NU CIS-313 Telecommunications and Computer Networks

Final Project, Network Diagram for the Scenario #2
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Content:
- Legend
- LAN only diagram for each of the three sites
- WAN only diagram
- Integrated LAN/WAN diagram

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Network Diagram for the Scenario #2, Legend

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Legend	
Scenario 2	
Symbol	Description
	Printer
	Server
	Leased Line
	User (Desktop or Laptop)
	Site
	Firewall
	Internet / ISP
	Switch
	Router
	DSU/CSU
	VPN
——	(black) Basic LAN Configuration
——	Extended configuration for redundancy
- - - -	Expected expansion
- - - -	Extended configuration for redundancy of expected expansion
	Expected expansion
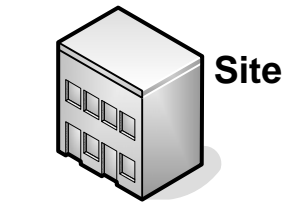
Site
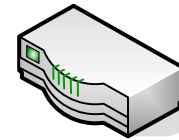
Router

Internet

User (Desktop, Laptop)

DSU/CSU

ISP

Server
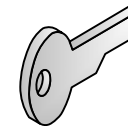
VPN
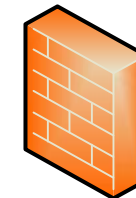
Firewall
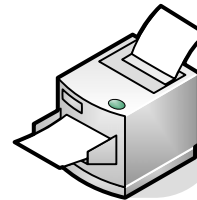
Printer
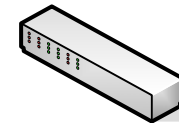
Switch
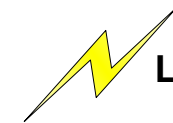
Leased Line

Basic LAN configuration

Extended configuration for redundancy

Expected expansion

Extended configuration for redundancy of expected expansion

LAN Diagram for the Scenario #2, Columbus Site

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Basic LAN configuration
Extended configuration for redundancy
Expected expansion
Extended configuration for redundancy of expected expansion

Columbus Site

Switch C
(24 Port)

Switch D
(24 Port)

4 links
4 links
4 links
4 links
4 links
4 links

Switch A
(48 Port)

Switch E
(48 Port)

Switch B
(48 Port)

Networked
Printer (2)

User (25)

Server (1)

Networked
Printer (2)

User (38)

Backup
Server (1)

User (25)

Networked
Printer (2)

User (12)

User (12)

LAN Diagram for the Scenario #2, Louisburg Site

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Legend:
- Basic LAN configuration
- Extended configuration for redundancy
- Expected expansion
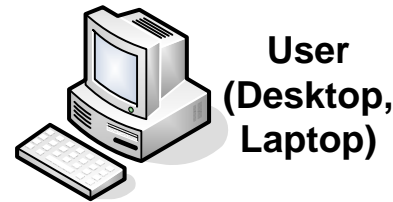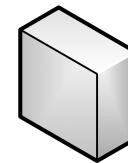- Extended configuration for redundancy of expected expansion

Louisburg Site

Switch C (12 Port)

Switch D (12 Port)

2 links   2 links   2 links   2 links

Switch A (24 Port)

Switch B (24 Port)

User (14)

User (5)

Server (1)

Backup Server (1)

User (5)

Networked Printer (1)

User (13)

LAN Diagram for the Scenario #2, New York Site

Student: Biljana Spasic

Legend:
- Basic LAN configuration
- Extended configuration for redundancy
- Expected expansion
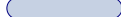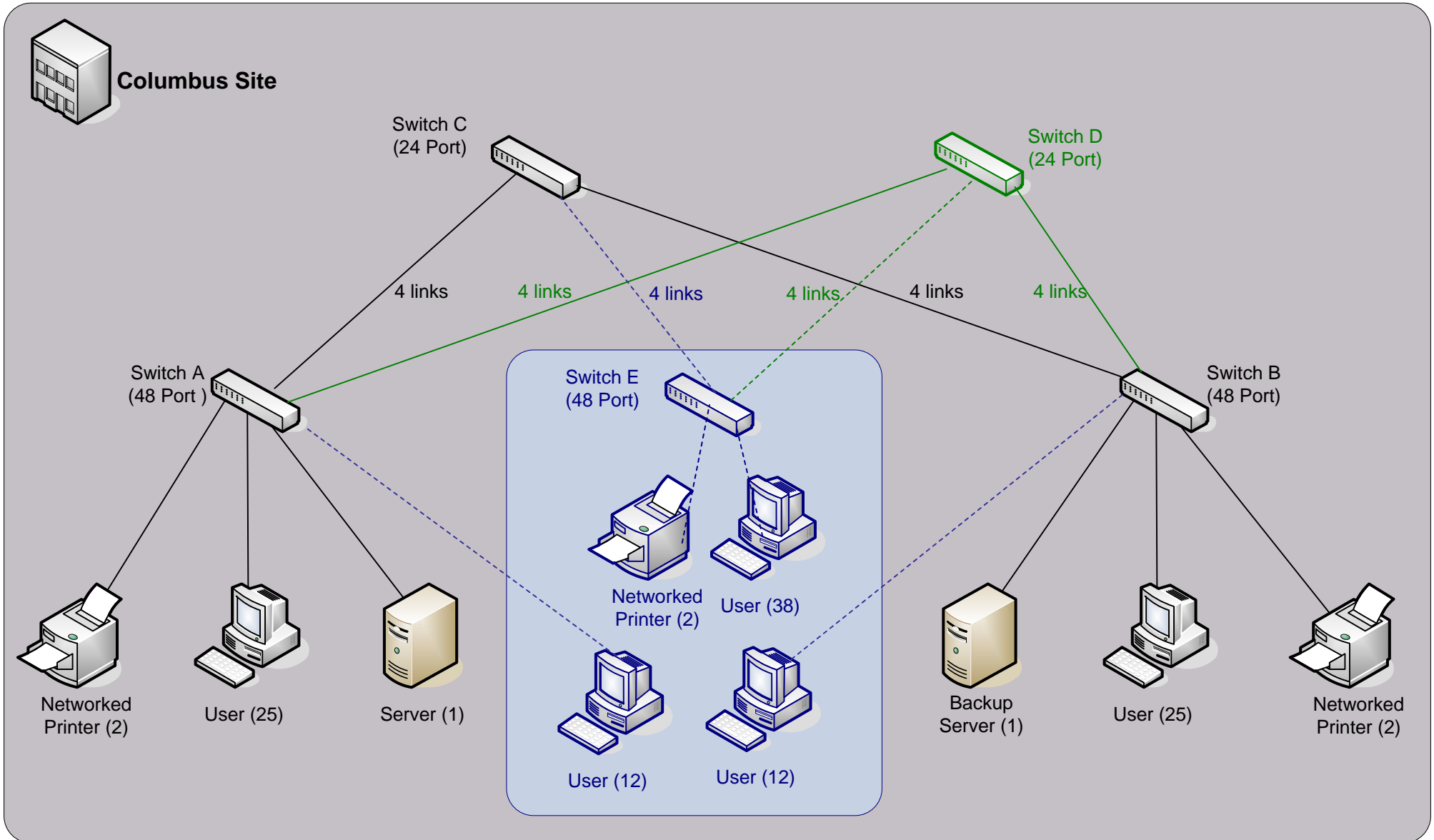- Extended configuration for redundancy of expected expansion

New York Site

- Switch C (24 Port)
- Switch D (24 Port)
- Switch E (48 Port)
- Switch A (48 Port)
- Switch B (48 Port)
- Switch F (48 Port)

4 links

- Networked Printer (2)
- User (38)
- User (12)
- Networked Printer (1)
- User (25)
- Server (1)
- Backup Server (1)
- User (25)
- Networked Printer (1)
- User (38)
- Networked Printer (1)
- User (12)

WAN Diagram for the Scenario #2

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Internet

ISP

T1 Leased line

T3 Leased line

Router L

Louisburg Site

DSU/CSU

VPN

Router C

T3 Leased line

T3 Leased line

Columbus Site

Router N

New York Site

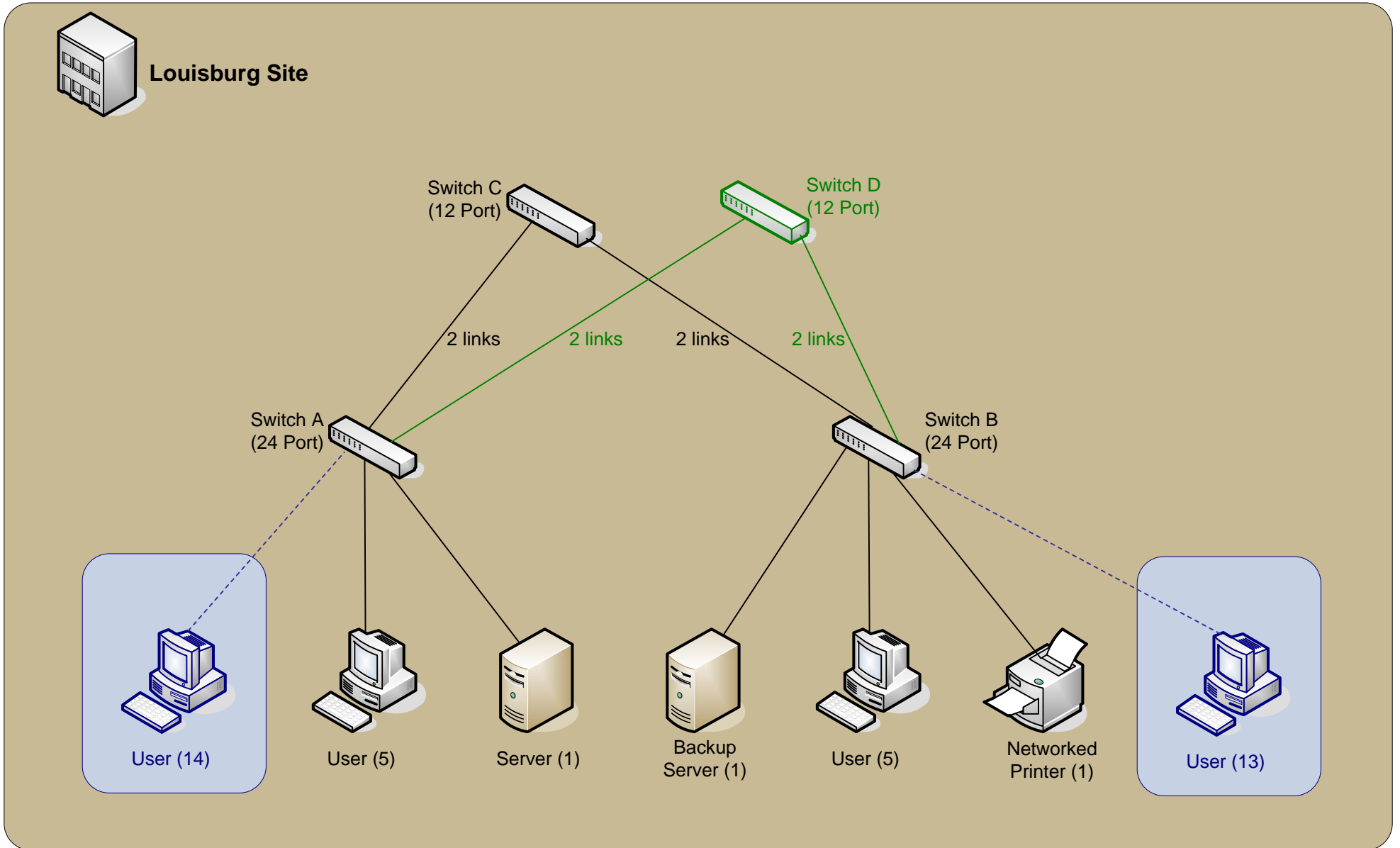# Integrated LAN and WAN Diagram for the Scenario #2
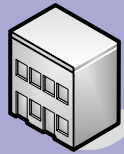
Student: Biljana Spasic

Legend:
- Basic LAN configuration
- Extended configuration for redundancy
- Expected expansion
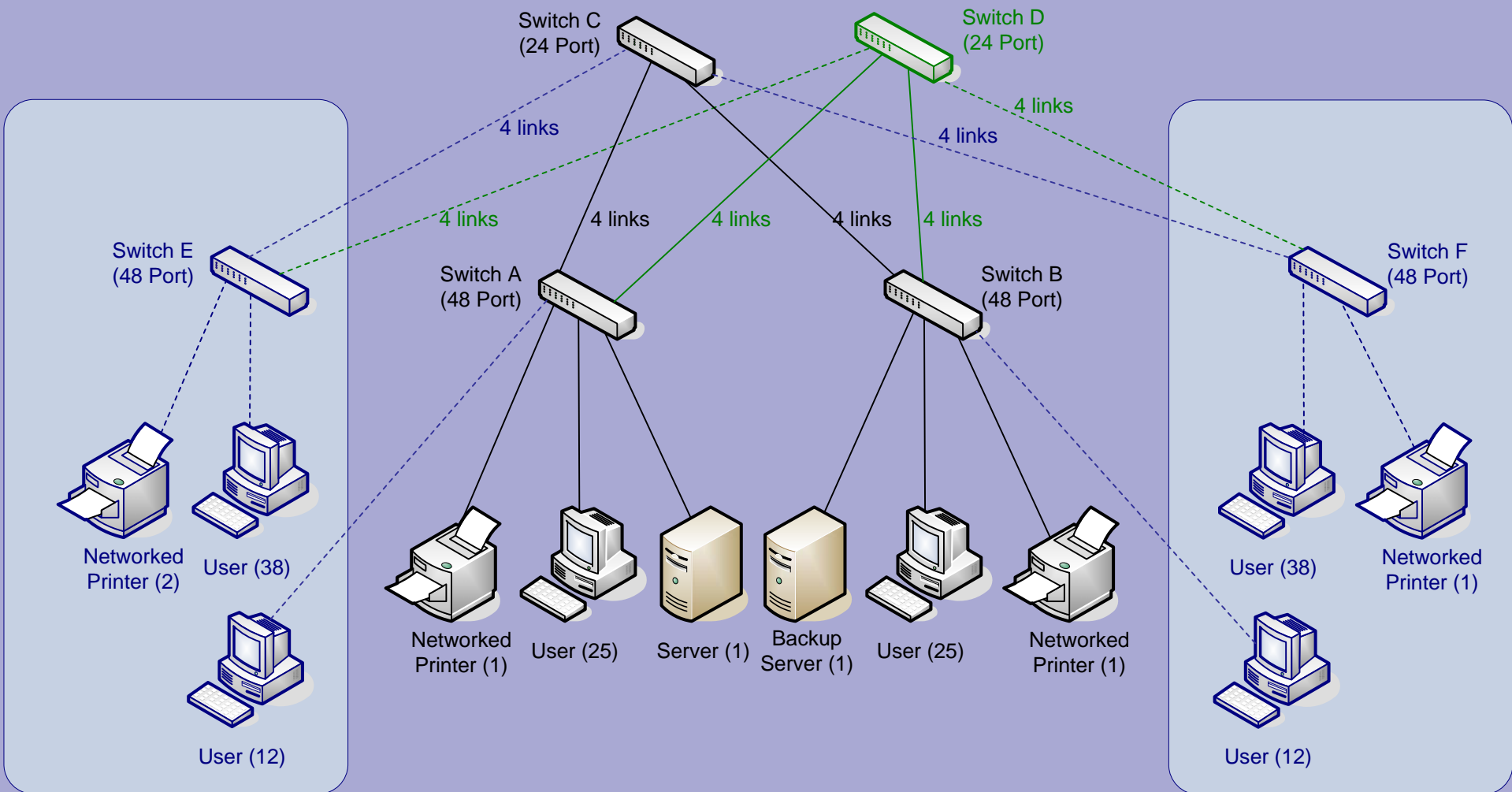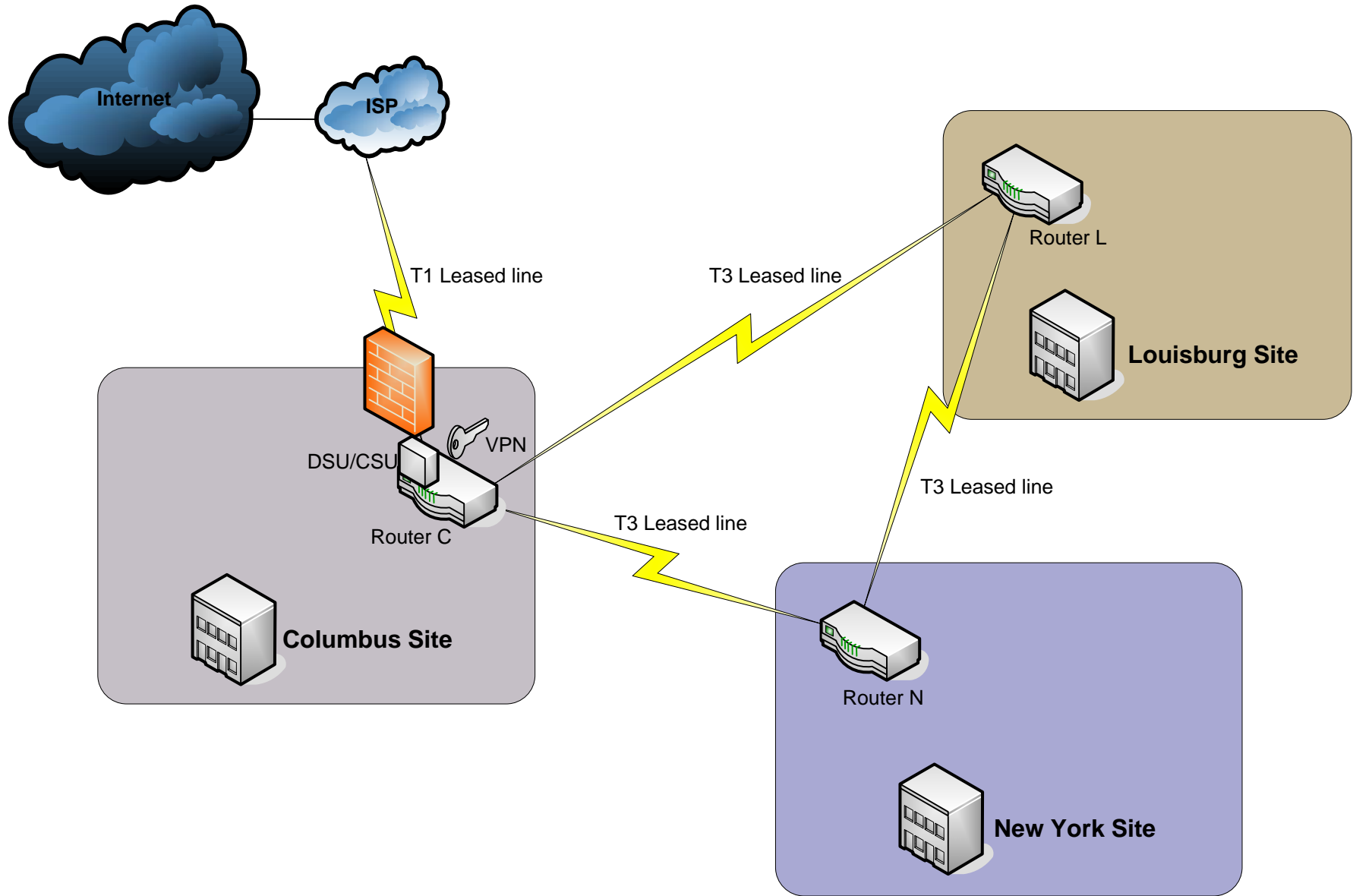- Extended configuration for redundancy of expected expansion

Internet

ISP

T1 Leased line

T3 Leased line

T3 Leased line

T3 Leased line

Louisburg Site

Router L

2 links

2 links

Switch C (12 Port)

Switch D (12 Port)

2 links 2 links 2 links 2 links

Switch A (24 Port)

Switch B (24 Port)

User (14)

User (5)

Server (1)

Backup Server (1)

User (5)

Networked Printer (1)

User (13)

Columbus Site

DSU/CSU

VPN

Router C

2 links

Switch C (24 Port)

2 links

Switch D (24 Port)

4 links 4 links 4 links 4 links 4 links 4 links

Switch A (48 Port)

Switch E (48 Port)

Switch B (48 Port)

Networked Printer (2)

User (25)

Server (1)

Networked Printer (2)

User (38)

User (12)

User (12)

Backup Server (1)

User (25)

Networked Printer (2)

New York Site

Router N

2 links

2 links

Switch C (24 Port)

Switch D (24 Port)

4 links

4 links 4 links 4 links 4 links 4 links 4 links

Switch E (48 Port)

Switch A (48 Port)

Switch B (48 Port)

Switch F (48 Port)

Networked Printer (2)

User (38)

User (12)

Networked Printer (1)

User (25)

Server (1)

Backup Server (1)

User (25)

Networked Printer (1)

User (38)

Networked Printer (1)

User (12)