



District Network Assessment Overview and Scope of Engagement:

Mt. Diablo Unified School District (MDUSD) seeks quotes for the tasks and deliverables outlined in this document to provide a full network assessment that will provide sufficient information and data to enable MDUSD to engage in a holistic process of District-wide network redesign.

Project Initiation

The project shall be inclusive of the following initiation activities, and any additional necessary activities to ensure that the project will be completed in the designated timeframe, and that deliverables are sufficiently comprehensive to enable necessary subsequent network design work.

1. Conduct a sponsor kickoff session to review project scope and objectives of the assessment.
2. Conduct a client kickoff session to review the mutually understood project scope and objectives of the assessment with MDUSD's Department of Technology and Information Systems and District leaders.
3. Review technical requirements for discovery of component configurations and access to available network monitoring and performance data.
4. Formulate the project schedule to expedite a sufficiently representative inspection of MDUSD IT infrastructure and field conditions.

Discovery Phase

Conduct sufficient meetings, interviews, and documentation review with key MDUSD staff to thoroughly inform assessments, recommendations, and deliverables.

1. Review high-level IT infrastructure architectures, platforms and standards.
2. Review network design.
3. Discuss known issues and constraints of the existing deployments.
4. Review wireless network deployment, platforms and coverage/capacity concerns.
5. Review data center compute platforms (stand-alone, chassis-based, and virtualization hypervisors). Understand current and planned use of cloud for Infrastructure as a Service, Software as a Service, Disaster Recovery.
6. Review SAN/NAS platforms, SAN fabric deployment, zoning and deployment architecture for connected storage arrays.

7. Conduct site Inspections at ten (10) District sites to be selected by MDUSD, to include the main central administrative center (Dent), and the Maintenance and Operations / Transportation / Warehouse campus:
 - a. Obtain and review relevant documentation for all District locations including but not limited to:
 - i. Architectural and electrical as-built plans
 - ii. Inventories of current infrastructure
 1. Outside cable plant
 2. Inside structured communication cabling
 3. Physical infrastructure in server rooms and telecom rooms including environmental.
 - b. Conduct high-level field inspections of existing buildings at ten (10) District locations. The district will provide infrastructure information for the other forty seven (47) sites. The field inspections will include:
 - i. Review of observable inter-building low-voltage conduit pathways between primary buildings, providing digital picture documentation and relevant text explanation of findings and critical issues, which will include but not necessarily be limited to location, routing, size, condition and suitability for probable future requirements; types of cables (i.e., single-mode fiber, multi-mode fiber, copper, coax). This work effort will NOT include any consultant entry into manholes, vaults, steam tunnels, ceiling spaces, etc., but may include inspection via these.
 - ii. Inspection of entrance facilities into each primary building, providing digital picture documentation and relevant text explanation of findings and critical issues, which will include but not necessarily be limited to location, size, condition and suitability of rooms; observable conduit quantities, sizes, conditions, % cable fills; types of cables (i.e., single-mode fiber, multi-mode fiber, copper, coax); and nature and condition of cable terminations.
 - iii. Inspection of representative telecom rooms (i.e., MDFs, BDFs and IDF), providing digital pictures and relevant explanation of findings and critical issues, which will include but not necessarily be limited to location, size, condition and suitability of rooms; observable conduit quantities, sizes, conditions, % cable fills; types of cables (i.e., single-mode fiber, multi-mode fiber, copper, coax); and nature and condition of cable terminations.
 - iv. Inspection of representative cabling at ten (10) sites.
 - c. Gather available technical documentation representing the MDUSD network deployment. Include review of Layer 1 campus cabling backbone as well as logical topologies for Layer 2 and Layer 3 networks.
 - d. Inspect the district data center and any key representative MPOE rooms for an understanding of typical deployment patterns and network distribution design.
 - e. Prepare a summary report of the ten sites which will include the following components:

- i. Consolidated findings, including observable and potential issues and challenges for future usage and upgrades
 - ii. Associated Rough Order of Magnitude (ROM) budgets
- f. Meet with project stakeholders to review the draft report and findings and incorporate any feedback into the final report deliverable.

Infrastructure Assessment Phase

1. Review and summarize campus IT asset inventories with respect to component vintages and suitability to business requirements.

Recommendations and Report Phase

1. Compile assessment findings including the district provided information into a comprehensive categorized report with section summaries. Include appendices of specific findings from each location.
2. Include in the report a findings and recommendations document describing the outcomes of the assessment effort and technical resource interviews.
 - a. Prepare executive summary of key findings.
 - b. Prioritize issues based on criticality and risk profile of identified issues.
3. Conduct a session with MDUSD IT management to orient to the assessment report and review key findings and recommendations.

Deliverables

The following deliverables will be provided to MDUSD, and will be the exclusive property of MDUSD.

1. IT Infrastructure assessment report including:
 - a. Description of individual campus conditions
 - b. Description of IT systems that were analyzed and reviewed
 - c. Detailed assessment of current infrastructure capacity and existing infrastructure

Timeline

Deliverables will be presented in final form to MDUSD no later than February 17, 2021.