**1号楼6楼信息科机房网络改造方案**

## 网络改造背景

* 优化网络结构

## 现网络拓扑图





## 改造后的网络拓扑图



## 改造前后网络端口对照表：

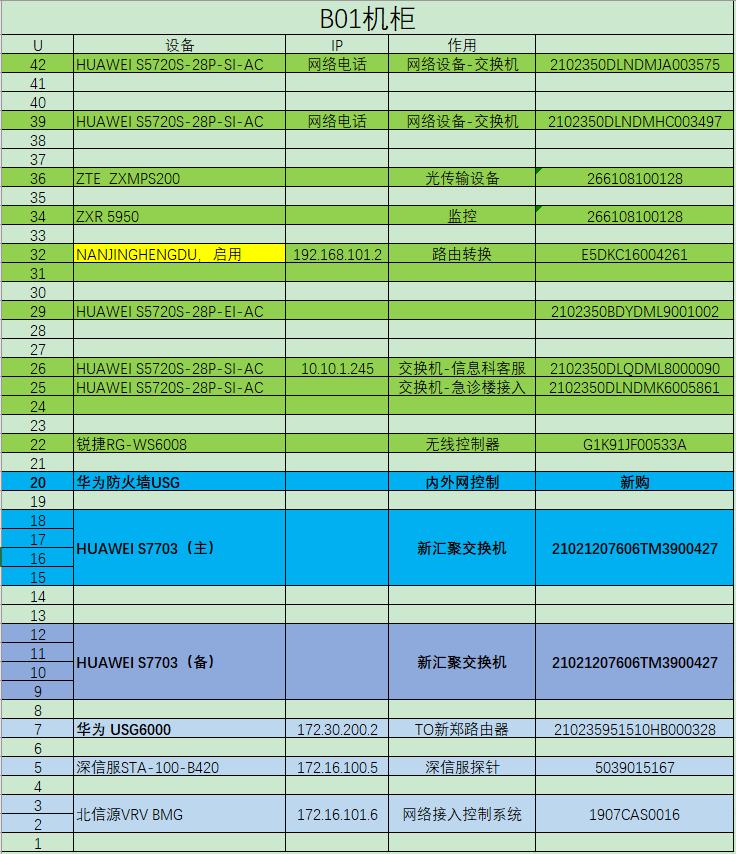
### 4.1、电口对照表：H3C S7506E : 华为 S7703



### 4.2、光口对照表：H3C S7506E : 华为 S7703



## 机柜设备布置图



### 辅助材料准备清单

|  |  |  |
| --- | --- | --- |
| **名称** | **标准、规格** | **数量** |
| PDU单元 | 16A，大于10孔 | 2 |
| 光纤跳线 | 单模 |  |
| 网络跳线 | CAT6类（屏蔽线） |  |
| 打印标签 |  |  |

## 配置相关的2台交换机

### 配置新购华为Quidway S7703的交换机（可提前配置）

#### 基础配置

sysname HUAWEI

lldp enable

**# 配置NTP**

clock timezone BJ add 08:00:00

ntp-service server disable

ntp-service ipv6 server disable

ntp-service unicast-server 192.168.89.200

**# 配置SSH及用户**

sftp server enable

stelnet server enable

ssh user zxyy

ssh user zxyy authentication-type password

ssh user zxyy service-type stelnet

#### VLAN配置信息统计表：

|  |  |  |
| --- | --- | --- |
| **楼层** | **现有端口 -> 对应华为端口** | **VLAN 透传范围** |
| 信息科交换机 | G2/0/24 -> GE2/0/24 | 25 **~~31~~** 40 62 300 |
| 急诊1楼 | G2/0/3 -> GE2/0/1 | 24 30 |
| 急诊5楼 | G4/0/20 -> GE3/1/4 | 23 25 101 104 300 to **~~301~~** |
| 1号楼C座影像 | G4/0/38 -> GE3/1/6 | 24 31 |
| 3号楼 | G4/0/9 -> GE3/1/0 | 30 to 33 |
| 影像诊断 | G4/0/12 -> GE3/1/1 | 30 to 31 101 300 |
| 门诊1楼 | G4/0/15 -> GE3/1/2 | 26 44 to 46 101 104 |
| 门诊3、2楼 | G4/0/18 -> GE3/1/3 | 41 to 42 101 104 |
| 门诊4、5、6楼 | G4/0/23 -> GE3/1/5 | 42 to 43 104 300 2013 **~~to 2014~~** |
| 到5号楼外网交换机 | GE4/0/47 -> GE3/1/7 | 100 to 101 104 **1000** |
| **到2号楼内网交换机** | 原上行接DELL -> XG3/0/22, 23 | 62 **~~94~~** 119 to 120 **~~150~~** 300 to **~~301~~** **1000** 2013 3001 |
| **外接端口实际**  **透传VLAN汇总：** | { 23, 24, 25, 26, 30, 31, 32, **~~33~~**, 41, 42, 43, 44, 45, 46, 62, **~~94~~**, 100, 101, 104, 119, 120, **~~150~~**, 300, **~~301~~**, **1000**, 2013, **~~2014~~**, 3001, **~~3002~~**}  **注：迁移到华为交换机后，3002去掉，加上3001（路由，VRV管理口）** | |

vlan batch 23 to 26 30 to 32

vlan batch 40 to 46 62

vlan batch 100 101 104

vlan batch 119 120 ~~162~~ 300 1000 2013

vlan batch 3001

#### VLAN 三层接口配置信息：

|  |  |  |  |
| --- | --- | --- | --- |
| **VLAN ID** | **IP地址** | **Description <修改描述>** | **使用单位** |
| 17 | 192.168.17.254 |  | 没用，去掉 |
| 23 | 192.168.23.254 | 1c#-1 | 皮肤病医院：负1楼 |
| 24 | 192.168.24.254 | 1c#1 | 皮肤病医院：1楼 |
| 25 | 192.168.25.254 | 1c#2-5 | 皮肤病医院：2~5楼 |
| 26 | 192.168.26.254 | 1a#5\_jyk | 门诊5楼：检验科 |
| 29 | 192.168.29.254 |  | 没用，去掉 |
| 30 | 192.168.30.254 |  | 3号楼-影像楼 |
| 31 | 192.168.31.254 |  | 3号楼-影像楼 |
| 32 | 192.168.32.254 |  | 3号楼-影像楼 |
| 33 | 192.168.33.254 |  | 没用，去掉 |
| 40 | 192.168.40.254 |  | 职工之家 |
| 41 | 192.168.41.254 |  | 门诊1楼 |
| 42 | 192.168.42.254 |  | 门诊2楼 |
| 43 | 192.168.43.254 |  | 门诊3楼 |
| 44 | 192.168.44.254 |  | 门诊4楼 |
| 45 | 192.168.45.254 |  | 门诊5楼 |
| 46 | 192.168.46.254 |  | 门诊6楼 |
| 61 | 192.168.61.254 |  | 没用，去掉 |
| 62 | 192.168.62.254 |  | 信息科 |
| 66 | 192.168.66.254 |  | 没用，去掉 |
| 74 | 192.168.74.254 | kfyy-ip-2 | 没用，去掉 |
| 91 |  | wvlanAP | 没用，去掉 |
| 94 |  |  | 没用，去掉 |
| 100 |  |  | 外网 |
| 101 |  |  | 外网 |
| 104 |  |  | 外网 |
|  |  |  |  |
| 119 | 192.168.15.1 | ap-apply | 锐捷内网WiFi，重症  覆盖5号楼、2号楼，用户接入 |
| 120 |  | ap-manage\_171.19.100.1 | 锐捷内网WiFi，管理AP |
| 150 |  |  | 没用，去掉 |
| 162 | 192.168.162.254 | anquan-guanli | 安全设备管理，  王凌宇提前调整 |
| 210 | 192.168.110.253 |  | 没用，去掉 |
| 300 | 10.102.3.249 | ycyxzx-sx | 远程会诊-视频  VLAN保留，IP去掉 |
| 301 |  |  | 没用，去掉 |
| 350 | 10.107.3.1/30 |  | 没用，去掉 |
| 551 | 172.100.100.1/28 |  | 没用，去掉 |
| 1000 | 192.168.100.254/24 |  | 部分路由引用 |
| 1098 | 10.98.20.114/28 |  | 没用，去掉 |
| 2013 |  | youjiali-zx | 尤加利，动态心电 |
| 2014 |  | kangtai-zx | 没用，去掉 |
| 2994 | 172.17.200.8/28 | 新郑 | 没用，去掉 |
| 2996 | 172.16.96.1/28 |  | 没用，去掉 |
| 2997 | 172.16.97.1/28 |  | 没用，去掉 |
| 2999 | 172.16.99.2/30 |  | 没用，去掉 |
| 3002 |  |  | 迁移后，去掉 |
| 3010 |  | liantong\_vp\_BenBu\_10.5.1.2 | 没用，去掉 |
| 3012 |  | liantong\_VPN\_gx\_10.5.2.2 | 没用，去掉 |
| 3014 |  | liantong\_VPN\_kf\_10.5.4.2 | 没用，去掉 |
| 3016 |  | liantong\_VPN\_yx\_10.5.6.2 | 没用，去掉 |
| 3018 |  | dianxin\_VPN\_10.5.8.2 | 没用，去掉 |
| 3019 |  | dianxin\_VPN\_10.5.9.2 | 没用，去掉 |
| 3020 |  | dianxin\_VPN\_10.5.10.2 | 没用，去掉 |
| 3071 | 10.5.7.1/30 | dianxin\_VPN\_mazi\_10.5.7.1 | 没用，去掉 |
| 3072 | 10.5.8.1/30 | dianxin\_VPN\_yx\_10.5.8.1 | 没用，去掉 |

##### VLAN 3层接口：

|  |  |  |  |
| --- | --- | --- | --- |
| 23 | 192.168.23.254 | 1c#-1 | 皮肤病医院：负1楼 |
| 24 | 192.168.24.254 | 1c#1 | 皮肤病医院：1楼 |
| 25 | 192.168.25.254 | 1c#2-5 | 皮肤病医院：2~5楼 |
| 26 | 192.168.26.254 | 1a#5\_jyk | 门诊5楼：检验科 |
| 30 | 192.168.30.254 |  | 3号楼-影像楼 |
| 31 | 192.168.31.254 |  | 3号楼-影像楼 |
| 32 | 192.168.32.254 |  | 3号楼-影像楼 |
| 40 | 192.168.40.254 |  | 职工之家 |
| 41 | 192.168.41.254 |  | 门诊1楼 |
| 42 | 192.168.42.254 |  | 门诊2楼 |
| 43 | 192.168.43.254 |  | 门诊3楼 |
| 44 | 192.168.44.254 |  | 门诊4楼 |
| 45 | 192.168.45.254 |  | 门诊5楼 |
| 46 | 192.168.46.254 |  | 门诊6楼 |
| 62 | 192.168.62.254 |  | 信息科 |
| 119 | 192.168.15.1 | ap-apply | 锐捷内网WiFi，重症  覆盖5号楼、2号楼，用户接入 |
| ~~162~~ | ~~192.168.162.254~~ | ~~anquan-guanli~~ | ~~安全设备管理，~~  ~~王凌宇提前调整~~ |
| 300 | 10.102.3.249 | ycyxzx-sx | 远程会诊-视频测试，IP已迁移 |
| 1000 | 192.168.100.254/24 |  | 部分路由引用 |
| 3001 | 172.16.101.2/24 | 与2号楼互联互通 | 与2号楼核心互联 |

|  |  |
| --- | --- |
| interface Vlan-interface23  description 1c#-1  ip address 192.168.23.254 255.255.255.0  #  interface Vlan-interface24  description jz1lou  ip address 192.168.24.254 255.255.255.0  #  interface Vlan-interface25  description pfk  ip address 192.168.25.254 255.255.255.0  #  interface Vlan-interface26  description jyk  ip address 192.168.26.254 255.255.255.0 | interface Vlan-interface23  description 1c#-1  ip address 192.168.23.254 255.255.255.0  #  interface Vlan-interface24  description jz1lou  ip address 192.168.24.254 255.255.255.0  #  interface Vlan-interface25  description pfk  ip address 192.168.25.254 255.255.255.0  #  interface Vlan-interface26  description jyk  ip address 192.168.26.254 255.255.255.0 |
| interface Vlan-interface30  ip address 192.168.30.254 255.255.255.0  #  interface Vlan-interface31  ip address 192.168.31.254 255.255.255.0  #  interface Vlan-interface32  ip address 192.168.32.254 255.255.255.0 | interface Vlan-interface30  ip address 192.168.30.254 255.255.255.0  #  interface Vlan-interface31  ip address 192.168.31.254 255.255.255.0  #  interface Vlan-interface32  ip address 192.168.32.254 255.255.255.0 |
| interface Vlan-interface40  ip address 192.168.40.254 255.255.255.0  #  interface Vlan-interface41  ip address 192.168.41.254 255.255.255.0  #  interface Vlan-interface42  ip address 192.168.42.254 255.255.255.0  #  interface Vlan-interface43  ip address 192.168.43.254 255.255.255.0  interface Vlan-interface44  ip address 192.168.44.254 255.255.255.0  #  interface Vlan-interface45  ip address 192.168.45.254 255.255.255.0  #  interface Vlan-interface46  description mz-6lou  ip address 192.168.46.254 255.255.255.0 | interface Vlan-interface40  ip address 192.168.40.254 255.255.255.0  #  interface Vlan-interface41  ip address 192.168.41.254 255.255.255.0  #  interface Vlan-interface42  ip address 192.168.42.254 255.255.255.0  #  interface Vlan-interface43  ip address 192.168.43.254 255.255.255.0  interface Vlan-interface44  ip address 192.168.44.254 255.255.255.0  #  interface Vlan-interface45  ip address 192.168.45.254 255.255.255.0  #  interface Vlan-interface46  description mz-6lou  ip address 192.168.46.254 255.255.255.0 |
| interface Vlan-interface62  description xxk  ip address 192.168.62.254 255.255.255.0 | interface Vlan-interface62  description xxk  ip address 192.168.62.254 255.255.255.0  **迁移到华为防火墙** |
| interface Vlan-interface119  description ap-apply  ip address 192.168.15.1 255.255.255.0 | interface Vlan-interface119  description ap-apply  ip address 192.168.15.1 255.255.255.0 |
| interface Vlan-interface162  description anquan-guanli  ip address 192.168.162.254 255.255.255.0 | ~~interface Vlan-interface162~~  ~~description anquan-guanli~~  ~~ip address 192.168.162.254 255.255.255.0~~  **网关需要迁移到5号楼DELL交换机上，配置相关静态路由表** |
| interface Vlan-interface300  description ycyxzx-sx  ip address 10.102.3.249 255.255.255.0 | ~~interface Vlan-interface300~~  ~~description ycyxzx-sx~~  ~~ip address 10.102.3.249 255.255.255.0~~  **IP地址已经迁移到2号楼核心交换机12708** |
| interface Vlan-interface1000  ip address 192.168.100.1 255.255.255.0  vrrp vrid 1 virtual-ip 192.168.100.254  vrrp vrid 1 priority 220  packet-filter 3003 inbound  packet-filter 3003 outbound | ~~interface Vlan-interface1000~~  ~~ip address 192.168.100.254 255.255.255.0~~  **需要迁移到2号楼核心交换机12708，配置相关静态路由表** |
|  | interface Vlan-interface3001  description TO\_HW\_S12708\_G7/0/2-3  ip address 172.16.101.2 255.255.255.240 |

#### 配置从H3C S7506E迁移过来的电口



|  |  |
| --- | --- |
| **原H3C S7506E交换机** | **新购华为 S7703交换机** |
| interface GigabitEthernet2/0/2  port link-mode bridge  description neiwang-wlan  port link-type trunk  undo port trunk permit vlan 1  port trunk permit vlan 119 to 120  loopback-detection enable  packet-filter 3000 inbound  packet-filter 3000 outbound  qos apply policy refuse-445 inbound  qos apply policy refuse-445 outbound  dhcp-snooping trust | interface GigabitEthernet2/0/0  port link-mode bridge  description neiwang-wlan  port link-type trunk  undo port trunk permit vlan 1  port trunk permit vlan 119 to 120  loopback-detection enable |
| interface GigabitEthernet2/0/3  port link-mode bridge  description 192.168.24.249\_47port  port link-type trunk  undo port trunk permit vlan 1  port trunk permit vlan 24 30  mirroring-group 2 mirroring-port both | interface GigabitEthernet2/0/1  port link-mode bridge  description 192.168.24.249\_47port  port link-type trunk  undo port trunk permit vlan 1  port trunk permit vlan 24 30 |
| interface GigabitEthernet2/0/12  port link-mode bridge  description sangfor\_tanzhen  mirroring-group 3 monitor-port | interface GigabitEthernet2/0/2  port link-mode bridge  description sangfor\_tanzhen  **镜像口---mirror** |
| interface GigabitEthernet2/0/14  port link-mode bridge  description tanzheng-manage\_port\_192.168.100.198  port access vlan 1000 | interface GigabitEthernet2/0/3  port link-mode bridge  description tanzheng-manage\_port\_192.168.100.198  port access vlan 1000  **深信服探针** |
| interface GigabitEthernet2/0/15  port link-mode bridge  description TO\_VRV\_zhunru\_172.16.101.6\_mirro\_port  mirroring-group 2 monitor-port | interface GigabitEthernet2/0/4  port link-mode bridge  description TO\_VRV\_zhunru\_172.16.101.6\_mirro\_port |
| interface GigabitEthernet2/0/7  port link-mode route  packet-filter 3000 inbound  packet-filter 3000 outbound  ip address 172.30.200.1 255.255.255.252 | interface GigabitEthernet2/0/5  desc XinZhengYuanQu  port link-mode route  ip address 172.30.200.1 255.255.255.252 |
| interface GigabitEthernet2/0/24  port link-mode bridge  description xxk-jieru\_192.168.62.252  port link-type trunk  undo port trunk permit vlan 1  port trunk permit vlan 25 31 40 62 300  packet-filter 3003 inbound  packet-filter 3003 outbound  mirroring-group 2 mirroring-port both | interface GigabitEthernet2/0/24  port link-mode bridge  description xxk-jieru\_192.168.62.2 52  port link-type trunk  undo port trunk permit vlan 1  port trunk permit vlan 25 31 40 62 300 |
| 北信源准入管理口  DELL交换机 Te1/5 | interface GigabitEthernet2/0/6  description beixinyuan-zhunru  port link-type access  port default vlan 3001 |

#### 配置从H3C S7506E迁移过来的光口



|  |  |
| --- | --- |
| **原H3C S7506E交换机** | **新购华为 S7703交换机** |
| interface GigabitEthernet4/0/9  port link-mode bridge  description to 3#  port link-type trunk  undo port trunk permit vlan 1  port trunk permit vlan 30 to 33  qos apply policy refuse-445 inbound  qos apply policy refuse-445 outbound  mirroring-group 2 mirroring-port both | interface GigabitEthernet3/1/0  port link-mode bridge  description to 3#  port link-type trunk  undo port trunk permit vlan 1  port trunk permit vlan 30 to 33 |
| interface GigabitEthernet4/0/12  port link-mode bridge  description to yixizhenduan  port link-type trunk  undo port trunk permit vlan 1  port trunk permit vlan 30 to 31 101 300  qos apply policy refuse-445 inbound  qos apply policy refuse-445 outbound  mirroring-group 2 mirroring-port both | interface GigabitEthernet3/1/1  port link-mode bridge  description to yixizhenduan  port link-type trunk  undo port trunk permit vlan 1  port trunk permit vlan 30 to 31 101 300 |
| interface GigabitEthernet4/0/15  port link-mode bridge  description mz4lou  port link-type trunk  undo port trunk permit vlan 1  port trunk permit vlan 26 44 to 46 101 104  qos apply policy refuse-445 inbound  qos apply policy refuse-445 outbound  mirroring-group 2 mirroring-port both | interface GigabitEthernet3/1/2  port link-mode bridge  description mz4lou  port link-type trunk  undo port trunk permit vlan 1  port trunk permit vlan 26 44 to 46 101 104 |
| interface GigabitEthernet4/0/18  port link-mode bridge  description mz1lou  port link-type trunk  undo port trunk permit vlan 1  port trunk permit vlan 41 to 42 101 104  qos apply policy refuse-445 inbound  qos apply policy refuse-445 outbound  mirroring-group 2 mirroring-port both | interface GigabitEthernet3/1/3  port link-mode bridge  description mz1lou  port link-type trunk  undo port trunk permit vlan 1  port trunk permit vlan 41 to 42 101 104 |
| interface GigabitEthernet4/0/20  port link-mode bridge  description to jz5#  port link-type trunk  undo port trunk permit vlan 1  port trunk permit vlan 23 25 101 104 300 **~~to 301~~**  qos apply policy refuse-445 inbound  qos apply policy refuse-445 outbound  mirroring-group 2 mirroring-port both | interface GigabitEthernet3/1/4  port link-mode bridge  description to jz5#  port link-type trunk  undo port trunk permit vlan 1  port trunk permit vlan 23 25 101 104 300 |
| interface GigabitEthernet4/0/23  port link-mode bridge  description mz-3luo  port link-type trunk  undo port trunk permit vlan 1  port trunk permit vlan 42 to 43 104 300 2013 ~~to 2014~~  qos apply policy refuse-445 inbound  qos apply policy refuse-445 outbound  mirroring-group 2 mirroring-port both | interface GigabitEthernet3/1/5  port link-mode bridge  description mz-3luo  port link-type trunk  undo port trunk permit vlan 1  port trunk permit vlan 42 to 43 101 104 300 2013 |
| interface GigabitEthernet4/0/38  port link-mode bridge  description yingxiang\_192.168.24.250  port link-type trunk  undo port trunk permit vlan 1  port trunk permit vlan 24 31  mirroring-group 2 mirroring-port both | interface GigabitEthernet3/1/6  port link-mode bridge  description yingxiang\_192.168.24.250  port link-type trunk  undo port trunk permit vlan 1  port trunk permit vlan 24 31 |
| interface GigabitEthernet4/0/47  port link-mode bridge  description TO\_5haolou\_H3C\_S7003E\_GE0/0/19  port link-type trunk  port trunk permit vlan **~~1 70~~** 100 to 101 104 **~~1000~~**  stp disable  mirroring-group 2 mirroring-port both  **# 改由自己接入1号楼外网汇聚交换机。**  **# vlan 1000去掉后：影响62段上网、外网上OA、外网堡垒机、省工伤医保、医联体VPN。。。** | interface GigabitEthernet2/0/23  description TO\_Huawei\_S5720(wai)\_192.168.101.241\_p23  port link-type trunk  undo port trunk allow-pass vlan 1  port trunk allow-pass vlan 100 to 101 104  stp disable  **连接1号楼外网汇聚交换机 192.168.101.241**  **# 同时配置好内外网防火墙** |

#### 配置与2号楼核心互联接口

**使用：XG3/0/22、XG3/0/23 接口连接2号楼核心交换机**

|  |
| --- |
| interface Eth-Trunk8  description TO\_2haolou\_HW\_S12708  port link-type trunk  undo port trunk allow-pass vlan 1  port trunk allow-pass vlan 62 119 to 120 300 1000 2013 3001  mode lacp  load-balance dst-mac |
| interface XGigabitEthernet3/0/22  description TO\_2haolou\_HW\_S12708\_XG7/0/2  eth-trunk 8 |
| interface XGigabitEthernet3/0/23  description TO\_2haolou\_HW\_S12708\_XG7/0/3  eth-trunk 8 |

#### 配置端口镜像组到深信服探针、北信源准入系统

|  |
| --- |
| 已配置  observe-port 2 interface GigabitEthernet2/0/4  observe-port 3 interface GigabitEthernet2/0/2 |

#### 配置生成树协议

|  |
| --- |
| 生成树保护  stp bpdu-protection |

#### 192.168.62.0段，IP-MAC地址绑定

|  |
| --- |
| arp static 192.168.62.247 0001-0001-0001  arp static 192.168.62.250 0001-0001-0001  arp static 192.168.62.175 ace0-103b-7f4f  arp static 192.168.62.158 9ceb-e85f-18f4  arp static 192.168.62.204 0001-0002-0004  arp static 192.168.62.219 0001-0008-0009  arp static 192.168.25.73 0001-0002-0008  arp static 192.168.62.218 0001-0002-0003  arp static 192.168.25.234 0001-0002-0003  arp static 192.168.62.154 0001-0030-0200  arp static 192.168.62.178 0001-0030-0200  arp static 192.168.62.184 0001-0030-0200  arp static 192.168.62.186 0001-0030-0200  arp static 192.168.62.188 0001-0030-0200  arp static 192.168.62.193 0001-0030-0200  arp static 192.168.62.194 0001-0030-0200  arp static 192.168.62.198 0001-0030-0200  arp static 192.168.62.199 0001-0030-0200  arp static 192.168.62.202 0001-0030-0200  arp static 192.168.62.203 0001-0030-0200  arp static 192.168.62.205 0001-0030-0200  arp static 192.168.62.206 0001-0030-0200  arp static 192.168.62.207 0001-0030-0200  arp static 192.168.62.208 0001-0030-0200  arp static 192.168.62.209 0001-0030-0200  arp static 192.168.62.211 0001-0030-0200  arp static 192.168.62.212 0002-0021-0010  arp static 192.168.62.213 0001-0030-0200  arp static 192.168.62.214 0001-0030-0200  arp static 192.168.62.215 0001-0030-0200  arp static 192.168.62.217 0001-0030-0200  arp static 192.168.62.221 0001-0030-0200  arp static 192.168.62.223 0001-0030-0200  arp static 192.168.62.224 0001-0030-0200  arp static 192.168.62.225 0001-0030-0200  arp static 192.168.62.226 0001-0030-0200  arp static 192.168.62.227 0001-0030-0200  arp static 192.168.62.229 0001-0030-0200  arp static 192.168.62.231 0001-0030-0200  arp static 192.168.62.243 0001-0030-0200  arp static 192.168.62.245 0001-0030-0200  arp static 192.168.62.246 0001-0030-0200  arp static 192.168.62.251 0001-0030-0200  arp static 192.168.62.242 0010-0020-0033  arp static 192.168.62.29 0010-0020-0033  arp static 192.168.62.39 0010-0020-0033  arp static 192.168.62.78 0010-0020-0033  arp static 192.168.62.91 0010-0020-0033  arp static 192.168.62.92 0010-0020-0033  arp static 192.168.62.93 0010-0020-0033  arp static 192.168.62.94 0010-0020-0033  arp static 192.168.62.96 0010-0020-0033  arp static 192.168.25.230 0000-1111-2222  arp static 192.168.25.231 0001-0003-0005  arp static 192.168.25.232 0002-0005-0006  arp static 192.168.62.222 0001-1234-3215  arp static 192.168.62.128 d43a-6507-19a6  arp static 192.168.62.143 9c5a-4486-7825  arp static 192.168.62.113 507b-9df7-8529  arp static 192.168.62.23 8c16-4555-61ec  arp static 192.168.62.14 f80f-4170-dbee  arp static 192.168.62.7 3c2c-30e7-b0a2  arp static 192.168.62.17 80fa-5b3d-e557  arp static 192.168.62.239 6c4b-904b-5a27  arp static 192.168.62.195 28d2-44ba-d170  arp static 192.168.62.70 9ceb-e85f-18f4  arp static 192.168.62.168 54e1-ad2f-5ebe  arp static 192.168.62.164 4c34-881a-086f  arp static 192.168.62.174 507b-9d29-9431  arp static 192.168.62.12 0001-0003-0019  arp static 192.168.62.155 0001-0003-0500  arp static 192.168.62.180 0001-0003-0500  arp static 192.168.62.228 0001-0003-0500  arp static 192.168.62.230 0001-0003-0500  arp static 192.168.62.233 0001-0003-0500  arp static 192.168.62.234 0001-0003-0501  arp static 192.168.62.240 0001-0003-0501  arp static 192.168.62.241 0001-0003-0501  arp static 192.168.62.244 0001-0003-0501  arp static 192.168.62.253 0001-0003-0501  arp static 192.168.62.62 0001-0003-0501  arp static 192.168.62.179 0001-0003-0005  arp static 192.168.62.25 0001-0003-0005  arp static 192.168.62.26 0001-0003-0005  arp static 192.168.62.27 0001-0003-0005  arp static 192.168.62.24 0001-0003-0005  arp static 192.168.62.249 e4f0-04e1-a41a  arp static 192.168.62.55 c809-a808-f78c  arp static 192.168.62.120 d481-d7f9-08ed  arp static 192.168.62.127 000e-c68f-af55  arp static 192.168.62.237 a44c-c879-a13a  arp static 192.168.62.60 000e-c6b9-ba01  arp static 192.168.62.165 9c5a-4489-4297  arp static 192.168.62.30 54ee-75cf-9f9f  arp static 192.168.62.107 002b-678f-3987  arp static 192.168.62.110 002b-678f-3987  arp static 192.168.62.34 88d7-f63a-a0ee  arp static 192.168.62.133 c8d3-ffdd-d0ec  arp static 192.168.62.54 80fa-5b0c-8e6b  arp static 192.168.62.123 308d-99aa-1ec2  arp static 192.168.62.35 28d2-44bb-5161  arp static 192.168.62.161 002b-678f-3987  arp static 192.168.62.171 00e0-4c72-8b93  arp static 192.168.62.126 f076-1c14-bd80  arp static 192.168.62.129 e4b9-7a5d-8c79  arp static 192.168.62.103 acfd-ce9b-f6e5  arp static 192.168.62.16 0001-0002-0003  arp static 192.168.62.132 507b-9d0e-8ce3  arp static 192.168.62.31 0001-0002-0006  arp static 192.168.62.71 f80f-41a6-f966  arp static 192.168.62.73 000e-c676-23a7  arp static 192.168.62.192 68f7-2825-62c2  arp static 192.168.62.104 bce9-2fb1-60b6  arp static 192.168.62.58 0021-ccd4-2931  arp static 192.168.62.53 5065-f349-ce80  arp static 192.168.62.141 e86a-6453-1d93  arp static 192.168.62.151 98fa-9be0-20b0  arp static 192.168.62.119 b025-aa30-7232  arp static 192.168.62.139 507b-9d22-53e0  arp static 192.168.62.153 100d-0e75-2c72  arp static 192.168.62.105 00e0-4c68-520c  arp static 192.168.62.57 c85b-76c2-3b9f  arp static 192.168.62.115 507b-9d79-b2a1  arp static 192.168.62.114 0024-3224-4b5e  arp static 192.168.62.48 002b-67cf-9069  arp static 192.168.62.3 ccd3-9d9c-2c45  arp static 192.168.62.109 80fa-5b51-c3c0  arp static 192.168.62.5 0010-f370-f1ce  arp static 192.168.62.75 f48e-38f1-9e62  arp static 192.168.62.137 54e1-ad55-41b1  arp static 192.168.62.121 d05f-6436-a4ee  arp static 192.168.62.116 0021-ccce-f096  arp static 192.168.62.2 0016-31df-d033  arp static 192.168.62.182 8c16-45ea-6974  arp static 192.168.62.170 54ee-75d9-916d  arp static 192.168.62.43 1c1b-0d58-4ff4  arp static 192.168.62.32 507b-9d1c-e78f  arp static 192.168.62.11 0cc4-7a79-8f71  arp static 192.168.62.144 000e-c6d7-ee61  arp static 192.168.62.88 0023-24e2-6d76  arp static 192.168.62.77 2c16-dba5-e742  arp static 192.168.62.134 00e0-4d71-bdc2  arp static 192.168.62.74 80fa-5b40-d0b1  arp static 192.168.62.13 e45f-0107-e219  arp static 192.168.62.33 b025-aa30-7232  arp static 192.168.62.38 00e0-4c7a-f150  arp static 192.168.62.156 80fa-5b07-9e08  arp static 192.168.62.152 0007-3e98-cbc5  arp static 192.168.62.177 f076-1c14-bd80  arp static 192.168.62.145 c85b-7627-d100  arp static 192.168.62.98 c8f7-5005-a510  arp static 192.168.62.172 507b-9d78-3337  arp static 192.168.62.6 94c6-918e-9ed1  arp static 192.168.62.232 68f7-2810-b8b8  arp static 192.168.62.51 98fa-9bc0-42ba  arp static 192.168.62.40 98fa-9bbf-564f  arp static 192.168.62.49 f48e-38ee-bb35  arp static 192.168.62.140 000e-c663-8c15  arp static 192.168.62.248 6891-d0d7-5584  arp static 192.168.62.101 e86a-64c7-ea5b  arp static 192.168.62.187 8c16-458a-31b8  arp static 192.168.62.159 107d-1a36-8227  arp static 192.168.62.36 98fa-9bc0-4662  arp static 192.168.62.173 68f7-2810-b8b8  arp static 192.168.62.176 507b-9d0e-8ce3  arp static 192.168.62.52 68f7-2811-8a83  arp static 192.168.62.125 1c39-47bc-384a  arp static 192.168.62.61 e4b9-7a5d-58aa  arp static 192.168.62.150 54ee-759a-87aa  arp static 192.168.62.20 484d-7ec8-e53d  arp static 192.168.62.21 f8a9-6335-0a77  arp static 192.168.62.142 94c6-918e-9eb4  arp static 192.168.62.149 00e0-4c36-01da  arp static 192.168.62.163 2c16-dba1-a5f1  arp static 192.168.62.8 1065-3064-9064  arp static 192.168.62.135 000e-c679-18c3  arp static 192.168.62.124 000e-c662-fccd  arp static 192.168.62.28 98fa-9bc0-42ba  arp static 192.168.62.15 80fa-5b66-5665  arp static 192.168.62.167 8c16-4568-a363  arp static 192.168.62.46 68f7-28b1-8a8b  arp static 192.168.62.147 c018-5016-4e0c  arp static 192.168.62.216 c018-5004-5c48  arp static 192.168.62.72 000e-c665-8082  arp static 192.168.62.45 54e1-ad2d-5273  arp static 192.168.62.47 54ee-75ea-38b5  arp static 192.168.62.44 d481-d78e-f2cc  arp static 192.168.62.42 4ccc-6a39-26b9  arp static 192.168.62.235 6431-507d-1b0e  arp static 192.168.62.166 6c4b-904a-1399  arp static 192.168.62.191 9c5a-4487-10db  arp static 192.168.62.183 1c39-4720-1398  arp static 192.168.62.90 9c5a-4487-0445  arp static 192.168.62.4 9829-a65d-6965  arp static 192.168.62.10 6891-d065-f217  arp static 192.168.62.87 1c39-4720-69a3  arp static 192.168.62.111 d45d-6439-d8cf  arp static 192.168.62.22 9c5a-4488-0713  arp static 192.168.62.85 b42e-99d7-94e1  arp static 192.168.62.41 1c39-4720-0b75  arp static 192.168.62.102 fc45-9627-cda9  arp static 192.168.62.82 1831-bfbc-7661  arp static 192.168.62.112 9c5a-4428-e652  arp static 192.168.62.67 9c5a-4428-6856  arp static 192.168.62.86 6c4b-904b-59fb  arp static 192.168.62.89 9c5a-4428-e755  arp static 192.168.62.84 9c5a-4487-0f6e  arp static 192.168.62.80 e86a-6453-1f64  arp static 192.168.62.162 305a-3a0e-7dff  arp static 192.168.62.65 4ccc-6a19-34d1  arp static 192.168.62.66 309c-2353-88f6  arp static 192.168.62.196 9c5a-4487-02f0  arp static 192.168.62.157 9c5a-4428-0dad  arp static 192.168.62.18 2c60-0c9c-cec1  arp static 192.168.62.106 9c5a-4489-4297  arp static 192.168.62.64 28d2-4484-032f  arp static 192.168.62.189 fc45-962a-a8ba  arp static 192.168.62.169 9c5a-4487-0f8c  arp static 192.168.62.56 0897-98fc-d3fd  arp static 192.168.62.108 0897-98fe-cd51  arp static 192.168.62.9 0090-0b42-a6eb  arp static 192.168.62.197 5065-f35c-5f13  arp static 192.168.62.79 d8c4-97bf-cdbb  arp static 192.168.62.252 2065-8ee0-3fb3  arp static 192.168.62.81 9c5a-4428-e3d1  arp static 192.168.62.181 0897-98fd-72d5  arp static 192.168.62.83 1c39-4720-68ad  arp static 192.168.62.69 1c39-4720-6990  arp static 192.168.62.201 5405-db7a-6c32  arp static 192.168.62.122 3456-7548-6781  arp static 192.168.62.68 f02f-74a2-0d3d  arp static 192.168.62.50 b07b-2573-d6a2  arp static 192.168.62.63 e86a-64d1-663f  arp static 192.168.62.76 00e0-4f71-53b1  arp static 192.168.62.117 d43a-6506-99c6  arp static 192.168.62.100 e86a-6443-b848  arp static 192.168.62.236 a44c-c879-a13a  arp static 192.168.62.190 9c5a-4486-7ad5  arp static 192.168.62.136 00e0-4c68-1a70  arp static 192.168.62.220 b4b5-2f82-a79b  arp static 192.168.62.185 708b-cd0c-3ec3  arp static 192.168.62.19 00e0-4c68-5e74  arp static 192.168.62.118 8c16-45bc-c623  arp static 192.168.62.210 54ee-75dc-7eeb  arp static 192.168.62.238 54e1-ad22-d531  arp static 192.168.62.95 6c02-e094-b030  arp static 192.168.62.160 5405-db7a-646e  arp static 192.168.62.138 2c16-dba3-a60d  arp static 192.168.62.200 000c-298b-022d  arp static 192.168.62.131 54ee-75d9-916d  arp static 192.168.62.146 4ccc-6ae0-822f  arp static 192.168.62.99 8c8c-aae2-2958  arp static 192.168.62.130 1c69-7aa5-e31c  arp static 192.168.62.97 c85b-76a9-e37a  arp static 192.168.62.148 68f7-28fb-d886  arp static 192.168.62.59 28d2-4460-ee20  arp static 192.168.62.1 000b-ab80-52a9 62 GigabitEthernet2/0/24 |

#### 合并静态路由表

##### A）分析DELL S4048T-ON交换机静态路由表

|  |  |
| --- | --- |
| **现有静态路由** | **对应改造后所需的静态路由说明** |
| ip route 0.0.0.0/0 172.16.102.2 | 主要用于192.168.62.0段访问互联网，以及医院办公外网10.10.0.0/16段通过天融信防火墙直接访问内网OA（10.20.1.180）；  **本次改造在信息科加配防火墙后，默认路由不在需要。** |
| ip route 10.5.18.0/24 10.5.17.1 | 无效路由 |
| ip route 10.20.0.0/24 172.16.101.1  ip route 10.20.1.0/24 172.16.101.1  ip route 10.20.2.0/24 172.16.101.1  ip route 10.30.0.0/16 172.16.101.1 | **# 现服务器网段、以及预留网段：**  ip route-static 10.20.0.0 24 172.16.101.1  ip route-static 10.20.1.0 24 172.16.101.1  ip route-static 10.20.2.0 24 172.16.101.1  # 下面路由可去掉  # ip route-static 10.30.0.0 16 172.16.101.1 |
| ip route 192.168.1.0/24 172.16.101.1  ip route 192.168.2.0/24 172.16.101.1  ip route 192.168.3.0/24 172.16.101.1  ip route 192.168.4.0/24 172.16.101.1  ip route 192.168.5.0/24 172.16.101.1  ip route 192.168.6.0/24 172.16.101.1  ip route 192.168.7.0/24 172.16.101.1  ip route 192.168.8.0/24 172.16.101.1  ip route 192.168.9.0/24 172.16.101.1  ip route 192.168.10.0/24 172.16.101.1  ip route 192.168.11.0/24 172.16.101.1  ip route 192.168.12.0/24 172.16.101.1  ip route 192.168.14.0/24 172.16.101.1  ip route 192.168.18.0/24 172.16.101.1  ip route 192.168.19.0/24 172.16.101.1  ip route 192.168.20.0/24 172.16.101.1  ip route 192.168.27.0/24 172.16.101.1  ip route 192.168.60.0/24 172.16.101.1  ip route 192.168.63.0/24 172.16.101.1 | **# 5号楼网络路由**  ip route-static 192.168.1.0 24 172.16.101.1  ip route-static 192.168.2.0 24 172.16.101.1  ip route-static 192.168.3.0 24 172.16.101.1  ip route-static 192.168.4.0 24 172.16.101.1  ip route-static 192.168.5.0 24 172.16.101.1  ip route-static 192.168.6.0 24 172.16.101.1  ip route-static 192.168.7.0 24 172.16.101.1  ip route-static 192.168.8.0 24 172.16.101.1  ip route-static 192.168.9.0 24 172.16.101.1  ip route-static 192.168.10.0 24 172.16.101.1  ip route-static 192.168.11.0 24 172.16.101.1  ip route-static 192.168.12.0 24 172.16.101.1  ip route-static 192.168.14.0 24 172.16.101.1  ip route-static 192.168.18.0 24 172.16.101.1  ip route-static 192.168.19.0 24 172.16.101.1  # ip route-static 192.168.20.0 24 172.16.101.1  ip route-static 192.168.27.0 24 172.16.101.1  ip route-static 192.168.60.0 24 172.16.101.1  ip route-static 192.168.63.0 24 172.16.101.1 |

|  |  |
| --- | --- |
| ip route 192.168.21.0/24 172.16.101.1  ip route 192.168.22.0/24 172.16.101.1  ip route 192.168.80.0/21 172.16.101.1  ip route 192.168.88.0/24 172.16.101.1  ip route 192.168.89.0/24 172.16.101.1 | **# 2号楼网段（内网）**  ip route-static 192.168.21.0 24 172.16.101.1  ip route-static 192.168.22.0 24 172.16.101.1  ip route-static 192.168.80.0 21 172.16.101.1  ip route-static 192.168.88.0 24 172.16.101.1  ip route-static 192.168.89.0 24 172.16.101.1 |
| ip route 192.168.48.0/21 172.16.101.1  ip route 192.168.56.0/22 172.16.101.1 | **# 高新院区**  ip route-static 192.168.48.0 21 172.16.101.1  ip route-static 192.168.56.0 22 172.16.101.1 |
| ip route 192.168.70.0/24 172.16.101.1  ip route 192.168.75.0/24 172.16.101.1  ip route 192.168.76.0/24 172.16.101.1  ip route 192.168.94.0/24 172.16.101.1  ip route 192.168.95.0/24 172.16.101.1  ip route 192.168.97.0/24 172.16.101.1  ip route 192.168.98.0/24 172.16.101.1 | **# 各分院**  ip route-static 192.168.70.0 24 172.16.101.1  ip route-static 192.168.75.0 24 172.16.101.1  ip route-static 192.168.76.0 24 172.16.101.1  ip route-static 192.168.94.0 24 172.16.101.1  ip route-static 192.168.95.0 24 172.16.101.1  ip route-static 192.168.97.0 24 172.16.101.1  ip route-static 192.168.98.0 24 172.16.101.1  # 马寨192.168.70.0  # 康复医院192.168.75.0  # 豫欣医院192.168.76.0  # 沟赵卫生院192.168.94.0  # 文化宫路院区192.168.95.0  # 老干部活动中心192.168.97.0  # 五棉社区服务站192.168.97.0  # 纪检委192.168.98.0  # 人大192.168.98.0 |
| ip route 10.40.124.0/24 172.16.101.1 | **# 2号楼核心（有部分设备在用，确认？）**  ip route-static 10.40.124.0 24 172.16.101.1 |
| ip route 59.207.34.0/24 172.16.101.1  ip route 59.207.51.0/24 172.16.101.1  ip route 59.207.61.0/24 172.16.101.1  ip route 10.167.4.0/24 172.16.101.1  ip route 10.224.0.0/16 172.16.101.1  ip route 10.232.0.0/16 172.16.101.1 | **# 郑州市卫健委（电子政务外网）**  ip route-static 59.207.34.0 24 172.16.101.1  ip route-static 59.207.51.0 24 172.16.101.1  ip route-static 59.207.61.0 24 172.16.101.1  **# 电子政务外网，到2号楼--> 5号楼DELL -> 10.167.4.2（防火墙USG6309E）**  ip route-static 10.167.4.0 24 172.16.101.1  # 10.167.4.2 卫健委视频专线防火墙  ip route-static 10.224.0.0 16 172.16.101.1  ip route-static 10.232.0.0 16 172.16.101.1  **# 卫生专网，到2号楼--> 5号楼DELL（4.3） -> 10.167.4.2（华为）** |

|  |  |
| --- | --- |
| ip route 172.16.100.0/24 172.16.101.1  ip route 172.16.101.0/24 172.16.101.1  ip route 172.16.103.0/24 172.16.101.1  ip route 11.0.2.0/24 172.16.101.1 | **# 三层路由互联地址：**  ip route-static 172.16.100.0 24 172.16.101.1  ip route-static 172.16.101.0 24 172.16.101.1  ip route-static 172.16.103.0 24 172.16.101.1  ip route-static 11.0.2.0 24 172.16.101.1 |
| ip route 10.98.0.0/16 172.16.101.1 | #ip route-static 10.98.0.0 16 172.16.101.1（弃用） |
| ip route 10.100.0.0/16 172.16.101.1  ip route 10.102.0.0/16 172.16.101.1 | ip route-static 10.100.0.0 16 172.16.101.1  ip route-static 10.102.0.0 16 172.16.101.1  # 视频会议（郑大一附院，远程医疗） |
| ip route 15.0.160.35/32 172.16.101.1 | ip route-static 15.0.160.35 32 172.16.101.1  **# 柯利尔（建行）到2号楼--> 5号楼DELL（4.3） -> 10.167.4.2（华为）** |
| ip route 180.9.0.0/16 172.16.101.1 | ip route-static 180.9.0.0 16 172.16.101.1  **# 120（院前急救），H3C SecPath F1000-AK125，通过2号楼，192.168.80.1**  **admin zxyy@123456** |

##### B）分析H3C S7506E交换机静态路由表

|  |
| --- |
| ~~ip route-static 0.0.0.0 0.0.0.0 192.168.100.253~~ |
| **~~医联体VPN，以下全部弃用（跟王凌宇确认过）~~**  ~~ip route-static 10.2.1.0 255.255.255.0 192.168.199.90 description yilianti\_vpn~~  ~~ip route-static 10.2.2.0 255.255.255.0 192.168.75.251 description gaozhaotijian~~ |
| **~~ROS，以下全部弃用（跟王凌宇确认过）~~**  ~~ip route-static 10.5.1.0 255.255.255.0 192.168.100.190~~  ~~ip route-static 10.5.2.0 255.255.255.0 192.168.100.190~~  ~~ip route-static 10.5.4.0 255.255.255.0 192.168.100.190~~  ~~ip route-static 10.5.6.0 255.255.255.0 192.168.100.190~~  ~~ip route-static 10.5.7.0 255.255.255.0 192.168.100.189~~  ~~ip route-static 10.5.8.0 255.255.255.0 192.168.100.189~~  ~~ip route-static 10.5.9.0 255.255.255.0 192.168.100.189~~  ~~ip route-static 10.5.11.0 255.255.255.0 192.168.100.189~~  ~~ip route-static 10.5.12.0 255.255.255.0 192.168.100.189~~  ~~ip route-static 10.5.14.0 255.255.255.0 192.168.100.189~~  ~~ip route-static 10.5.15.0 255.255.255.0 192.168.100.189~~  ~~ip route-static 10.5.16.0 255.255.255.0 192.168.100.189~~  ~~ip route-static 10.5.17.0 255.255.255.0 192.168.100.187~~  ~~ip route-static 10.5.18.0 255.255.255.0 192.168.100.187~~  ~~ip route-static 10.5.19.0 255.255.255.0 192.168.100.190~~  ~~ip route-static 10.5.21.0 255.255.255.0 192.168.100.190~~ |
| **# 医院内网电脑IP段，指向DELL交换机**  **## 5号楼网络：**  ip route-static 192.168.1.0 255.255.255.0 172.16.102.1  ip route-static 192.168.2.0 255.255.255.0 172.16.102.1  ip route-static 192.168.3.0 255.255.255.0 172.16.102.1  ip route-static 192.168.4.0 255.255.255.0 172.16.102.1  ip route-static 192.168.5.0 255.255.255.0 172.16.102.1  ip route-static 192.168.6.0 255.255.255.0 172.16.102.1  ip route-static 192.168.7.0 255.255.255.0 172.16.102.1  ip route-static 192.168.8.0 255.255.255.0 172.16.102.1  ip route-static 192.168.9.0 255.255.255.0 172.16.102.1  ip route-static 192.168.10.0 255.255.255.0 172.16.102.1  ip route-static 192.168.11.0 255.255.255.0 172.16.102.1  ip route-static 192.168.12.0 255.255.255.0 172.16.102.1  ip route-static 192.168.14.0 255.255.255.0 172.16.102.1  ip route-static 192.168.18.0 255.255.255.0 172.16.102.1  ip route-static 192.168.19.0 255.255.255.0 172.16.102.1  ~~ip route-static 192.168.20.0 255.255.255.0 172.16.102.1~~  ip route-static 192.168.27.0 255.255.255.0 172.16.102.1  ip route-static 192.168.60.0 255.255.255.0 172.16.102.1  ip route-static 192.168.63.0 255.255.255.0 172.16.102.1  **## 2号楼网络：**  ip route-static 192.168.21.0 255.255.255.0 172.16.102.1  ip route-static 192.168.22.0 255.255.255.0 172.16.102.1  ip route-static 192.168.80.0 255.255.248.0 172.16.102.1  ip route-static 192.168.88.0 255.255.255.0 172.16.102.1  ip route-static 192.168.89.0 255.255.255.0 172.16.102.1  **## 各分院网络：**  ip route-static 192.168.48.0 255.255.248.0 172.16.102.1 description TO\_GXYY\_48-55  ip route-static 192.168.56.0 255.255.252.0 172.16.102.1 description TO\_GXYY\_56-59  ip route-static 192.168.70.0 255.255.255.0 172.16.102.1 description MaZhai  ip route-static 192.168.75.0 255.255.255.0 172.16.102.1 description TO\_KangFu  ip route-static 192.168.76.0 255.255.255.0 172.16.102.1 description TO\_YuXing  ip route-static 192.168.94.0 255.255.255.0 172.16.102.1 description TO\_GouZhao  ip route-static 192.168.95.0 255.255.255.0 172.16.102.1 description TO\_WenHuaGong  ip route-static 192.168.97.0 255.255.255.0 172.16.102.1 description TO\_WuMian\_LaoGanBu  ip route-static 192.168.98.0 255.255.255.0 172.16.102.1 description TO\_RenDa\_JiWei  ip route-static 172.17.0.0 255.255.0.0 172.30.200.2 description to FenYuan\_XinZheng |
|  |
| **## 服务器网段：**  ip route-static 10.20.0.0 255.255.255.0 172.16.102.1  ip route-static 10.20.1.0 255.255.255.0 172.16.102.1  ip route-static 10.20.2.0 255.255.255.0 172.16.102.1  ~~ip route-static 10.30.0.0 255.255.255.0 172.16.102.1~~  ~~ip route-static 10.40.0.0 255.255.0.0 172.16.102.1~~  ~~# ip route-static 10.98.0.0 255.255.0.0 172.16.102.1~~  # 郑州市卫健委：视频专线  ip route-static 10.167.4.0 255.255.255.0 172.16.102.1  # 郑州市卫健委-卫生专网  ip route-static 10.224.0.0 255.255.0.0 172.16.102.1  ip route-static 10.232.0.0 255.255.0.0 172.16.102.1  # 郑州市卫健委-电子政务外网  ip route-static 59.207.34.0 255.255.255.0 172.16.102.1  ip route-static 59.207.51.0 255.255.255.0 172.16.102.1  ip route-static 59.207.61.0 255.255.255.0 172.16.102.1  # 三层路由互联地址：  ip route-static 11.0.2.0 255.255.255.0 172.16.102.1  ip route-static 172.16.100.0 255.255.255.248 172.16.102.1  ip route-static 172.16.101.0 255.255.255.248 172.16.102.1  ip route-static 172.16.103.0 255.255.255.0 172.16.102.1  ~~ip route-static 172.16.104.0 255.255.255.0 172.16.102.1~~ |
| **# 省市医保【省市医保防火墙，华为：USG6507，admin@123)】**  ip route-static 59.207.62.136 255.255.255.255 192.168.100.251 description ShiYiBao  ip route-static 21.0.255.15 255.255.255.255 192.168.100.251  ip route-static 10.120.0.0 255.255.0.0 192.168.100.251  ip route-static 10.121.0.0 255.255.0.0 192.168.100.251  ip route-static 172.18.192.29 255.255.255.255 192.168.100.251  ip route-static 172.18.192.40 255.255.255.248 192.168.100.251 description shiyibao\_jiekou\_172.18.192.42  ip route-static 172.18.224.136 255.255.255.248 192.168.100.251 description shengyibao\_jk\_172.18.224.137  ip route-static 172.120.0.0 255.255.0.0 192.168.100.251  ip route-static 191.191.191.0 255.255.255.0 192.168.100.251  ip route-static 192.1.0.0 255.255.0.0 192.168.100.251 |
| **# 省工伤医保（经过信息科防火墙172.16.101.3，进入外网省工伤VPN：192.168.0.65）**  ip route-static 10.120.6.22 255.255.255.255 192.168.100.253 description gongshangyibao  ip route-static 10.120.84.35 255.255.255.255 192.168.100.253 description gongshangyibao1  # 外网交换机（192.168.0.254）上有的路由：  ip route-static 10.120.96.54 32 192.168.0.65 description gongshangyibao1  **# 高招VPN（康复医院核心交换机192.168.75.251，转接深信服VPN）**  **- 此条路由已经失效，需要配置在5号楼DELL交换机上。**  ip route-static 10.255.2.0 255.255.255.0 192.168.75.251 description gaozhaotijian1 |
| ~~# 无效路由~~  ~~ip route-static 10.100.0.0 255.255.0.0 10.102.3.1~~  ~~ip route-static 10.102.0.0 255.255.0.0 10.102.3.1~~  ~~广电（全部弃用）~~  ~~ip route-static 172.16.52.5 255.255.255.255 192.168.100.241 description guangdian~~  ~~ip route-static 172.16.52.6 255.255.255.254 192.168.100.241 description guangdian~~  ~~ip route-static 172.16.52.8 255.255.255.254 192.168.100.241 description guangdian~~  ~~ip route-static 172.30.69.1 255.255.255.255 192.168.100.241 description guangdian~~  ~~ip route-static 172.30.93.76 255.255.255.255 192.168.100.241 description guangdian~~  ~~ip route-static 172.30.95.196 255.255.255.255 192.168.100.241 description guangdian~~  ~~#老农合改走医保专线（全部弃用）~~  ip route-static 172.16.10.0 255.255.255.0 192.168.0.15  ip route-static 172.16.90.0 255.255.255.0 192.168.0.15  **# 7.2、柯利尔（建行）**  ip route-static 15.0.160.35 255.255.255.255 172.16.102.1 description JianHang  **# 7.4、银联专线（Cisco 路由器：192.168.100.91）**  ip route-static 11.88.253.240 255.255.255.255 192.168.100.91  ip route-static 11.88.254.0 255.255.255.0 192.168.100.91  ip route-static 11.131.241.71 255.255.255.255 192.168.100.91  **# 10.1、无线AC-AP管理**  ip route-static 171.19.100.0 255.255.255.0 192.168.15.254  **# 7.3、120（院前急救）**  ip route-static 180.9.0.0 255.255.0.0 172.16.102.1 |

##### C）合并后的静态路由表（配置在华为S7703汇聚交换机）【68条】

###### 一、服务器网段：

ip route-static 10.20.0.0 24 172.16.101.1 desc Server\_Network

ip route-static 10.20.1.0 24 172.16.101.1 desc Server\_Network

ip route-static 10.20.2.0 24 172.16.101.1 desc Server\_Network

###### 二、5号楼网络：

ip route-static 192.168.1.0 24 172.16.101.1 desc Building\_5#\_Network

ip route-static 192.168.2.0 24 172.16.101.1 desc Building\_5#\_Network

ip route-static 192.168.3.0 24 172.16.101.1 desc Building\_5#\_Network

ip route-static 192.168.4.0 24 172.16.101.1 desc Building\_5#\_Network

ip route-static 192.168.5.0 24 172.16.101.1 desc Building\_5#\_Network

ip route-static 192.168.6.0 24 172.16.101.1 desc Building\_5#\_Network

ip route-static 192.168.7.0 24 172.16.101.1 desc Building\_5#\_Network

ip route-static 192.168.8.0 24 172.16.101.1 desc Building\_5#\_Network

ip route-static 192.168.9.0 24 172.16.101.1 desc Building\_5#\_Network

ip route-static 192.168.10.0 24 172.16.101.1 desc Building\_5#\_Network

ip route-static 192.168.11.0 24 172.16.101.1 desc Building\_5#\_Network

ip route-static 192.168.12.0 24 172.16.101.1 desc Building\_5#\_Network

ip route-static 192.168.14.0 24 172.16.101.1 desc Building\_5#\_Network

ip route-static 192.168.18.0 24 172.16.101.1 desc Building\_5#\_Network

ip route-static 192.168.19.0 24 172.16.101.1 desc Building\_5#\_Network

**~~# ip route-static 192.168.20.0 24 172.16.101.1 desc Building\_5#\_Network\_BeiYong~~**

ip route-static 192.168.27.0 24 172.16.101.1 desc Building\_5#\_Network

ip route-static 192.168.60.0 24 172.16.101.1 desc Building\_5#\_Network

ip route-static 192.168.63.0 24 172.16.101.1 desc Building\_5#\_Network

###### 三、2号楼网段（内网）

ip route-static 192.168.21.0 24 172.16.101.1 desc Building\_2#\_Network

ip route-static 192.168.22.0 24 172.16.101.1 desc Building\_2#\_Network

ip route-static 192.168.80.0 21 172.16.101.1 desc Building\_2#\_Network

ip route-static 192.168.88.0 24 172.16.101.1 desc Building\_2#\_Network

ip route-static 192.168.89.0 24 172.16.101.1 desc Building\_2#\_Network

###### 四、各分院网络

# 4.1、高新院区

ip route-static 192.168.48.0 21 172.16.101.1 desc FenYuan\_GaoXinYuanQu

ip route-static 192.168.56.0 22 172.16.101.1 desc FenYuan\_GaoXinYuanQu

# 4.2、马寨

ip route-static 192.168.70.0 24 172.16.101.1 desc FenYuan\_MaZhai

# 4.3、康复医院

ip route-static 192.168.75.0 24 172.16.101.1 desc FenYuan\_KangFu

# 4.4、豫欣医院

ip route-static 192.168.76.0 24 172.16.101.1 desc FenYuan\_YuXing

# 4.5、沟赵卫生院

ip route-static 192.168.94.0 24 172.16.101.1 desc FenYuan\_GouZhao

# 4.6、文化宫路院区

ip route-static 192.168.95.0 24 172.16.101.1 desc FenYuan\_WenHuaGong

# 4.7、老干部活动中心\五棉社区服务站

ip route-static 192.168.97.0 24 172.16.101.1 desc FenYuan\_LaoGanBu\_WuMian

# 4.8、纪检委\人大

ip route-static 192.168.98.0 24 172.16.101.1 desc FenYuan\_JiJianWei\_RenDa

# 4.9、新郑市公立医院（启用一个三层接口）

ip route-static 172.17.0.0 255.255.0.0 172.30.200.2 description to FenYuan\_XinZheng

###### 五、郑州市卫健委

# 5.1、电子政务外网

ip route-static 59.207.34.0 24 172.16.101.1 desc ZZSWJW\_DZZW

ip route-static 59.207.51.0 24 172.16.101.1 desc ZZSWJW\_DZZW

ip route-static 59.207.61.0 24 172.16.101.1 desc ZZSWJW\_DZZW

# 5.2、卫健委视频专线（防火墙互联地址，在DELL交换机上，VLAN390）

ip route-static 10.167.4.0 24 172.16.101.1 desc ZZSWJW\_ShiPingHuiYi

# 5.3、卫生专网

ip route-static 10.224.0.0 16 172.16.101.1 desc ZZSWJW\_WeiShengZhuanWang

ip route-static 10.232.0.0 16 172.16.101.1 desc ZZSWJW\_WeiShengZhuanWang

###### 六、三层路由互联地址：

ip route-static 11.0.1.0 255.255.255.0 172.16.101.1 description Layer3\_HuLian

ip route-static 11.0.2.0 255.255.255.0 172.16.101.1 description Layer3\_HuLian

ip route-static 172.16.100.0 255.255.255.0 172.16.101.1 description Layer3\_HuLian

ip route-static 172.16.103.0 255.255.255.0 172.16.101.1 description Layer3\_HuLian

###### 七、其他专线：

# 7.1、郑大一附院，远程医疗

ip route-static 10.100.0.0 16 172.16.101.1 desc ZhuanXian\_ZDYFY

ip route-static 10.102.0.0 16 172.16.101.1 desc ZhuanXian\_ZDYFY

# 7.2、柯利尔（建行）

ip route-static 15.0.160.35 32 172.16.101.1 desc ZhuanXian\_Clear\_JianHang

# 7.3、120（院前急救）

ip route-static 180.9.0.0 16 172.16.101.1 desc ZhuanXian\_120\_YuanQianJiJiu

# 7.4、银联专线（Cisco 路由器：192.168.100.91）

ip route-static 11.88.253.240 255.255.255.255 192.168.100.91 desc ZhuanXian\_YinLian

ip route-static 11.88.254.0 255.255.255.0 192.168.100.91 desc ZhuanXian\_YinLian

ip route-static 11.131.241.71 255.255.255.255 192.168.100.91 desc ZhuanXian\_YinLian

###### 八、省市医保（8条静态路由在使用）

**【省市医保防火墙192.168.100.251，华为：USG6507，admin@123)】**

# 省医保

ip route-static 10.85.96.36 255.255.255.255 192.168.100.251 desc YB\_ShengYiBao

ip route-static 192.1.0.0 255.255.0.0 192.168.100.251 desc YB\_ShengYiBao

# 省市医保公用

ip route-static 10.120.0.0 255.255.0.0 192.168.100.251 desc YB\_Sheng\_Shi\_YiBao

# 市医保

ip route-static 10.121.0.0 255.255.0.0 192.168.100.251 desc YB\_ShiYiBao

ip route-static 59.207.62.136 255.255.255.255 192.168.100.251 desc YB\_ShiYiBao

ip route-static 172.120.0.0 255.255.0.0 192.168.100.251 desc YB\_ShiYiBao

ip route-static 191.191.191.0 255.255.255.0 192.168.100.251 desc YB\_ShiYiBao

# 卫生局大数据：

ip route-static 21.0.255.15 255.255.255.255 192.168.100.251 desc YB\_WeiShengJu\_DaShuJu

**# 未确定（可能不用了）：【确定没有用】**

ip route-static 172.18.192.29 255.255.255.255 192.168.100.251 desc YB

ip route-static 172.18.192.40 255.255.255.248 192.168.100.251 desc YB\_shiyibao\_jiekou\_172.18.192.42

ip route-static 172.18.224.136 255.255.255.248 192.168.100.251 desc YB\_shengyibao\_jk\_172.18.224.137

###### 九、省工伤医保【经过信息科防火墙路由，华为USG安全网关，172.16.101.3】

ip route-static 10.120.84.35 255.255.255.255 172.16.101.3 desc YB\_ShengGongShang

ip route-static 10.120.96.54 255.255.255.255 172.16.101.3 desc YB\_ShengGongShang

###### 十、其他路由

10.1、无线AC（172.16.100.0 AP管理地址段，int vlan119: 192.168.15.1）

ip route-static 171.19.100.0 255.255.255.0 192.168.15.254 desc WiFi\_AP\_GuanLi

10.1、高招VPN（康复医院核心交换机192.168.75.251，转接深信服VPN）

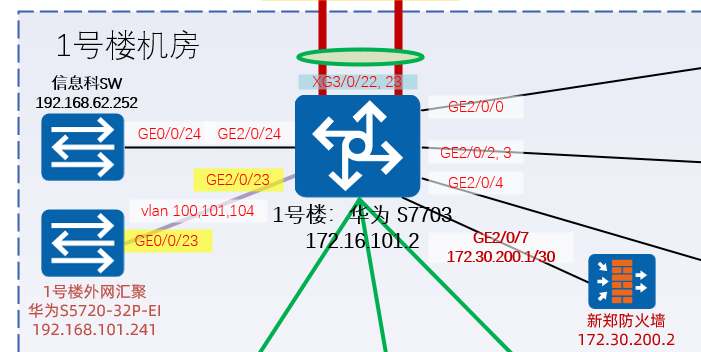
此条路由已经失效，应改配置在5号楼DELL交换机上。

**# ip route-static 10.255.2.0 255.255.255.0 192.168.75.251 desc gaozhaotijian1**

##### D）最终静态路由表【64条】

|  |
| --- |
| ~~ip route-static 0.0.0.0 0 172.16.101.3 desc TO\_Huawei\_USG~~ |
| ip route-static 10.20.0.0 255.255.255.0 172.16.101.1 description Server\_Network  ip route-static 10.20.1.0 255.255.255.0 172.16.101.1 description Server\_Network  ip route-static 10.20.2.0 255.255.255.0 172.16.101.1 description Server\_Network  ip route-static 10.85.96.36 255.255.255.255 192.168.100.251 description YB\_ShengYiBao  ip route-static 10.100.0.0 255.255.0.0 172.16.101.1 description ZhuanXian\_ZDYFY  ip route-static 10.102.0.0 255.255.0.0 172.16.101.1 description ZhuanXian\_ZDYFY  ip route-static 10.120.0.0 255.255.0.0 192.168.100.251 description YB\_Sheng\_Shi\_YiBao  ip route-static 10.120.84.35 255.255.255.255 172.16.101.3 description YB\_ShengGongShang  ip route-static 10.120.96.54 255.255.255.255 172.16.101.3 description YB\_ShengGongShang  ip route-static 10.121.0.0 255.255.0.0 192.168.100.251 description YB\_ShiYiBao  ip route-static 10.167.4.0 255.255.255.0 172.16.101.1 description ZZSWJW\_ShiPingHuiYi  ip route-static 10.224.0.0 255.255.0.0 172.16.101.1 description ZZSWJW\_WeiShengZhuanWang  ip route-static 10.232.0.0 255.255.0.0 172.16.101.1 description ZZSWJW\_WeiShengZhuanWang+  ip route-static 11.0.1.0 255.255.255.0 172.16.101.1 description Layer3\_HuLian  ip route-static 11.0.2.0 255.255.255.0 172.16.101.1 description Layer3\_HuLian  ip route-static 11.88.253.240 255.255.255.255 192.168.100.91 description ZhuanXian\_YinLian  ip route-static 11.88.254.0 255.255.255.0 192.168.100.91 description ZhuanXian\_YinLian  ip route-static 11.131.241.71 255.255.255.255 192.168.100.91 description ZhuanXian\_YinLian  ip route-static 15.0.160.35 255.255.255.255 172.16.101.1 description ZhuanXian\_Clear\_JianHang  ip route-static 21.0.255.15 255.255.255.255 192.168.100.251 description YB\_WeiShengJu\_DaShuJu  ip route-static 59.207.34.0 255.255.255.0 172.16.101.1 description ZZSWJW\_DZZW  ip route-static 59.207.51.0 255.255.255.0 172.16.101.1 description ZZSWJW\_DZZW  ip route-static 59.207.61.0 255.255.255.0 172.16.101.1 description ZZSWJW\_DZZW  ip route-static 59.207.62.136 255.255.255.255 192.168.100.251 description YB\_ShiYiBao  ip route-static 171.19.100.0 255.255.255.0 192.168.15.254 description WiFi\_AP\_GuanLi  ip route-static 172.16.100.0 255.255.255.0 172.16.101.1 description Layer3\_HuLian  ip route-static 172.16.103.0 255.255.255.0 172.16.101.1 description Layer3\_HuLian  ip route-static 172.17.0.0 255.255.0.0 172.30.200.2 description to FenYuan\_XinZheng  ip route-static 172.120.0.0 255.255.0.0 192.168.100.251 description YB\_ShiYiBao  ip route-static 180.9.0.0 255.255.0.0 172.16.101.1 description ZhuanXian\_120\_YuanQianJiJiu  ip route-static 191.191.191.0 255.255.255.0 192.168.100.251 description YB\_ShiYiBao  ip route-static 192.1.0.0 255.255.0.0 192.168.100.251 description YB\_ShengYiBao  ip route-static 192.168.1.0 255.255.255.0 172.16.101.1 description Building\_5#\_Network  ip route-static 192.168.2.0 255.255.255.0 172.16.101.1 description Building\_5#\_Network  ip route-static 192.168.3.0 255.255.255.0 172.16.101.1 description Building\_5#\_Network  ip route-static 192.168.4.0 255.255.255.0 172.16.101.1 description Building\_5#\_Network  ip route-static 192.168.5.0 255.255.255.0 172.16.101.1 description Building\_5#\_Network  ip route-static 192.168.6.0 255.255.255.0 172.16.101.1 description Building\_5#\_Network  ip route-static 192.168.7.0 255.255.255.0 172.16.101.1 description Building\_5#\_Network  ip route-static 192.168.8.0 255.255.255.0 172.16.101.1 description Building\_5#\_Network  ip route-static 192.168.9.0 255.255.255.0 172.16.101.1 description Building\_5#\_Network  ip route-static 192.168.10.0 255.255.255.0 172.16.101.1 description Building\_5#\_Network  ip route-static 192.168.11.0 255.255.255.0 172.16.101.1 description Building\_5#\_Network  ip route-static 192.168.12.0 255.255.255.0 172.16.101.1 description Building\_5#\_Network  ip route-static 192.168.14.0 255.255.255.0 172.16.101.1 description Building\_5#\_Network  ip route-static 192.168.18.0 255.255.255.0 172.16.101.1 description Building\_5#\_Network  ip route-static 192.168.19.0 255.255.255.0 172.16.101.1 description Building\_5#\_Network  ip route-static 192.168.21.0 255.255.255.0 172.16.101.1 description Building\_2#\_Network  ip route-static 192.168.22.0 255.255.255.0 172.16.101.1 description Building\_2#\_Network  ip route-static 192.168.27.0 255.255.255.0 172.16.101.1 description Building\_5#\_Network  ip route-static 192.168.48.0 255.255.248.0 172.16.101.1 description FenYuan\_GaoXinYuanQu  ip route-static 192.168.56.0 255.255.252.0 172.16.101.1 description FenYuan\_GaoXinYuanQu  ip route-static 192.168.60.0 255.255.255.0 172.16.101.1 description Building\_5#\_Network  ip route-static 192.168.63.0 255.255.255.0 172.16.101.1 description Building\_5#\_Network  ip route-static 192.168.70.0 255.255.255.0 172.16.101.1 description FenYuan\_MaZhai  ip route-static 192.168.75.0 255.255.255.0 172.16.101.1 description FenYuan\_KangFu  ip route-static 192.168.76.0 255.255.255.0 172.16.101.1 description FenYuan\_YuXing  ip route-static 192.168.80.0 255.255.248.0 172.16.101.1 description Building\_2#\_Network  ip route-static 192.168.88.0 255.255.255.0 172.16.101.1 description Building\_2#\_Network  ip route-static 192.168.89.0 255.255.255.0 172.16.101.1 description Building\_2#\_Network  ip route-static 192.168.94.0 255.255.255.0 172.16.101.1 description FenYuan\_GouZhao  ip route-static 192.168.95.0 255.255.255.0 172.16.101.1 description FenYuan\_WenHuaGong  ip route-static 192.168.97.0 255.255.255.0 172.16.101.1 description FenYuan\_LaoGanBu\_WuMian  ip route-static 192.168.98.0 255.255.255.0 172.16.101.1 description FenYuan\_JiJianWei\_RenDa |

### 连接外网交换机



#### 配置1号楼外网汇聚华为S5720-32P-EI（192.168.101.241）：

interface GigabitEthernet0/0/23

description TO\_Huawei\_S7703\_Core

port link-type trunk

undo port trunk allow-pass vlan 1

port trunk allow-pass vlan 100 to 101 104

#### 配置1号楼内网汇聚：华为S7703

interface GigabitEthernet2/0/23

description TO\_Huawei\_S5720(wai)\_192.168.101.241\_p23

port link-type trunk

undo port trunk allow-pass vlan 1

port trunk allow-pass vlan 100 to 101 104

### 关于切换192.168.100.254网关部分

#### 华为新交换机S7703：改路由（医保、银联）

undo interface Vlan-interface1000

改路由：192.168.100.251、192.168.100.91

undo ip route-static 10.85.96.36 255.255.255.255 192.168.100.251

undo ip route-static 10.120.0.0 255.255.0.0 192.168.100.251

undo ip route-static 10.121.0.0 255.255.0.0 192.168.100.251

undo ip route-static 21.0.255.15 255.255.255.255 192.168.100.251

undo ip route-static 59.207.62.136 255.255.255.255 192.168.100.251

undo ip route-static 172.120.0.0 255.255.0.0 192.168.100.251

undo ip route-static 191.191.191.0 255.255.255.0 192.168.100.251

undo ip route-static 192.1.0.0 255.255.0.0 192.168.100.251

ip route-static 10.85.96.36 255.255.255.255 172.16.101.1 desc YB\_ShengYiBao

ip route-static 10.120.0.0 255.255.0.0 172.16.101.1 desc YB\_Sheng\_Shi\_YiBao

ip route-static 10.121.0.0 255.255.0.0 172.16.101.1 desc YB\_ShiYiBao

ip route-static 21.0.255.15 255.255.255.255 172.16.101.1 desc YB\_WeiShengJu\_DaShuJu

ip route-static 59.207.62.136 255.255.255.255 172.16.101.1 desc YB\_ShiYiBao

ip route-static 172.120.0.0 255.255.0.0 172.16.101.1 desc YB\_ShiYiBao

ip route-static 191.191.191.0 255.255.255.0 172.16.101.1 desc YB\_ShiYiBao

ip route-static 192.1.0.0 255.255.0.0 172.16.101.1 desc YB\_ShengYiBao

undo ip route-static 11.88.253.240 255.255.255.255 192.168.100.91

undo ip route-static 11.88.254.0 255.255.255.0 192.168.100.91

undo ip route-static 11.131.241.71 255.255.255.255 192.168.100.91

ip route-static 11.88.253.240 255.255.255.255 172.16.101.1 desc ZhuanXian\_YinLian

ip route-static 11.88.254.0 255.255.255.0 172.16.101.1 desc ZhuanXian\_YinLian

ip route-static 11.131.241.71 255.255.255.255 172.16.101.1 desc ZhuanXian\_YinLian

**ip route-static 192.168.100.0 255.255.255.0 172.16.101.1 desc Server\_Network**

#### 修改2号楼华为核心交换机S12708：改路由（医保、银联）

interface Vlan-interface1000

ip address 192.168.100.254 255.255.255.0

改路由：192.168.100.251、192.168.100.91

ip route-st 10.85.96.36 255.255.255.255 192.168.100.251 desc YB\_ShengYiBao

ip route-st 10.120.0.0 255.255.0.0 192.168.100.251 desc YB\_Sheng\_Shi\_YiBao

ip route-st 10.121.0.0 255.255.0.0 192.168.100.251 desc YB\_ShiYiBao

ip route-st 21.0.255.15 255.255.255.255 192.168.100.251 desc YB\_WeiShengJu\_DaShuJu

ip route-st 59.207.62.136 255.255.255.255 192.168.100.251 desc YB\_ShiYiBao

ip route-st 172.120.0.0 255.255.0.0 192.168.100.251 desc YB\_ShiYiBao

ip route-st 191.191.191.0 255.255.255.0 192.168.100.251 desc YB\_ShiYiBao

ip route-st 192.1.0.0 255.255.0.0 192.168.100.251 desc YB\_ShengYiBao

ip route-st 11.88.253.240 255.255.255.255 192.168.100.91 desc ZhuanXian\_YinLian

ip route-st 11.88.254.0 255.255.255.0 192.168.100.91 desc ZhuanXian\_YinLian

ip route-st 11.131.241.71 255.255.255.255 192.168.100.91 desc ZhuanXian\_YinLian

### 配置信息科内外网防火墙（华为防火墙）



#### 1）防火墙路由表：

|  |
| --- |
| 路由到内网网段：？？？ |
| ip route-static 10.20.0.0 255.255.255.0 172.16.101.2 desc Server\_Network  ip route-static 10.20.1.0 255.255.255.0 172.16.101.2 desc Server\_Network  ip route-static 10.20.2.0 255.255.255.0 172.16.101.2 desc Server\_Network  ip route-static 10.85.96.36 255.255.255.255 172.16.101.2 desc YB\_ShengYiBao  ip route-static 10.100.0.0 255.255.0.0 172.16.101.2 desc ZhuanXian\_ZDYFY  ip route-static 10.102.0.0 255.255.0.0 172.16.101.2 desc ZhuanXian\_ZDYFY  ip route-static 10.120.0.0 255.255.0.0 172.16.101.2 desc YB\_Sheng\_Shi\_YiBao  ip route-static 10.120.84.35 255.255.255.255 10.10.12.254 desc YB\_ShengGongShang  ip route-static 10.120.96.54 255.255.255.255 10.10.12.254 desc YB\_ShengGongShang  ip route-static 10.121.0.0 255.255.0.0 172.16.101.2 desc YB\_ShiYiBao  ip route-static 10.167.4.0 255.255.255.0 172.16.101.2 desc ZZSWJW\_ShiPingHuiYi  ip route-static 10.224.0.0 255.255.0.0 172.16.101.2 desc ZZSWJW\_WeiShengZhuanWang  ip route-static 10.232.0.0 255.255.0.0 172.16.101.2 desc ZZSWJW\_WeiShengZhuanWang+  ip route-static 11.0.1.0 255.255.255.0 172.16.101.2 desc Layer3\_HuLian  ip route-static 11.0.2.0 255.255.255.0 172.16.101.2 desc Layer3\_HuLian  ip route-static 11.88.253.240 255.255.255.255 172.16.101.2 desc ZhuanXian\_YinLian  ip route-static 11.88.254.0 255.255.255.0 172.16.101.2 desc ZhuanXian\_YinLian  ip route-static 11.131.241.71 255.255.255.255 172.16.101.2 desc ZhuanXian\_YinLian  ip route-static 15.0.160.35 255.255.255.255 172.16.101.2 desc ZhuanXian\_Clear\_JianHang  ip route-static 21.0.255.15 255.255.255.255 172.16.101.2 desc YB\_WeiShengJu\_DaShuJu  ip route-static 59.207.34.0 255.255.255.0 172.16.101.2 desc ZZSWJW\_DZZW  ip route-static 59.207.51.0 255.255.255.0 172.16.101.2 desc ZZSWJW\_DZZW  ip route-static 59.207.61.0 255.255.255.0 172.16.101.2 desc ZZSWJW\_DZZW  ip route-static 59.207.62.136 255.255.255.255 172.16.101.2 desc YB\_ShiYiBao  ip route-static 171.19.100.0 255.255.255.0 172.16.101.2 desc WiFi\_AP\_GuanLi  ip route-static 172.16.100.0 255.255.255.0 172.16.101.2 desc Layer3\_HuLian  ip route-static 172.16.103.0 255.255.255.0 172.16.101.2 desc Layer3\_HuLian  ip route-static 172.17.0.0 255.255.0.0 172.30.200.2 desc to FenYuan\_XinZheng  ip route-static 172.120.0.0 255.255.0.0 172.16.101.2 desc YB\_ShiYiBao  ip route-static 180.9.0.0 255.255.0.0 172.16.101.2 desc ZhuanXian\_120\_YuanQianJiJiu  ip route-static 191.191.191.0 255.255.255.0 172.16.101.2 desc YB\_ShiYiBao  ip route-static 192.1.0.0 255.255.0.0 172.16.101.2 desc YB\_ShengYiBao  ip route-static 192.168.0.0 255.255.255.0 10.10.12.254  **ip route-static 192.168.0.0 255.255.0.0 172.16.101.2 desc HIS\_LAN** |
| **#缺省路由：**  ip route-static 0.0.0.0 0 10.10.12.254 description Default\_to\_192.168.0.254 |

#### 2）修改外网核心交换机（192.168.0.254）路由表：

**原指向内网的静态路由：**

ip route-static 10.20.0.0 24 192.168.100.254

ip route-static 10.20.1.0 24 192.168.100.254

ip route-static 10.40.124.0 24 192.168.100.254

ip route-static 172.16.101.0 29 192.168.100.254 description DELL

ip route-static 172.16.103.0 24 192.168.100.254

ip route-static 192.168.0.0 18 192.168.100.254 description 0-63

ip route-static 192.168.64.0 19 192.168.100.254 description 64-95

ip route-static 192.168.96.0 22 192.168.100.254 description 96-99

ip route-static 192.168.100.91 32 192.168.100.254

ip route-static 192.168.100.251 32 192.168.100.254

**删除原指向内网的静态路由：**

undo ip route-static 10.20.0.0 24 192.168.100.254

undo ip route-static 10.20.1.0 24 192.168.100.254

undo ip route-static 10.40.124.0 24 192.168.100.254

undo ip route-static 172.16.101.0 29 192.168.100.254

undo ip route-static 172.16.103.0 24 192.168.100.254

undo ip route-static 192.168.0.0 18 192.168.100.254

undo ip route-static 192.168.64.0 19 192.168.100.254

undo ip route-static 192.168.96.0 22 192.168.100.254

undo ip route-static 192.168.100.91 32 192.168.100.254

undo ip route-static 192.168.100.251 32 192.168.100.254

**添加新的指向内网的静态路由（指向华为USG 6309防火墙）：**

ip route-static 10.20.0.0 24 10.10.12.250

ip route-static 10.20.1.0 24 10.10.12.250

ip route-static 10.40.124.0 24 10.10.12.250

ip route-static 172.16.101.0 29 10.10.12.250 description DELL

ip route-static 172.16.103.0 24 10.10.12.250

ip route-static 192.168.0.0 18 10.10.12.250 description 0-63

ip route-static 192.168.64.0 19 10.10.12.250 description 64-95

ip route-static 192.168.96.0 22 10.10.12.250 description 96-99

ip route-static 192.168.100.91 32 10.10.12.250

ip route-static 192.168.100.251 32 10.10.12.250

#### 3）修改1号楼汇聚交换机（172.16.101.2）路由表：

ip route-static 10.10.0.0 16 172.16.101.3

#### 4）修改2号楼核心交换机（172.16.101.1）路由表：

ip route-static 10.10.0.0 16 172.16.101.2

### 配置2号楼核心交换机S12708（10.20.0.254）交换机

#### 配置到1号楼华为 S7703交换机的互联接口（仅修改VLAN Trunk）

|  |  |
| --- | --- |
| **现有S12708配置** | **修改后的S12708配置** |
| interface Eth-Trunk8  description to-1haolou-dell-s4048t  port link-type trunk  undo port trunk allow-pass vlan 1  port trunk allow-pass vlan 62 119 to 120 300 **~~to 301 1000~~** 2013 **~~2999~~** 3001 **~~3004~~**  traffic-filter inbound acl 3003  traffic-filter outbound acl 3003  mode lacp  load-balance dst-mac  port-mirroring to observe-port 3 inbound  port-mirroring to observe-port 3 outbound | interface Eth-Trunk8  description to-1haolou-dell-s4048t  port link-type trunk  undo port trunk allow-pass vlan 1  **port trunk allow-pass vlan 62 119 to 120 300 2013 3001**  traffic-filter inbound acl 3003  traffic-filter outbound acl 3003  mode lacp  load-balance dst-mac  port-mirroring to observe-port 3 inbound  port-mirroring to observe-port 3 outbound |
| interface XGigabitEthernet7/0/2  description to-1haolou-dell-s4048t#1\_1/52/1  eth-trunk 8  interface XGigabitEthernet7/0/3  description to-1haolou-dell-s4048t#2\_2/52/1  eth-trunk 8 | interface XGigabitEthernet7/0/2  description to-1haolou-dell-s4048t#1\_1/52/1  eth-trunk 8  interface XGigabitEthernet7/0/3  description to-1haolou-dell-s4048t#2\_2/52/1  eth-trunk 8 |

**配置到省工伤的路由（经过华为防火墙）：**

ip route-static 10.120.84.35 255.255.255.255 172.16.101.3 desc YB\_ShengGongShang

ip route-static 10.120.96.54 255.255.255.255 172.16.101.3 desc YB\_ShengGongShang

## 改造与变更流程



## 保障方案

### 指挥组

连军胜、李晓莉

### 本次改造影响的楼层范围

门诊楼

急诊楼

门诊2楼远程PACS诊断室

1号楼C座1楼

### 发布网络改造维护通知

### 技术保障与分工

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **序号** | **姓名** | **手机号码** | **部门** | **分工** |
| 1 | 李常福 | 13633825095 | 信息科 | 网络数据配置 |
| 2 | 王凌宇 | 15670612817 | 信息科 | 网络数据配置 |
| 3 | 王寅 | 13598847384 | 信息科 | 设备搬迁、线标 |
| 4 | 杨匀正 | 18638558221 | 信息科 | 安全设备迁移 |
| 5 | 熊文伟 | 18503713334 | 第三方运维 | 现场网络调试 |
| 6 | 张飞 | 15890904714 | 第三方运维 | 设备搬迁、线标 |
| 7 |  |  | 网络工程师 | 设备供货商 |

### 切换计划

#### 第一阶段迁移计划：在2021年7月9日前：

1. 完成192.168.100.0/24段迁移
2. 完成华为S7703交换机上架与配置
3. 完成需要迁移网线、光纤跳线标签打印



#### 第二阶段迁移计划：

|  |  |  |
| --- | --- | --- |
| **日期** | **时间** | **变更操作内容** |
| **一、准备工作** | | |
| 7月23日 | 12:00前完成 | 1、准备设备上架机柜螺丝，标签数据；  2、准备充足的电源线、光纤跳线，扎带；  3、推车，打光笔，寻线仪，5米网线15根，RJ45头，网钳，笔记本电脑2台，串口线。 |
| 7月23日 | 20:00-21:00 | 做好相关的网络设备配置备份 |
| **二、调整配置** | | |
| 7月23日 | 21:00-21:20 | 配置华为交换机，调整光纤与网线连接 |
| 7月23日 | 21:20-21:40 | 配置2号楼核心交换机 |
| 7月23日 | 21:40-22:00 | 验证配置，测试各系统连通性 |
| 7月23日 | 22:00 | 完成改造，后续跟进理线与标签打印。 |

### 切换后，测试网络连通性：

|  |  |
| --- | --- |
| 服务器网段 | 10.20.0.254  10.20.1.254  10.20.2.254 |
| 5号楼网络 | 192.168.1.254  192.168.2.254  192.168.63.254 |
| 2号楼网段 | 192.168.21.254  192.168.89.254 |
| 各分院网络 | 192.168.51.254  192.168.55.254  192.168.70.254  192.168.75.254  192.168.76.254  192.168.94.254  192.168.95.254  192.168.97.254  192.168.98.254 |
| 新郑分院 | 172.17.0.0 |
| 郑州市卫健委 | 59.207.34.0  59.207.51.0  59.207.61.0  10.167.4.0  10.224.0.0  10.232.0.0 |
| 其他专线：郑大一附院，远程医疗 | 10.100.0.0  10.102.0.0 |
| 其他专线：柯利尔（建行） | 15.0.160.35 |
| 其他专线：120（院前急救） | 180.9.0.0 |
| 其他专线：银联专线 | 192.168.100.91  11.88.253.240  11.131.241.71 |
| 省市医保 | 10.85.96.36  21.0.255.15  59.207.62.136  172.18.192.29 |
| 省工伤医保 | 10.120.6.22  10.120.84.35  10.120.96.54 |

### 应急措施

启动迁移后，如果出现问题，各方应在30分钟内排查解决。如果无法在短时间内解决，恢复以前线路配置，线路还原，网络数据配置还原，分析原因，切换另行通知。

**实施人员签字：**

**监督人员签字：**

**科长签字：**

**确认日期：**