRv9000 R1:

IP Address: 10.10.20.170

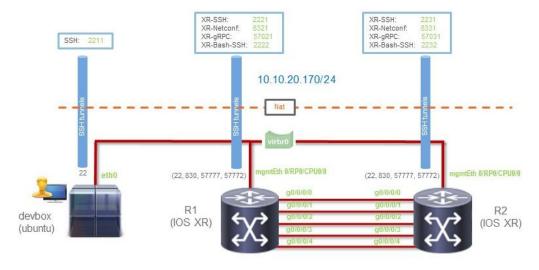
Username/Password: [admin/admin] Management IP: 10.10.20.170

XR SSH Port: 2221 NETCONF Port: 8321 gRPC Port: 57021 XR-Bash SSH Port: 2222

## IOS-XRv9000 R2:

**IP Address**: 10.10.20.170

Username/Password: [admin/admin]
Management IP: 10.10.20.170



Lab: IOS XR Programmability-105

## **VPN Connection Information:**

If you don't have Cisco's AnyConnect VPN Client installed on your system, you can download it here: <a href="https://developer.cisco.com/site/sandbox/anyconnect/">https://developer.cisco.com/site/sandbox/anyconnect/</a>

Use Cisco's AnyConnect VPN Client to connect to your private lab using this information:

VPN Network Address	VPN Username	VPN Password
devnetsandbox-emea-gwy.cisco.com:20267	EventUser	VHHJ

#### **Lab System Information:**

#### Development Linux System:

IP Address: 10.10.20.170

Username/Password: [admin/admin]

**SSH Port**: 2211

### IOS-XRv9000 R1:

IP Address: 10.10.20.170

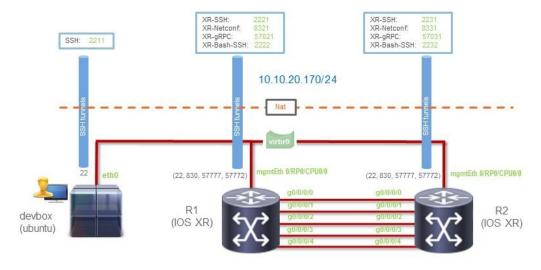
**Username/Password**: [admin/admin] **Management IP**: 10.10.20.170

XR SSH Port: 2221 NETCONF Port: 8321 gRPC Port: 57021 XR-Bash SSH Port: 2222

## IOS-XRv9000 R2:

**IP Address**: 10.10.20.170

**Username/Password**: [admin/admin] **Management IP**: 10.10.20.170



Lab: IOS XR Programmability-106

## **VPN Connection Information:**

If you don't have Cisco's AnyConnect VPN Client installed on your system, you can download it here: <a href="https://developer.cisco.com/site/sandbox/anyconnect/">https://developer.cisco.com/site/sandbox/anyconnect/</a>

Use Cisco's AnyConnect VPN Client to connect to your private lab using this information:

VPN Network Address	VPN Username	VPN Password
devnetsandbox-emea-gwy.cisco.com:20268	EventUser	BKRG

#### **Lab System Information:**

#### Development Linux System:

IP Address: 10.10.20.170

Username/Password: [admin/admin]

**SSH Port**: 2211

### IOS-XRv9000 R1:

IP Address: 10.10.20.170

**Username/Password**: [admin/admin] **Management IP**: 10.10.20.170

XR SSH Port: 2221 NETCONF Port: 8321 gRPC Port: 57021 XR-Bash SSH Port: 2222

## IOS-XRv9000 R2:

**IP Address**: 10.10.20.170

Username/Password: [admin/admin] Management IP: 10.10.20.170



Lab: IOS XR Programmability-107

## **VPN Connection Information:**

If you don't have Cisco's AnyConnect VPN Client installed on your system, you can download it here: <a href="https://developer.cisco.com/site/sandbox/anyconnect/">https://developer.cisco.com/site/sandbox/anyconnect/</a>

Use Cisco's AnyConnect VPN Client to connect to your private lab using this information:

VPN Network Address	VPN Username	VPN Password
devnetsandbox-emea-gwy.cisco.com:20269	EventUser	VUJC

#### **Lab System Information:**

#### Development Linux System:

IP Address: 10.10.20.170

Username/Password: [admin/admin]

**SSH Port**: 2211

### IOS-XRv9000 R1:

IP Address: 10.10.20.170

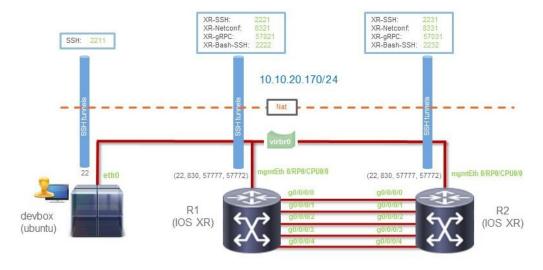
Username/Password: [admin/admin] Management IP: 10.10.20.170

XR SSH Port: 2221 NETCONF Port: 8321 gRPC Port: 57021 XR-Bash SSH Port: 2222

## IOS-XRv9000 R2:

**IP Address**: 10.10.20.170

Username/Password: [admin/admin] Management IP: 10.10.20.170



Lab: IOS XR Programmability-108

## **VPN Connection Information:**

If you don't have Cisco's AnyConnect VPN Client installed on your system, you can download it here: <a href="https://developer.cisco.com/site/sandbox/anyconnect/">https://developer.cisco.com/site/sandbox/anyconnect/</a>

Use Cisco's AnyConnect VPN Client to connect to your private lab using this information:

VPN Network Address	VPN Username	VPN Password
devnetsandbox-emea-gwy.cisco.com:20270	EventUser	TGJR

#### **Lab System Information:**

#### Development Linux System:

IP Address: 10.10.20.170

Username/Password: [admin/admin]

**SSH Port**: 2211

### IOS-XRv9000 R1:

IP Address: 10.10.20.170

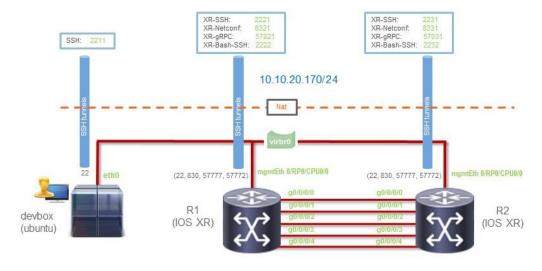
Username/Password: [admin/admin] Management IP: 10.10.20.170

XR SSH Port: 2221 NETCONF Port: 8321 gRPC Port: 57021 XR-Bash SSH Port: 2222

## IOS-XRv9000 R2:

**IP Address**: 10.10.20.170

**Username/Password**: [admin/admin] **Management IP**: 10.10.20.170



Lab: IOS XR Programmability-109

## **VPN Connection Information:**

If you don't have Cisco's AnyConnect VPN Client installed on your system, you can download it here: <a href="https://developer.cisco.com/site/sandbox/anyconnect/">https://developer.cisco.com/site/sandbox/anyconnect/</a>

Use Cisco's AnyConnect VPN Client to connect to your private lab using this information:

VPN Network Address	VPN Username	VPN Password
devnetsandbox-emea-gwy.cisco.com:20271	EventUser	LMDT

#### **Lab System Information:**

#### Development Linux System:

IP Address: 10.10.20.170

Username/Password: [admin/admin]

**SSH Port**: 2211

### IOS-XRv9000 R1:

IP Address: 10.10.20.170

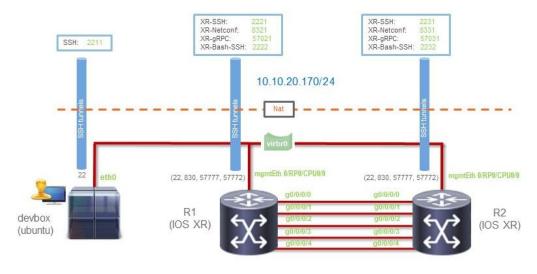
**Username/Password**: [admin/admin] **Management IP**: 10.10.20.170

XR SSH Port: 2221 NETCONF Port: 8321 gRPC Port: 57021 XR-Bash SSH Port: 2222

## IOS-XRv9000 R2:

**IP Address**: 10.10.20.170

Username/Password: [admin/admin]
Management IP: 10.10.20.170



Lab: IOS XR Programmability-110

## **VPN Connection Information:**

If you don't have Cisco's AnyConnect VPN Client installed on your system, you can download it here: <a href="https://developer.cisco.com/site/sandbox/anyconnect/">https://developer.cisco.com/site/sandbox/anyconnect/</a>

Use Cisco's AnyConnect VPN Client to connect to your private lab using this information:

VPN Network Address	VPN Username	VPN Password
devnetsandbox-emea-gwy.cisco.com:20272	EventUser	YJRB

#### **Lab System Information:**

#### Development Linux System:

IP Address: 10.10.20.170

Username/Password: [admin/admin]

**SSH Port**: 2211

### IOS-XRv9000 R1:

IP Address: 10.10.20.170

**Username/Password**: [admin/admin] **Management IP**: 10.10.20.170

XR SSH Port: 2221 NETCONF Port: 8321 gRPC Port: 57021 XR-Bash SSH Port: 2222

## IOS-XRv9000 R2:

**IP Address**: 10.10.20.170

Username/Password: [admin/admin] Management IP: 10.10.20.170



Lab: IOS XR Programmability-111

## **VPN Connection Information:**

If you don't have Cisco's AnyConnect VPN Client installed on your system, you can download it here: <a href="https://developer.cisco.com/site/sandbox/anyconnect/">https://developer.cisco.com/site/sandbox/anyconnect/</a>

Use Cisco's AnyConnect VPN Client to connect to your private lab using this information:

VPN Network Address	VPN Username	VPN Password
devnetsandbox-emea-gwy.cisco.com:20273	EventUser	AGMT

#### **Lab System Information:**

#### Development Linux System:

IP Address: 10.10.20.170

Username/Password: [admin/admin]

**SSH Port**: 2211

### IOS-XRv9000 R1:

IP Address: 10.10.20.170

**Username/Password**: [admin/admin] **Management IP**: 10.10.20.170

XR SSH Port: 2221 NETCONF Port: 8321 gRPC Port: 57021 XR-Bash SSH Port: 2222

## IOS-XRv9000 R2:

**IP Address**: 10.10.20.170

**Username/Password**: [admin/admin] **Management IP**: 10.10.20.170



Lab: IOS XR Programmability-112

## **VPN Connection Information:**

If you don't have Cisco's AnyConnect VPN Client installed on your system, you can download it here: <a href="https://developer.cisco.com/site/sandbox/anyconnect/">https://developer.cisco.com/site/sandbox/anyconnect/</a>

Use Cisco's AnyConnect VPN Client to connect to your private lab using this information:

VPN Network Address	VPN Username	VPN Password
devnetsandbox-emea-gwy.cisco.com:20274	EventUser	NQVP

#### **Lab System Information:**

#### Development Linux System:

IP Address: 10.10.20.170

Username/Password: [admin/admin]

**SSH Port**: 2211

### IOS-XRv9000 R1:

IP Address: 10.10.20.170

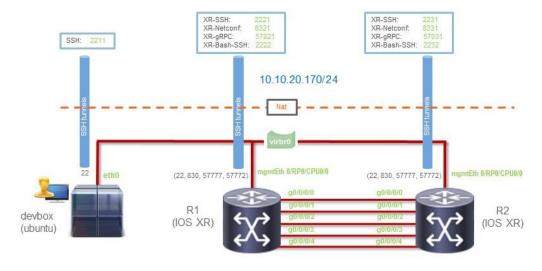
Username/Password: [admin/admin] Management IP: 10.10.20.170

XR SSH Port: 2221 NETCONF Port: 8321 gRPC Port: 57021 XR-Bash SSH Port: 2222

## IOS-XRv9000 R2:

**IP Address**: 10.10.20.170

Username/Password: [admin/admin] Management IP: 10.10.20.170



Lab: IOS XR Programmability-113

## **VPN Connection Information:**

If you don't have Cisco's AnyConnect VPN Client installed on your system, you can download it here: <a href="https://developer.cisco.com/site/sandbox/anyconnect/">https://developer.cisco.com/site/sandbox/anyconnect/</a>

Use Cisco's AnyConnect VPN Client to connect to your private lab using this information:

VPN Network Address	VPN Username	VPN Password
devnetsandbox-emea-gwy.cisco.com:20275	EventUser	EVPG

#### **Lab System Information:**

#### Development Linux System:

IP Address: 10.10.20.170

Username/Password: [admin/admin]

**SSH Port**: 2211

### IOS-XRv9000 R1:

IP Address: 10.10.20.170

Username/Password: [admin/admin] Management IP: 10.10.20.170

XR SSH Port: 2221 NETCONF Port: 8321 gRPC Port: 57021 XR-Bash SSH Port: 2222

## IOS-XRv9000 R2:

**IP Address**: 10.10.20.170

Username/Password: [admin/admin]
Management IP: 10.10.20.170



Lab: IOS XR Programmability-114

## **VPN Connection Information:**

If you don't have Cisco's AnyConnect VPN Client installed on your system, you can download it here: <a href="https://developer.cisco.com/site/sandbox/anyconnect/">https://developer.cisco.com/site/sandbox/anyconnect/</a>

Use Cisco's AnyConnect VPN Client to connect to your private lab using this information:

VPN Network Address	VPN Username	VPN Password
devnetsandbox-emea-gwy.cisco.com:20276	EventUser	VNUJ

#### **Lab System Information:**

#### Development Linux System:

IP Address: 10.10.20.170

Username/Password: [admin/admin]

**SSH Port**: 2211

### IOS-XRv9000 R1:

IP Address: 10.10.20.170

**Username/Password**: [admin/admin] **Management IP**: 10.10.20.170

XR SSH Port: 2221 NETCONF Port: 8321 gRPC Port: 57021 XR-Bash SSH Port: 2222

## IOS-XRv9000 R2:

**IP Address**: 10.10.20.170

Username/Password: [admin/admin]
Management IP: 10.10.20.170



Lab: IOS XR Programmability-115

## **VPN Connection Information:**

If you don't have Cisco's AnyConnect VPN Client installed on your system, you can download it here: <a href="https://developer.cisco.com/site/sandbox/anyconnect/">https://developer.cisco.com/site/sandbox/anyconnect/</a>

Use Cisco's AnyConnect VPN Client to connect to your private lab using this information:

VPN Network Address	VPN Username	VPN Password
devnetsandbox-emea-gwy.cisco.com:20277	EventUser	NRJP

#### **Lab System Information:**

#### Development Linux System:

IP Address: 10.10.20.170

Username/Password: [admin/admin]

**SSH Port**: 2211

### IOS-XRv9000 R1:

IP Address: 10.10.20.170

**Username/Password**: [admin/admin] **Management IP**: 10.10.20.170

XR SSH Port: 2221 NETCONF Port: 8321 gRPC Port: 57021 XR-Bash SSH Port: 2222

## IOS-XRv9000 R2:

**IP Address**: 10.10.20.170

Username/Password: [admin/admin]
Management IP: 10.10.20.170



Lab: IOS XR Programmability-116

## **VPN Connection Information:**

If you don't have Cisco's AnyConnect VPN Client installed on your system, you can download it here: <a href="https://developer.cisco.com/site/sandbox/anyconnect/">https://developer.cisco.com/site/sandbox/anyconnect/</a>

Use Cisco's AnyConnect VPN Client to connect to your private lab using this information:

VPN Network Address	VPN Username	VPN Password
devnetsandbox-emea-gwy.cisco.com:20278	EventUser	QFTB

#### **Lab System Information:**

#### Development Linux System:

IP Address: 10.10.20.170

Username/Password: [admin/admin]

**SSH Port**: 2211

### IOS-XRv9000 R1:

IP Address: 10.10.20.170

**Username/Password**: [admin/admin] **Management IP**: 10.10.20.170

XR SSH Port: 2221 NETCONF Port: 8321 gRPC Port: 57021 XR-Bash SSH Port: 2222

## IOS-XRv9000 R2:

**IP Address**: 10.10.20.170

Username/Password: [admin/admin]
Management IP: 10.10.20.170



Lab: IOS XR Programmability-117

## **VPN Connection Information:**

If you don't have Cisco's AnyConnect VPN Client installed on your system, you can download it here: <a href="https://developer.cisco.com/site/sandbox/anyconnect/">https://developer.cisco.com/site/sandbox/anyconnect/</a>

Use Cisco's AnyConnect VPN Client to connect to your private lab using this information:

VPN Network Address	VPN Username	VPN Password
devnetsandbox-emea-gwy.cisco.com:20279	EventUser	LVLD

#### **Lab System Information:**

#### Development Linux System:

IP Address: 10.10.20.170

Username/Password: [admin/admin]

**SSH Port**: 2211

### IOS-XRv9000 R1:

IP Address: 10.10.20.170

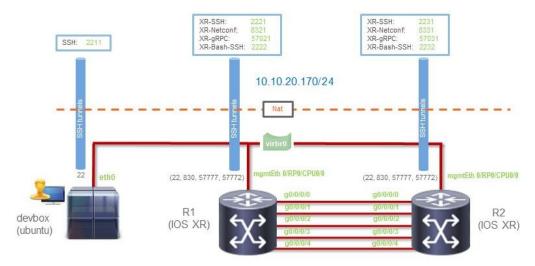
**Username/Password**: [admin/admin] **Management IP**: 10.10.20.170

XR SSH Port: 2221 NETCONF Port: 8321 gRPC Port: 57021 XR-Bash SSH Port: 2222

## IOS-XRv9000 R2:

**IP Address**: 10.10.20.170

Username/Password: [admin/admin]
Management IP: 10.10.20.170



Lab: IOS XR Programmability-118

## **VPN Connection Information:**

If you don't have Cisco's AnyConnect VPN Client installed on your system, you can download it here: <a href="https://developer.cisco.com/site/sandbox/anyconnect/">https://developer.cisco.com/site/sandbox/anyconnect/</a>

Use Cisco's AnyConnect VPN Client to connect to your private lab using this information:

VPN Network Address	VPN Username	VPN Password
devnetsandbox-emea-gwy.cisco.com:20280	EventUser	PDFB

#### **Lab System Information:**

#### Development Linux System:

IP Address: 10.10.20.170

Username/Password: [admin/admin]

**SSH Port**: 2211

### IOS-XRv9000 R1:

IP Address: 10.10.20.170

**Username/Password**: [admin/admin] **Management IP**: 10.10.20.170

XR SSH Port: 2221 NETCONF Port: 8321 gRPC Port: 57021 XR-Bash SSH Port: 2222

## IOS-XRv9000 R2:

**IP Address**: 10.10.20.170

Username/Password: [admin/admin] Management IP: 10.10.20.170



Lab: IOS XR Programmability-119

## **VPN Connection Information:**

If you don't have Cisco's AnyConnect VPN Client installed on your system, you can download it here: <a href="https://developer.cisco.com/site/sandbox/anyconnect/">https://developer.cisco.com/site/sandbox/anyconnect/</a>

Use Cisco's AnyConnect VPN Client to connect to your private lab using this information:

VPN Network Address	VPN Username	VPN Password
devnetsandbox-emea-gwy.cisco.com:20281	EventUser	NDUY

#### **Lab System Information:**

#### Development Linux System:

IP Address: 10.10.20.170

Username/Password: [admin/admin]

**SSH Port**: 2211

### IOS-XRv9000 R1:

IP Address: 10.10.20.170

Username/Password: [admin/admin] Management IP: 10.10.20.170

XR SSH Port: 2221 NETCONF Port: 8321 gRPC Port: 57021 XR-Bash SSH Port: 2222

## IOS-XRv9000 R2:

**IP Address**: 10.10.20.170

Username/Password: [admin/admin] Management IP: 10.10.20.170



Lab: IOS XR Programmability-120

## **VPN Connection Information:**

If you don't have Cisco's AnyConnect VPN Client installed on your system, you can download it here: <a href="https://developer.cisco.com/site/sandbox/anyconnect/">https://developer.cisco.com/site/sandbox/anyconnect/</a>

Use Cisco's AnyConnect VPN Client to connect to your private lab using this information:

VPN Network Address	VPN Username	VPN Password
devnetsandbox-emea-gwy.cisco.com:20282	EventUser	XEMM

#### **Lab System Information:**

#### Development Linux System:

IP Address: 10.10.20.170

Username/Password: [admin/admin]

**SSH Port**: 2211

### IOS-XRv9000 R1:

**IP Address**: 10.10.20.170

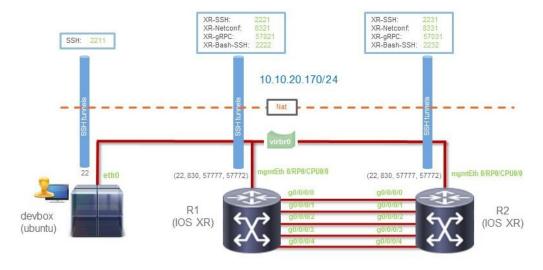
Username/Password: [admin/admin] Management IP: 10.10.20.170

XR SSH Port: 2221 NETCONF Port: 8321 gRPC Port: 57021 XR-Bash SSH Port: 2222

## IOS-XRv9000 R2:

**IP Address**: 10.10.20.170

Username/Password: [admin/admin] Management IP: 10.10.20.170



Lab: IOS XR Programmability-121

## **VPN Connection Information:**

If you don't have Cisco's AnyConnect VPN Client installed on your system, you can download it here: <a href="https://developer.cisco.com/site/sandbox/anyconnect/">https://developer.cisco.com/site/sandbox/anyconnect/</a>

Use Cisco's AnyConnect VPN Client to connect to your private lab using this information:

VPN Network Address	VPN Username	VPN Password
devnetsandbox-emea-gwy.cisco.com:20283	EventUser	LLQC

#### **Lab System Information:**

#### Development Linux System:

IP Address: 10.10.20.170

Username/Password: [admin/admin]

SSH Port: 2211

### IOS-XRv9000 R1:

IP Address: 10.10.20.170

**Username/Password**: [admin/admin] **Management IP**: 10.10.20.170

XR SSH Port: 2221 NETCONF Port: 8321 gRPC Port: 57021 XR-Bash SSH Port: 2222

## IOS-XRv9000 R2:

**IP Address**: 10.10.20.170

Username/Password: [admin/admin]
Management IP: 10.10.20.170



Lab: IOS XR Programmability-122

## **VPN Connection Information:**

If you don't have Cisco's AnyConnect VPN Client installed on your system, you can download it here: <a href="https://developer.cisco.com/site/sandbox/anyconnect/">https://developer.cisco.com/site/sandbox/anyconnect/</a>

Use Cisco's AnyConnect VPN Client to connect to your private lab using this information:

VPN Network Address	VPN Username	VPN Password
devnetsandbox-emea-gwy.cisco.com:20284	EventUser	TRLC

#### **Lab System Information:**

#### Development Linux System:

IP Address: 10.10.20.170

Username/Password: [admin/admin]

**SSH Port**: 2211

### IOS-XRv9000 R1:

**IP Address**: 10.10.20.170

Username/Password: [admin/admin] Management IP: 10.10.20.170

XR SSH Port: 2221 NETCONF Port: 8321 gRPC Port: 57021 XR-Bash SSH Port: 2222

## IOS-XRv9000 R2:

**IP Address**: 10.10.20.170

**Username/Password**: [admin/admin] **Management IP**: 10.10.20.170



Lab: IOS XR Programmability-123

## **VPN Connection Information:**

If you don't have Cisco's AnyConnect VPN Client installed on your system, you can download it here: <a href="https://developer.cisco.com/site/sandbox/anyconnect/">https://developer.cisco.com/site/sandbox/anyconnect/</a>

Use Cisco's AnyConnect VPN Client to connect to your private lab using this information:

VPN Network Address	VPN Username	VPN Password
devnetsandbox-emea-gwy.cisco.com:20285	EventUser	PLTF

#### **Lab System Information:**

#### Development Linux System:

IP Address: 10.10.20.170

Username/Password: [admin/admin]

**SSH Port**: 2211

### IOS-XRv9000 R1:

IP Address: 10.10.20.170

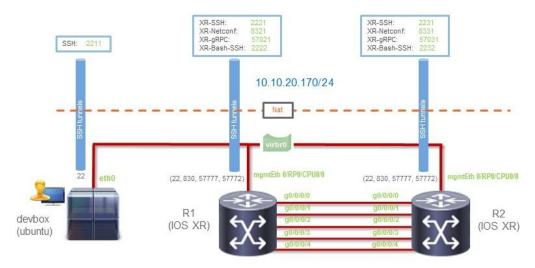
**Username/Password**: [admin/admin] **Management IP**: 10.10.20.170

XR SSH Port: 2221 NETCONF Port: 8321 gRPC Port: 57021 XR-Bash SSH Port: 2222

## IOS-XRv9000 R2:

**IP Address**: 10.10.20.170

Username/Password: [admin/admin] Management IP: 10.10.20.170



Lab: IOS XR Programmability-124

## **VPN Connection Information:**

If you don't have Cisco's AnyConnect VPN Client installed on your system, you can download it here: <a href="https://developer.cisco.com/site/sandbox/anyconnect/">https://developer.cisco.com/site/sandbox/anyconnect/</a>

Use Cisco's AnyConnect VPN Client to connect to your private lab using this information:

VPN Network Address	VPN Username	VPN Password
devnetsandbox-emea-gwy.cisco.com:20286	EventUser	BUXQ

#### **Lab System Information:**

#### Development Linux System:

IP Address: 10.10.20.170

Username/Password: [admin/admin]

**SSH Port**: 2211

### IOS-XRv9000 R1:

IP Address: 10.10.20.170

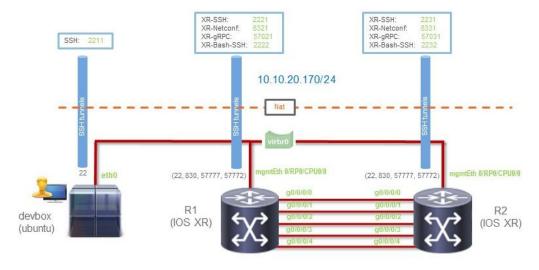
**Username/Password**: [admin/admin] **Management IP**: 10.10.20.170

XR SSH Port: 2221 NETCONF Port: 8321 gRPC Port: 57021 XR-Bash SSH Port: 2222

## IOS-XRv9000 R2:

**IP Address**: 10.10.20.170

Username/Password: [admin/admin] Management IP: 10.10.20.170



Lab: IOS XR Programmability-125

## **VPN Connection Information:**

If you don't have Cisco's AnyConnect VPN Client installed on your system, you can download it here: <a href="https://developer.cisco.com/site/sandbox/anyconnect/">https://developer.cisco.com/site/sandbox/anyconnect/</a>

Use Cisco's AnyConnect VPN Client to connect to your private lab using this information:

VPN Network Address	VPN Username	VPN Password
devnetsandbox-emea-gwy.cisco.com:20287	EventUser	MMJN

#### **Lab System Information:**

#### Development Linux System:

IP Address: 10.10.20.170

Username/Password: [admin/admin]

**SSH Port**: 2211

### IOS-XRv9000 R1:

IP Address: 10.10.20.170

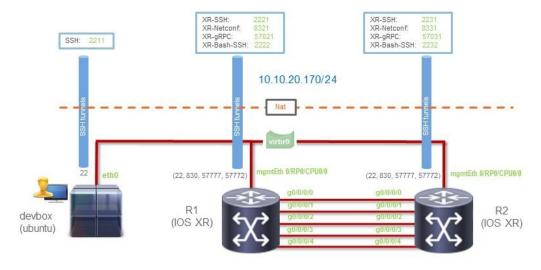
**Username/Password**: [admin/admin] **Management IP**: 10.10.20.170

XR SSH Port: 2221 NETCONF Port: 8321 gRPC Port: 57021 XR-Bash SSH Port: 2222

## IOS-XRv9000 R2:

**IP Address**: 10.10.20.170

Username/Password: [admin/admin]
Management IP: 10.10.20.170



Lab: IOS XR Programmability-126

## **VPN Connection Information:**

If you don't have Cisco's AnyConnect VPN Client installed on your system, you can download it here: <a href="https://developer.cisco.com/site/sandbox/anyconnect/">https://developer.cisco.com/site/sandbox/anyconnect/</a>

Use Cisco's AnyConnect VPN Client to connect to your private lab using this information:

VPN Network Address	VPN Username	VPN Password
devnetsandbox-emea-gwy.cisco.com:20288	EventUser	AKMQ

#### **Lab System Information:**

#### Development Linux System:

IP Address: 10.10.20.170

Username/Password: [admin/admin]

**SSH Port**: 2211

### IOS-XRv9000 R1:

IP Address: 10.10.20.170

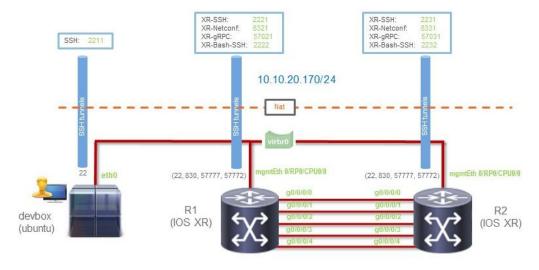
**Username/Password**: [admin/admin] **Management IP**: 10.10.20.170

XR SSH Port: 2221 NETCONF Port: 8321 gRPC Port: 57021 XR-Bash SSH Port: 2222

## IOS-XRv9000 R2:

IP Address: 10.10.20.170

Username/Password: [admin/admin]
Management IP: 10.10.20.170



Lab: IOS XR Programmability-127

## **VPN Connection Information:**

If you don't have Cisco's AnyConnect VPN Client installed on your system, you can download it here: <a href="https://developer.cisco.com/site/sandbox/anyconnect/">https://developer.cisco.com/site/sandbox/anyconnect/</a>

Use Cisco's AnyConnect VPN Client to connect to your private lab using this information:

VPN Network Address	VPN Username	VPN Password
devnetsandbox-emea-gwy.cisco.com:20289	EventUser	CNUE

#### **Lab System Information:**

#### Development Linux System:

IP Address: 10.10.20.170

Username/Password: [admin/admin]

**SSH Port**: 2211

### IOS-XRv9000 R1:

IP Address: 10.10.20.170

**Username/Password**: [admin/admin] **Management IP**: 10.10.20.170

XR SSH Port: 2221 NETCONF Port: 8321 gRPC Port: 57021 XR-Bash SSH Port: 2222

## IOS-XRv9000 R2:

**IP Address**: 10.10.20.170

**Username/Password**: [admin/admin] **Management IP**: 10.10.20.170



Lab: IOS XR Programmability-128

## **VPN Connection Information:**

If you don't have Cisco's AnyConnect VPN Client installed on your system, you can download it here: <a href="https://developer.cisco.com/site/sandbox/anyconnect/">https://developer.cisco.com/site/sandbox/anyconnect/</a>

Use Cisco's AnyConnect VPN Client to connect to your private lab using this information:

VPN Network Address	VPN Username	VPN Password
devnetsandbox-emea-gwy.cisco.com:20290	EventUser	KZUJ

#### **Lab System Information:**

#### Development Linux System:

IP Address: 10.10.20.170

Username/Password: [admin/admin]

**SSH Port**: 2211

### IOS-XRv9000 R1:

**IP Address**: 10.10.20.170

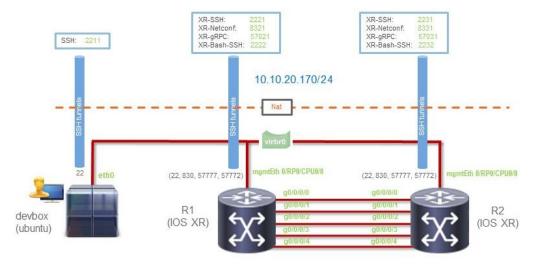
Username/Password: [admin/admin] Management IP: 10.10.20.170

XR SSH Port: 2221 NETCONF Port: 8321 gRPC Port: 57021 XR-Bash SSH Port: 2222

## IOS-XRv9000 R2:

**IP Address**: 10.10.20.170

Username/Password: [admin/admin] Management IP: 10.10.20.170



Lab: IOS XR Programmability-129

## **VPN Connection Information:**

If you don't have Cisco's AnyConnect VPN Client installed on your system, you can download it here: <a href="https://developer.cisco.com/site/sandbox/anyconnect/">https://developer.cisco.com/site/sandbox/anyconnect/</a>

Use Cisco's AnyConnect VPN Client to connect to your private lab using this information:

VPN Network Address	VPN Username	VPN Password
devnetsandbox-emea-gwy.cisco.com:20291	EventUser	HJGV

#### **Lab System Information:**

#### Development Linux System:

IP Address: 10.10.20.170

Username/Password: [admin/admin]

**SSH Port**: 2211

### IOS-XRv9000 R1:

IP Address: 10.10.20.170

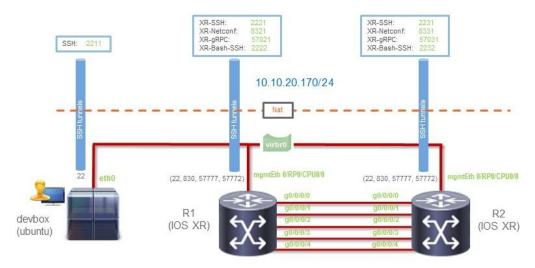
**Username/Password**: [admin/admin] **Management IP**: 10.10.20.170

XR SSH Port: 2221 NETCONF Port: 8321 gRPC Port: 57021 XR-Bash SSH Port: 2222

## IOS-XRv9000 R2:

**IP Address**: 10.10.20.170

Username/Password: [admin/admin] Management IP: 10.10.20.170



Lab: IOS XR Programmability-130

## **VPN Connection Information:**

If you don't have Cisco's AnyConnect VPN Client installed on your system, you can download it here: <a href="https://developer.cisco.com/site/sandbox/anyconnect/">https://developer.cisco.com/site/sandbox/anyconnect/</a>

Use Cisco's AnyConnect VPN Client to connect to your private lab using this information:

VPN Network Address	VPN Username	VPN Password
devnetsandbox-emea-gwy.cisco.com:20292	EventUser	BVTU

#### **Lab System Information:**

#### Development Linux System:

IP Address: 10.10.20.170

Username/Password: [admin/admin]

**SSH Port**: 2211

### IOS-XRv9000 R1:

IP Address: 10.10.20.170

**Username/Password**: [admin/admin] **Management IP**: 10.10.20.170

XR SSH Port: 2221 NETCONF Port: 8321 gRPC Port: 57021 XR-Bash SSH Port: 2222

## IOS-XRv9000 R2:

**IP Address**: 10.10.20.170

Username/Password: [admin/admin]
Management IP: 10.10.20.170

