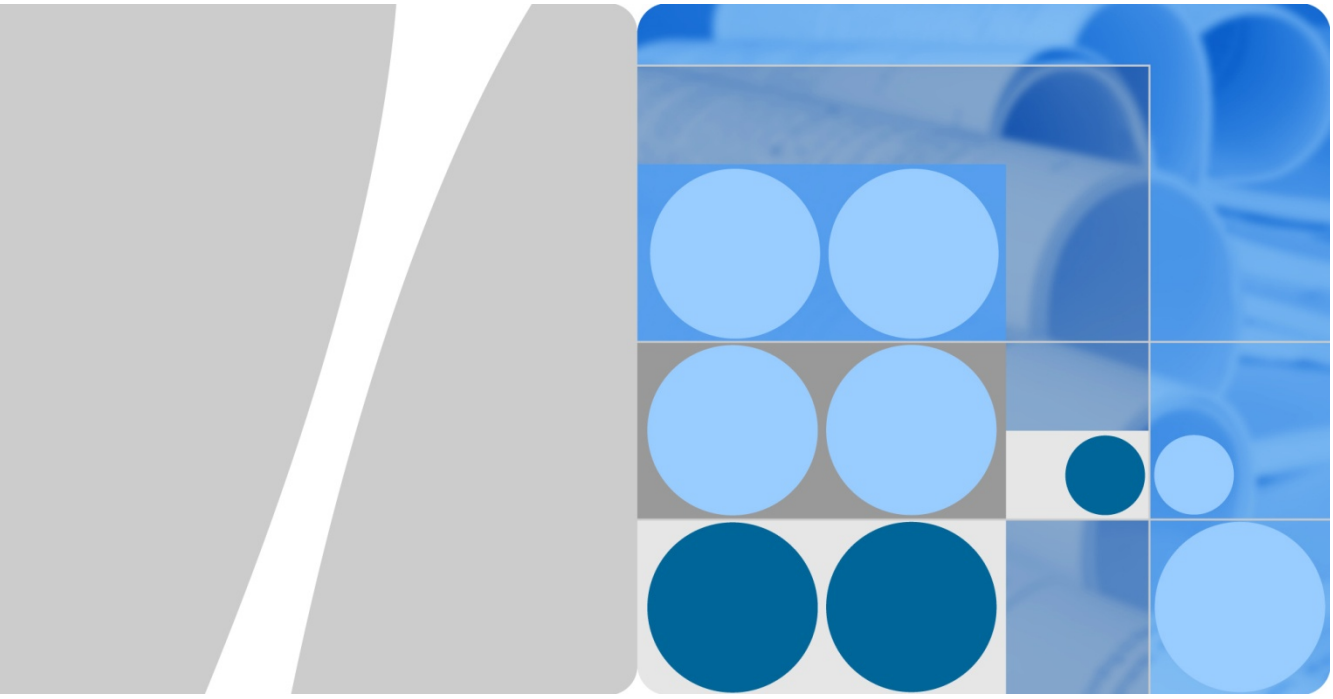

Huawei Data Communication Network Basics

Lab Construction Guide

For Version 1.0

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Revision History

For Version	Date	Description
1.0	2020.3	New version

Guide Information

Author	Time Range	Reader
Talent Ecosystem Development Dept	2020.3-…	Regional Offices, Suppliers, & Huawei Authorized Learning Partners (HALP).

Contents

1 About this Document

After the experiment has been standard, the experimental equipment was determined. In consideration of demand for the upgrading of teaching materials, generating a list of experimental equipment and physical connection topology.

This guide provides supporting information for HAINA, regional offices, suppliers, and Huawei Authorized Learning Partners (HALP) for the purchase of equipment, installation of modules, cables, and configuration of related equipment required for construction of the Huawei Data Communication Network Basics lab environment, and aid in supporting the corresponding lab training, as part of the Huawei Data Communication Network Basics course.

2 The Datacom Lab Topology

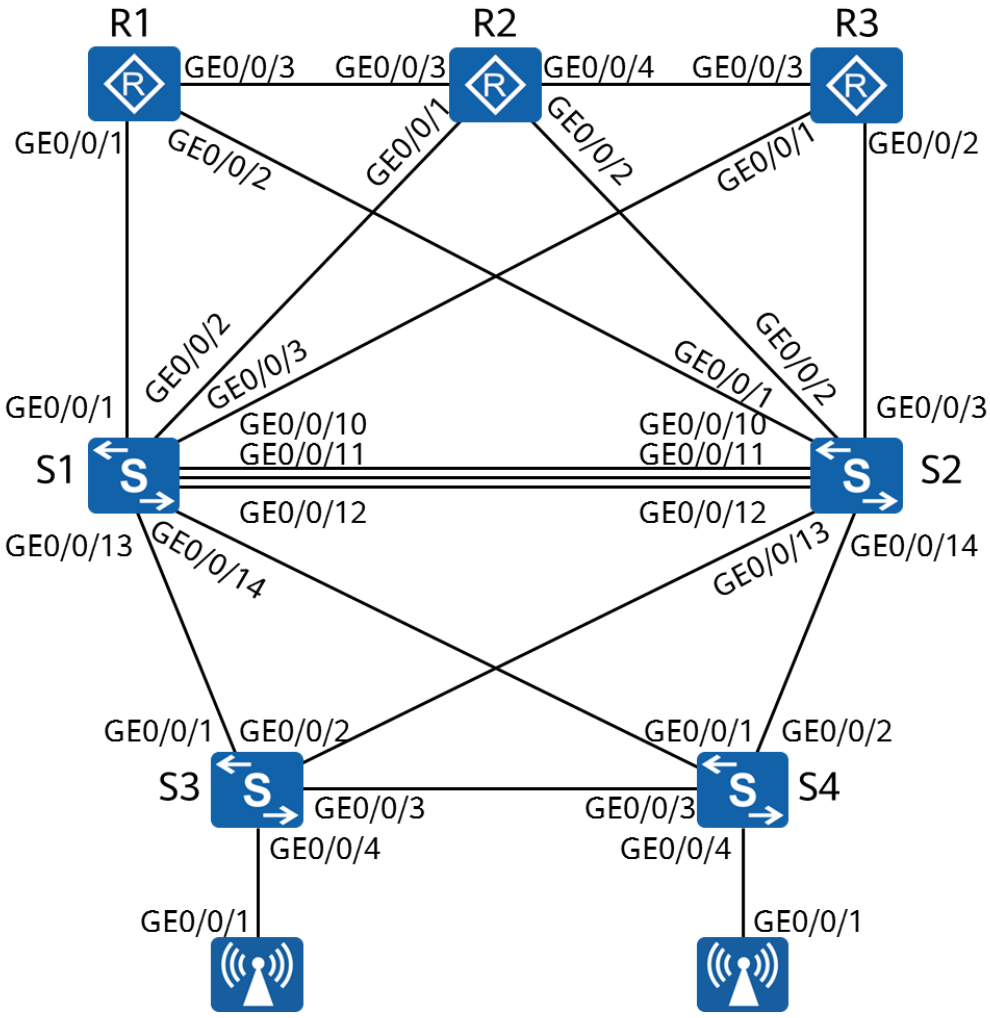

Figure 2-1 Datacom Physical Topology

NOTE

The physical topology shown in Figure 2-1 contains all equipment on the purchase list.

3 Equipment Purchasing

You must purchase the equipment based on the lab requirements. If you have any doubt, send email to learning@huawei.com. The equipment purchase list, named Huawei Data Communication Network Basics Experiment Equipment List for V1.0 is attached as part of Appendices.

4 Cable Connection

The equipment must be connected based on the topology shown in Figure 2-1.

Ensure that the correct models are used for the different types of equipment based on the mapping provided in Table 4-1.

Table 4-1 Required model for different types of equipment

Equipment	Model
R1	AR 651C
R2	AR 651C
R3	AR 651C
S1	S5731-H24T4XC
S2	S5731-H24T4XC
S3	S5731-H24P4XC
S4	S5731-H24P4XC
AP1	AirEngine5760-10
AP2	AirEngine5760-10

Check whether the ports are connected correctly based on Table 4-2.

Table 4-2 Required mapping between ports

R1	GE0/0/1	S1
	GE0/0/2	S2
	GE0/0/3	R1
R2	GE0/0/1	S1
	GE0/0/2	S2

	GE0/0/3	R1
	GE0/0/4	R2
R3	GE0/0/1	S1
	GE0/0/2	S2
	GE0/0/3	R2
S1	GE0/0/1	R1
	GE0/0/2	R2
	GE0/0/3	R3
	GE0/0/10	S2
	GE0/0/11	S2
	GE0/0/12	S2
	GE0/0/13	S3
	GE0/0/14	S4
S2	GE0/0/1	R1
	GE0/0/2	R2
	GE0/0/3	R3
	GE0/0/10	S1
	GE0/0/11	S1
	GE0/0/12	S1
	GE0/0/13	S3
	GE0/0/13	S4
S3	GE0/0/1	S1
	GE0/0/2	S2

	GE0/0/3	S3
	GE0/0/4	AP1
S4	GE0/0/1	S1
	GE0/0/2	S2
	GE0/0/3	S3
	GE0/0/4	AP2
AP1	GE0/0/1	S3
AP2	GE0/0/2	S4

5 Problems Caused by Non-standard Equipment

You must use the standard equipment contained on the equipment list in 7 Appendices when building the lab.

The non-standard equipment may cause problems, including but not limited to the following items:

1. The commands may be found to be incompatible, or the interface names are not consistent with the ones in the lab guide.
2. Parts of the lab results cannot be displayed.
3. The non-standard equipment is not compatible with the lab guide or learning materials of later versions.

6 Precautions

After the instructor conducts training of the learning materials, the students are expected to independently carry out and complete the steps listed in the Lab Guide. If any fault occurs, the students should ask for troubleshooting support from the instructor.

For all the AR651C routers, interface GE0/0/0~GE0/0/7 are switch port by default, instructor should configure them to be layer three port by using command ’undo portswitch’ and save as default configuration.

In the experiment, in order to avoid the influence of residual configuration on the experiment, after the completion of the experiment, students should delete the equipment configuration information before closing the equipment; at the same time, at the beginning of the experiment, confirm the equipment from the empty configuration, or perform configuration empty, and restart the equipment.

7 Appendices

Huawei AirEngine 5760-10 Access P

Huawei Cloud Engine S573

Huawei NetEngine AR600

Huawei Data Communication N