

Project Charter

Project Name: UltraSol Energy Solutions Infrastructure Merger

Brief Project Summary:

Full scale merger of existing Solar-Tec infrastructure into UltraSol environment.

Project Approval Date:

January 8th, 2024

Project Sponsor:

Northern Alberta Institute of Technology

Project Manager:

Chris Redford

Project Start Date:

January 15th, 2024

Projected Finish Date:

April 27th, 2024

Budget Estimate:

1 million CAD

Initial Scope:

The project involves migrating the server infrastructure from Windows 2012 to present-day standards, preserving Active Directory for business continuity. Server migration to a virtualized platform, data security enhancements, and potential cloud integration are key components. Network infrastructure upgrades, IP addressing schemes, and security measures are outlined for wired and wireless networks. Specific requirements for each building, telecommunications/data rooms, power, cooling, and secured/public Wi-Fi considerations are addressed, especially segregated hazardous environments that are hostile to computer systems.

Project Deliverables:

1. Server Environment:

- Migrate from Windows 2012 to present-day standards.

- Preserve and migrate Active Directory for business continuity.

2. **Thin Client Solutions:**

- Implement thin clients for industrial bays and clean rooms.
- Address environmental challenges in manufacturing areas.

3. **Server Virtualization:**

- Migrate servers to a virtualized platform.
- Preserve AD user objects and NTFS permissions.

4. **Data Security:**

- Add new users, enhance data security.
- Decide on cloud integration with ADDS.

5. **Desktop Replacement:**

- Replace all user desktops uniformly.
- Deploy according to blueprints.

6. **Wired Infrastructure:**

- Upgrade HQ wired infrastructure to present-day standards.
- Consider budget constraints.

7. **IP Addressing and Network Design:**

- Develop IP addressing schemes for offices, bays, and common areas.
- Segregate subnets for security and firewall OT networks.

8. **Wireless Infrastructure:**

- Implement Wi-Fi in all buildings.
- Determine access point placement and coverage zones.

9. **Network Security:**

- Design and implement network security measures.
- Deploy firewalls, routers, switches as needed.

10. **CCTV System:**

- Plan and deploy IP-based security cameras in all buildings.
- Address infrastructure, IP, and security needs.

Milestones:

Planning and Strategy (Month 0-1):

- Develop a comprehensive project plan, including timelines and resource allocation.
- Define strategies for server environment migration, thin client implementation, and network transformation.

Network Implementation (Month 3-4):

- Finalize the upgrade of wired infrastructure to current standards.
- Implement IP addressing schemes and subnet segregation for security and autonomy.
- Deploy Wi-Fi infrastructure in all buildings with coverage zones.
- Design and implement network security measures.

Infrastructure Implementation (Month 1-2):

- Complete server environment migration to present-day standards.
- Successfully implement thin client solutions in industrial bays and clean rooms.
- Achieve data security enhancements and implement cloud integration.

Operational Implementation (Month 5-6):

- Complete replacement of all user desktops across the organization.
- Deploy IP-based security camera systems and dedicated storage solutions.
- Ensure comprehensive documentation and conduct training sessions.
- Validate and test disaster recovery plans for data rooms and critical infrastructure.

Main Project Success Criteria:

Seamlessly integrate and deploy a new IT infrastructure for UltraSol Energy Solutions.

Team Roles and Responsibilities

Role	Name	Position	Sign-Off
Project Manager	Quinn	Project Supervision	
IT Infrastructure Specialist	Aidan	Technical Project Management	
Security Analyst	Matt	Cybersecurity Implementation	
IT Hardware Deployment Specialist	Jamie	Hardware Deployment Specialist	
Network Architect and Innovations Specialist	Taqi	Network Innovation Specialist	