**ANEXO 8**

**Tabla de Direccionamientos de Sub Redes.**

Cabe agregar que a los efectos de cubrir las 300 IP solicitadas y al implementar una SubRed para cada Departamento se seleccionó IP de máscara 25 para alcanzar el requerimiento solicitado de la forma más eficaz.

1. Subred Departamento IT.
   1. VLAN 40.

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| **Rango IP** |
| 192.168.40.0 a 192.168.40.127/25 |

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| **Equipamiento** | **Dirección IP** | **Puerta enlace** | **Boca** |
| Router Principal agregación | 10.10.0.2/30 |  | 1 |
| Router Principal agregación | 10.10.1.2/30 |  | 2 |
| Router Principal agregación | 10.10.2.2/30 |  | 3 |
| Router Principal agregación | 10.10.3.2/30 |  | 4 |
| Router Principal agregación | 10.10.4.2/30 |  | 5 |
| Router Principal agregación | 10.10.5.2/30 |  | 6 |
| Router Principal agregación | 10.10.6.2/30 |  | 7 |
| Router Principal agregación | 10.10.7.2/30 |  | 8 |
| Router Principal agregación | 10.10.8.2/30 |  | 9 |

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| **Equipamiento** | **Dirección IP** | **Puerta enlace** | **Boca** |
| Router Principal agregación | 10.10.9.2/30 |  | 10 |
| Router Principal agregación | 10.10.10.2/30 |  | 11 |

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| **Equipamiento** | **Dirección IP** | **Puerta enlace** | **Boca** |
| Servidor Base de Datos Raid-1 | 10.10.3.3/30 | 10.10.3.2/30 |  |
| Servidor PBX | 10.10.9.3/30 | 10.10.9.2/30 |  |
| Firewall | 10.10.0.3/30 | 10.10.0.2/30 |  |
| Switch1 Capa 3 | 10.10.8.3/30 | 10.10.8.2/30 | 1 |
| Switch1 Capa 3 | 10.11.0.3/30 | 10.11.0.2/30 | 2 |
| Switch1 Capa 3 |  | 192.168.10.1/25 | 3 |
| Switch1 Capa 3 | 10.11.1.0/30 | 10.11.0.2/30 | 2 |
| Switch1 Capa 3 | 10.11.2.0/30 | 10.11.0.2/30 | 2 |
| Switch1 Capa 3 | 10.11.3.0/30 | 10.11.0.2/30 | 2 |
| Switch2 Capa 3 | 10.10.7.3/30 | 10.100.7.2/30 | 1 |
| Switch2 Capa 3 | 10.11.1.3/30 | 10.11.1.2/30 | 2 |
| Switch2 Capa 3 | 10.11.0.2/30 | 10.11.0.3/30 | 3 |
| Switch2 Capa 3 | 10.11.2.0/30 | 10.11.1.2/30 | 2 |
| Switch2 Capa 3 | 10.11.3.0/30 | 10.11.1.2/30 | 2 |
| Switch2 Capa 3 |  | 192.168.20.1/25 | 4 |
| Switch3 Capa 3 | 10.10.6.3/30 | 10.10.6.2/30 | 1 |
| Switch3 Capa 3 | 10.11.2.3/30 | 10.11.2.2/30 | 2 |
| Switch3 Capa 3 | 10.11.3.0/30 | 10.11.2.2/30 | 2 |
| Switch3 Capa 3 | 10.11.1.2/30 | 10.11.1.3/30 | 3 |
| **Equipamiento** | **Dirección IP** | **Puerta enlace** | **Boca** |
| Switch3 Capa 3 | 10.11.0.0/30 | 10.11.1.3/30 | 3 |
| Switch3 Capa 3 |  | 192.168.30.1/25 | 4 |
| Switch4 Capa 3 | 10.10.5.3/30 | 10.10.5.2/30 | 1 |
| Switch4 Capa 3 | 10.11.3.3/30 | 10.11.3.2/30 | 2 |
| Switch4 Capa 3 | 10.11.2.2/30 | 10.11.2.3/30 | 3 |
| Switch4 Capa 3 | 10.11.1.0/30 | 10.11.2.3/30 | 3 |
| Switch4 Capa 3 | 10.11.0.0/30 | 10.11.2.3/30 | 3 |
| Switch4 Capa 3 |  | 192.168.40.1/25 | 4 |
| Switch5 Capa 3 | 10.10.4.3/30 | 10.10.4.2/30 | 1 |
| Switch5 Capa 3 | 10.11.3.2/30 | 10.11.3.3/30 | 2 |
| Switch5 Capa 3 | 10.11.2.0/30 | 10.11.3.3/30 | 2 |
| Switch5 Capa 3 | 10.11.1.0/30 | 10.11.3.3/30 | 2 |
| Switch5 Capa 3 | 10.11.0.0/30 | 10.11.3.3/30 | 2 |
| Switch5 Capa 3 |  | 192.168.50.1/25 | 3 |
| PC 1 (VLAN 10) | 192.168.10.2/25 | 192.168.10.1/25 |  |
| PC 3 (VLAN 10) | 192.168.10.4/25 | 192.168.10.1/25 |  |
| PC 4 (VLAN 10) | 192.168.10.5/25 | 192.168.10.1/25 |  |
| PC 2 (VLAN 20) | 192.168.20.3/25 | 192.168.20.1/25 |  |
| PC 3 (VLAN 20) | 192.168.20.4/25 | 192.168.20.1/25 |  |
| PC 1 (VLAN 30) | 192.168.30.2/25 | 192.168.30.1/25 |  |
| PC 4 (VLAN 30) | 192.168.30.5/25 | 192.168.30.1/25 |  |
| PC 7 (VLAN 40) | 192.168.40.8/25 | 192.168.40.1/25 |  |
| PC 5 (VLAN 40) | 192.168.40.6/25 | 192.168.40.1/25 |  |
| IP Tel-1 (VLAN 50) | 192.168.50.2/25 | 192.168.50.1/25 |  |
| IP Tel- 3 (VLAN 50) | 192.168.50.4/25 | 192.168.50.1/25 |  |

1. Subred Departamento Administración.
   1. VLAN 10.

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| **Rango IP** |
| 192.168.10.0 a 192.168.10.127/25 |

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| **Equipamiento** | **Dirección IP** | **Puerta enlace** | **Boca** |
| Switch capa 3 agregación | 10.10.2.3/30 | 10.10.2.2/30 | 1 |
| Switch capa 3 agregación | 10.14.1.3/30 | 10.14.1.2/30 | 2 |
| Switch capa 3 agregación | 10.14.2.3/30 | 10.14.2.2/30 | 3 |
| Switch capa 3 agregación | 10.14.3.3/30 | 10.14.3.2/30 | 4 |
| Switch capa 3 agregación | 10.14.4.3/30 | 10.14.4.2/30 | 5 |
| Switch capa 3 agregación | 10.14.5.3/30 | 10.14.5.2/30 | 6 |
| Switch1 capa 3 | 10.14.5.2/30 | 10.14.5.3/30 | 1 |
| Switch1 capa 3 | 10.15.0.3/30 | 10.15.0.2/30 | 2 |
| Switch1 capa 3 | 10.15.1.0/30 | 10.15.0.2/30 | 2 |
| Switch1 capa 3 | 10.15.2.0/30 | 10.15.0.2/30 | 2 |
| Switch1 capa 3 | 10.15.3.0/30 | 10.15.0.2/30 | 2 |
| Switch1 capa 3 |  | 192.168.10.1/25 | 3 |
| Switch 2 capa 3 | 10.14.4.2/30 | 10.14.4.3/30 | 1 |
| Switch 2 capa 3 | 10.15.1.3/30 | 10.15.1.2/30 | 2 |
| Switch 2 capa 3 |  | 192.168.20.1/25 | 3 |
| Switch 2 capa 3 | 10.15.0.2/30 | 10.15.0.3/30 | 4 |
| Switch 2 capa 3 | 10.15.2.0/30 | 10.15.1.2/30 | 2 |
| Switch 2 capa 3 | 10.15.3.0/0 | 10.15.1.2/30 | 2 |

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| **Equipamiento** | **Dirección IP** | **Puerta enlace** | **Boca** |
| Switch 3 capa 3 | 10.14.3.2/30 | 10.14.3.3/30 | 1 |
| Switch 3 capa 3 | 10.15.2.3/30 | 10.15.2.2/30 | 2 |
| Switch 3 capa 3 |  | 192.168.30.1/25 | 3 |
| Switch 3 capa 3 | 10.15.1.2/30 | 10.15.1.3/30 | 4 |
| Switch 3 capa 3 | 10.15.0.0/30 | 10.15.1.3/30 | 4 |
| Switch 3 capa 3 | 10.15.3.0/30 | 10.15.2.2/30 | 2 |
| Switch 4 capa 3 | 10.14.2.2/30 | 10.14.2.3/30 | 1 |
| Switch 4 capa 3 | 10.15.3.3/30 | 10.15.3.2/30 | 2 |
| Switch 4 capa 3 |  | 192.168.40.1/25 | 3 |
| Switch 4 capa 3 | 10.15.2.2/30 | 10.15.2.3/30 | 4 |
| Switch 4 capa 3 | 10.15.1.0/30 | 10.15.2.3/30 | 4 |
| Switch 4 capa 3 | 10.15.0.0/30 | 10.15.2.3/30 | 4 |
| Switch 5 capa 3 | 10.14.1.2/30 | 10.14.1.3/30 | 1 |
| Switch 5 capa 3 |  | 192.168.50.1/25 | 2 |
| Switch 5 capa 3 | 10.15.3.2/30 | 10.15.3.3/30 | 3 |
| Switch 5 capa 3 | 10.15.2.0/30 | 10.15.3.3/30 | 3 |
| Switch 5 capa 3 | 10.15.1.0/30 | 10.15.3.3/30 | 3 |
| Switch 5 capa 3 | 10.15.0.0/30 | 10.15.3.3/30 | 3 |
| PC 11 (VLAN 10) | 192.168.10.12/25 | 192.168.10.1/25 |  |
| PC 12 (VLAN 10) | 192.168.10.13/25 | 192.168.10.1/25 |  |
| PC 14 (VLAN 10) | 192.168.10.15/25 | 192.168.10.1/25 |  |
| PC 16 (VLAN 10) | 192.168.10.17/25 | 192.168.10.1/25 |  |
| PC 18 (VLAN 20) | 192.168.20.19/25 | 192.168.20.1/25 |  |
| PC 12 (VLAN 20) | 192.168.20.13/25 | 192.168.20.1/25 |  |
| PC 11 (VLAN 30) | 192.168.30.12/25 | 192.168.30.1/25 |  |
| PC 9 (VLAN 30) | 192.168.30.10/25 | 192.168.30.1/25 |  |
| PC 15 (VLAN 40) | 192.168.40.16/25 | 192.168.40.1/25 |  |
| **Equipamiento** | **Dirección IP** | **Puerta enlace** | **Boca** |
| PC19 (VLAN 40) | 192.168.40.20/25 | 192.68.40.1/25 |  |
| IP Tel-6 (VLAN 50) | 192.168.50.7/25 | 192.168.50.1/25 |  |
| IP Tel- 9 (VLAN 50) | 192.168.50.10/25 | 192.168.50.1/25 |  |

1. Subred Departamento Planta.
   1. VLAN 20.

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| **Rango IP** |
| 192.168.20.0 a 192.168.20.127/25 |

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| **Equipamiento** | **Dirección IP** | **Puerta enlace** | **Boca** |
| Switch capa 3 agregación | 10.10.1.3/30 | 10.10.1.2/30 | 1 |
| Switch capa 3 agregación | 10.12.1.3/30 | 10.12.1.2/30 | 2 |
| Switch capa 3 agregación | 10.12.2.3/30 | 10.12.2.2/30 | 3 |
| Switch capa 3 agregación | 10.12.3.3/30 | 10.12.3.2/30 | 4 |
| Switch capa 3 agregación | 10.12.4.3/30 | 10.12.4.2/30 | 5 |
| Switch capa 3 agregación | 10.12.5.3/30 | 10.12.5.2/30 | 6 |
| Switch1 capa 3 | 10.12.5.2/30 | 10.12.5.3/30 | 1 |
| Switch1 capa 3 | 10.13.0.3/30 | 10.13.0.2/30 | 2 |
| Switch1 capa 3 | 10.13.1.0/30 | 10.13.0.2/30 | 2 |
| Switch1 capa 3 | 10.13.2.0/30 | 10.13.0.2/30 | 2 |
| Switch1 capa 3 | 10.13.3.0/30 | 10.13.0.2/30 | 2 |

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| **Equipamiento** | **Dirección IP** | **Puerta enlace** | **Boca** |
| Switch1 capa 3 |  | 192.168.10.1/25 | 3 |
| Switch 2 capa 3 | 10.12.4.2/30 | 10.12.4.3/30 | 1 |
| Switch 2 capa 3 | 10.13.1.3/30 | 10.13.1.2/30 | 2 |
| Switch 2 capa 3 |  | 192.168.20.1/25 | 3 |
| Switch 2 capa 3 | 10.13.0.2/30 | 10.13.0.3/30 | 4 |
| Switch 2 capa 3 | 10.13.2.0/30 | 10.13.1.2/30 | 2 |
| Switch 2 capa 3 | 10.13.3.0/0 | 10.13.1.2/30 | 2 |
| Switch 3 capa 3 | 10.12.3.2/30 | 10.12.3.3/30 | 1 |
| Switch 3 capa 3 | 10.13.2.3/30 | 10.13.2.2/30 | 2 |
| Switch 3 capa 3 |  | 192.168.30.1/25 | 3 |
| Switch 3 capa 3 | 10.13.1.2/30 | 10.13.1.3/30 | 4 |
| Switch 3 capa 3 | 10.13.0.0/30 | 10.13.1.3/30 | 4 |
| Switch 3 capa 3 | 10.13.3.0/30 | 10.13.2.2/30 | 2 |
| Switch 4 capa 3 | 10.12.2.2/30 | 10.12.2.3/30 | 1 |
| Switch 4 capa 3 | 10.13.3.3/30 | 10.13.3.2/30 | 2 |
| Switch 4 capa 3 |  | 192.168.40.1/25 | 3 |
| Switch 4 capa 3 | 10.13.2.2/30 | 10.13.2.3/30 | 4 |
| Switch 4 capa 3 | 10.13.1.0/30 | 10.13.2.3/30 | 4 |
| Switch 4 capa 3 | 10.13.0.0/30 | 10.13.2.3/30 | 4 |
| Switch 5 capa 3 | 10.12.1.2/30 | 10.12.1.3/30 | 1 |
| Switch 5 capa 3 |  | 192.168.50.1/25 | 2 |
| Switch 5 capa 3 | 10.13.3.2/30 | 10.13.3.3/30 | 3 |
| Switch 5 capa 3 | 10.13.2.0/30 | 10.13.3.3/30 | 3 |
| Switch 5 capa 3 | 10.13.1.0/30 | 10.13.3.3/30 | 3 |
| Switch 5 capa 3 | 10.13.0.0/30 | 10.13.3.3/30 | 3 |
| PC 6 (VLAN 10) | 192.168.10.7/25 | 192.168.10.1/25 |  |
| PC 9 (VLAN 10) | 192.168.10.10/25 | 192.168.10.1/25 |  |
| **Equipamiento** | **Dirección IP** | **Puerta enlace** | **Boca** |
| PC 5 (VLAN 20) | 192.168.20.6/25 | 192.168.20.1/25 |  |
| PC 8 (VLAN 20) | 192.168.20.9/25 | 192.168.20.1/25 |  |
| PC 10 (VLAN 20) | 192.168.20.11/25 | 192.168.20.1/25 |  |
| PC 6 (VLAN 30) | 192.168.30.7/25 | 192.168.30.1/25 |  |
| PC 11 (VLAN 40) | 192.168.40.12/25 | 192.168.40.1/25 |  |
| PC13 (VLAN 40) | 192.168.40.14/25 | 192.68.40.1/25 |  |
| IP Tel-2 (VLAN 50) | 192.168.50.3/25 | 192.168.50.1/25 |  |
| IP Tel- 5 (VLAN 50) | 192.168.50.6/25 | 192.168.50.1/25 |  |

1. Subred Departamento Laboratorio.
   1. VLAN 30.

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| **Rango IP** |
| 192.168.30.0 a 192.168.30.127/25 |

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| **Equipamiento** | **Dirección IP** | **Puerta enlace** | **Boca** |
| Switch capa 3 agregación | 10.10.10.3/30 | 10.10.10.2/30 | 1 |
| Switch capa 3 agregación | 10.16.1.3/30 | 10.16.1.2/30 | 2 |
| Switch capa 3 agregación | 10.16.2.3/30 | 10.16.2.2/30 | 3 |
| Switch capa 3 agregación | 10.16.3.3/30 | 10.16.3.2/30 | 4 |
| Switch capa 3 agregación | 10.16.4.3/30 | 10.16.4.2/30 | 5 |
| Switch capa 3 agregación | 10.16.5.3/30 | 10.16.5.2/30 | 6 |
| Switch1 capa 3 | 10.16.5.2/30 | 10.16.5.3/30 | 1 |
| Switch1 capa 3 | 10.17.0.3/30 | 10.17.0.2/30 | 2 |
| **Equipamiento** | **Dirección IP** | **Puerta enlace** | **Boca** |
| Switch1 capa 3 | 10.17.1.0/30 | 10.17.0.2/30 | 2 |
| Switch1 capa 3 | 10.17.2.0/30 | 10.17.0.2/30 | 2 |
| Switch1 capa 3 | 10.17.3.0/30 | 10.17.0.2/30 | 2 |
| Switch1 capa 3 |  | 192.168.10.1/25 | 3 |
| Switch 2 capa 3 | 10.16.4.2/30 | 10.16.4.3/30 | 1 |
| Switch 2 capa 3 | 10.17.1.3/30 | 10.17.1.2/30 | 2 |
| Switch 2 capa 3 |  | 192.168.20.1/25 | 3 |
| Switch 2 capa 3 | 10.17.0.2/30 | 10.17.0.3/30 | 4 |
| Switch 2 capa 3 | 10.17.2.0/30 | 10.17.1.2/30 | 2 |
| Switch 2 capa 3 | 10.17.3.0/0 | 10.17.1.2/30 | 2 |
| Switch 3 capa 3 | 10.16.3.2/30 | 10.16.3.3/30 | 1 |
| Switch 3 capa 3 | 10.17.2.3/30 | 10.17.2.2/30 | 2 |
| Switch 3 capa 3 |  | 192.168.30.1/25 | 3 |
| Switch 3 capa 3 | 10.17.1.2/30 | 10.17.1.3/30 | 4 |
| Switch 3 capa 3 | 10.17.0.0/30 | 10.17.1.3/30 | 4 |
| Switch 3 capa 3 | 10.17.3.0/30 | 10.17.2.2/30 | 2 |
| Switch 4 capa 3 | 10.16.2.2/30 | 10.16.2.3/30 | 1 |
| Switch 4 capa 3 | 10.17.3.3/30 | 10.17.3.2/30 | 2 |
| Switch 4 capa 3 |  | 192.168.40.1/25 | 3 |
| Switch 4 capa 3 | 10.17.2.2/30 | 10.17.2.3/30 | 4 |
| Switch 4 capa 3 | 10.17.1.0/30 | 10.17.2.3/30 | 4 |
| Switch 4 capa 3 | 10.17.0.0/30 | 10.17.2.3/30 | 4 |
| Switch 5 capa 3 | 10.16.1.2/30 | 10.16.1.3/30 | 1 |
| Switch 5 capa 3 |  | 192.168.50.1/25 | 2 |
| Switch 5 capa 3 | 10.17.3.2/30 | 10.17.3.3/30 | 3 |
| Switch 5 capa 3 | 10.17.2.0/30 | 10.17.3.3/30 | 3 |
| Switch 5 capa 3 | 10.17.1.0/30 | 10.17.3.3/30 | 3 |
| Switch 5 capa 3 | 10.17.0.0/30 | 10.17.3.3/30 | 3 |
| **Equipamiento** | **Dirección IP** | **Puerta enlace** | **Boca** |
| PC 21(VLAN 10) | 192.168.10.22/25 | 192.168.10.1/25 |  |
| PC 23 (VLAN 10) | 192.168.10.24/25 | 192.168.10.1/25 |  |
| PC 24 (VLAN 20) | 192.168.20.25/25 | 192.168.20.1/25 |  |
| PC 27 (VLAN 20) | 192.168.20.28/25 | 192.168.20.1/25 |  |
| PC 21 (VLAN 30) | 192.168.30.22/25 | 192.168.30.1/25 |  |
| PC 23 (VLAN 30) | 192.168.30.24/25 | 192.168.30.1/25 |  |
| PC 25 (VLAN 30) | 192.168.30.26/25 | 192.168.30.1/25 |  |
| PC 29 (VLAN 30) | 192.168.30.30/25 | 192.168.30.1/25 |  |
| PC 32 (VLAN 40) | 192.168.40.33/25 | 192.68.40.1/25 |  |
| PC 36 (VLAN 40) | 192.168.40.37/25 | 192.68.40.1/25 |  |
| IP Tel-15 (VLAN 50) | 192.168.50.16/25 | 192.168.50.1/25 |  |
| IP Tel-19 (VLAN 50) | 192.168.50.20/25 | 192.168.50.1/25 |  |