

Here is the Gantt chart demonstrating interdependencies between activities of Network upgrade project for a bank

Key Activities of the Network Upgrade Project:

1. Planning Phase:

Activity 1: Making plans for the project and gathering needs

Activity 2: Approval of the budget and assignment of resources

Activity 3: Picking a vendor and signing the contract

2. Design Phase:

Activity 4: Review of network design and architecture

Activity 5: Review of security and compliance

3. Implementation Phase:

Activity 6: Hardware Procurement (Routers, Switches, Firewalls)

Activity 7: Software Licensing and Configuration (Firewall rules, VPN, etc.)

Activity 8: Network Configuration (Core Switches, Routers)

4. Testing Phase:

Activity 9: System Testing (Connectivity, Redundancy, Failover)

Activity 10: Security Testing (Penetration Testing, Vulnerability Scans)

Activity 11: User Acceptance Testing (UAT)

5. Deployment Phase:

Activity 12: Network Deployment at Branches (Head Office and Branches)

Activity 13: Rollout of New Security Protocols

Activity 14: Backup and Disaster Recovery Plan Implementation

6. Post-deployment Phase:

Activity 15: Training staff and keeping records

Activity 16: Setting up monitoring and support

Activity 17: Review and end of the project

Example of a Gantt chart layout:

The jobs in the Gantt chart might depend on each other in the following ways:

Task No.	Task Description	Duration	Dependencies
1	Making plans for the project and gathering needs	1 week	Start
2	Approval of the budget and assignment of resources	2 weeks	After Task 1
3	Picking a vendor and signing the contract	2 weeks	After Task 2
4	Review of network design and architecture	2 weeks	After Task 3
5	Review of security and compliance	1 weeks	Parallel to task 4
6	Hardware Procurement (Routers, Switches, Firewalls)	4 weeks	After Task 4
7	Software Licensing and Configuration (Firewall rules, VPN.)	2 weeks	After Task 4,5
8	Network Configuration (Core Switches, Routers)	3 weeks	After Task 6,7
9	System Testing (Connectivity, Redundancy, Failover)	2 weeks	After Task 8
10	Security Testing (Penetration Testing, Vulnerability Scans)	1 weeks	Parallel to task 9
11	User Acceptance Testing (UAT)	1 weeks	After Task 9,10
12	Network Deployment at Branches (Head Office and Branches)	3 weeks	After Task 11
13	Rollout of New Security Protocols	2 weeks	After Task 11
14	Backup and Disaster Recovery Plan Implementation	1 weeks	After Task 13
15	Training staff and keeping records	1 weeks	After Task 12
16	Setting up monitoring and support	1 weeks	After Task 15
17	Review and end of the project	1 weeks	After Task 16

Key Features:

- **Dependencies between jobs:** Some jobs, like setting up the network (Task 8), need both buying hardware (Task 6) and setting up software (Task 7). Testing (Tasks 9–11) doesn't happen until these important setup steps are done.
- **Parallel Tasks:** To speed up the project without affecting important dependencies, tasks like testing (Tasks 9 and 10) and security review (Task 5) can happen at the same time.
- **Tasks to do after deployment:** Once the network is fully set up (Task 12), the last steps, like training staff (Task 15) and setting up tracking (Task 16), can be done.

Here I am going to include a diagram below for this Gantt chart:

