



Key Elements of a CMMS *RFP*

Maintenance Care
2025





Work Orders

This is an example of what your organization should look for in maintenance management software solutions and the type of detail that should be included in your RFP submission guidelines:

Comprehensive Work Order Lifecycle Management: The CMMS should support the entire work order lifecycle, from initiation and assignment to completion and documentation. This includes:

Automated Work Order Creation: Ability to automatically generate work orders based on various triggers like preventive maintenance schedules, meter readings, or alerts from IoT devices.

Prioritization and Scheduling: Tools to prioritize work orders based on urgency, criticality, and available resources. Integration with scheduling tools to optimize technician time and minimize downtime.

Detailed Work Order Information: Capture all essential details within a work order, including:

- Asset information (name, location, history)
- Problem description and reported symptoms
- Priority level and due dates
- Assigned technician(s)
- Required parts and materials
- Estimated labor hours
- Safety procedures and checklists

Real-time Tracking and Updates: Enable technicians to update work order status in real-time, record labor hours, add notes, and attach images/videos. Provide managers with visibility into work order progress and resource allocation.

Historical Work Order Data: Maintain a complete history of all work orders, including associated costs, labor hours, and parts used, for analysis and reporting.

Audit Logs: Tracking of every change made to a work order along the way to prevent the loss of information

Preventive Maintenance

Flexible Scheduling: The CMMS should offer flexible options for scheduling preventive maintenance tasks, including:

- Calendar-based scheduling (daily, weekly, monthly, etc.)
- Meter-based scheduling (triggering maintenance based on usage, run hours, etc.)
- Condition-based scheduling (using sensor data or inspections to predict maintenance needs)

Automated Reminders and Alerts: Send automatic notifications to technicians and managers about upcoming preventive maintenance tasks.

Preventive Maintenance Libraries: Provide pre-built templates or libraries of common preventive maintenance tasks for various asset types.

Maintenance Plan Optimization: Tools to analyze preventive maintenance data and optimize schedules to minimize downtime and maximize asset life.

Asset Management

Centralized Asset Registry: Maintain a comprehensive database of all assets, including:

- Asset identification (name, description, model number, serial number)
- Location information (building, floor, room)
- Associated documents (manuals, warranties, certifications)
- Maintenance history (work orders, inspections, repairs)
- Performance data (metrics, KPIs)

Asset Hierarchy and Relationships: Ability to define asset hierarchies and relationships (e.g., parent-child relationships, system dependencies) to understand asset dependencies and facilitate maintenance planning.

Asset Lifecycle Management: Track asset lifecycle costs, from acquisition to disposal, to make informed decisions about maintenance, repair, or replacement.

Condition Monitoring: Integration with condition monitoring systems (e.g., vibration analysis, oil analysis) to proactively identify potential issues and schedule maintenance accordingly.

Barcode and QR Code Scanning: Support barcode and QR code scanning for efficient Asset management.

Inventory Management

Real-time Inventory Tracking: Maintain accurate inventory records, including:

- Part numbers, descriptions, and quantities
- Location information (warehouse, stockroom, etc.)
- Reorder points and lead times
- Vendor information and pricing

Automated Reordering: Trigger automatic purchase orders when inventory levels fall below predefined thresholds.

Parts Usage Tracking: Link parts usage to specific work orders to track consumption and costs.



Mobile Access

Native Mobile Apps: Provide dedicated mobile apps for iOS and Android devices, optimized for different screen sizes and user roles.

Offline Functionality: Enable technicians to access and update information even when offline, with automatic synchronization when connectivity is restored.

Mobile-Specific Features: Offer features specifically designed for mobile use, such as:

- GPS location tracking for technicians
- Barcode and QR code scanning
- Voice-to-text input for work order updates
- Push notifications for work order assignments and reminders

Security and Access Control: Implement robust security measures to protect sensitive data accessed via mobile devices, including user authentication and data encryption.

Customizable Reports: Allow users to create custom reports tailored to their specific needs, with options to:

- Select data fields and filters
- Define report formats and layouts
- Schedule reports for automatic generation and distribution

Dashboards and Visualizations: Provide interactive dashboards with customizable widgets and visualizations (e.g., charts, graphs, gauges) to present key performance indicators (KPIs) in a clear and concise manner.

2. Data Analysis and Insights:

- **Trend Analysis:** Enable users to identify trends in maintenance data, such as recurring failures, increasing downtime, or rising costs.
- **Root Cause Analysis:** Facilitate root cause analysis by providing tools to drill down into data and identify the underlying causes of maintenance issues.
- **Predictive Analytics:** Offer capabilities for predictive maintenance, using historical data and machine learning algorithms to forecast future failures and optimize maintenance schedules.

3. Data Integration and Export:

Data Integration: Seamlessly integrate with other business systems (e.g., ERP, accounting) to access and analyze data from multiple sources.

Data Export: Allow users to export data in various formats (e.g., CSV, Excel, PDF) for further analysis or reporting in other tools.

4. Accessibility and Collaboration:

Role-Based Access Control: Ensure data security and confidentiality by implementing role-based access control, allowing users to access only the reports and data relevant to their roles.

Report Sharing and Collaboration: Enable users to share reports with colleagues, stakeholders, or external partners.

Reporting & Analytics

The CMMS must provide robust reporting and analytics software capabilities to enable data-driven decision-making and continuous improvement in maintenance operations. This includes:

1. Variety of Report Types:

Pre-built Reports: Offer a library of standard reports covering key maintenance metrics:

- Mean Time To Repair (MTTR)
- Mean Time Between Failures (MTBF)
- Preventive Maintenance Compliance
- Work Order Completion Rates
- Asset Downtime Analysis
- Inventory Turnover
- Maintenance Costs

Key Performance Indicators

The CMMS should track and report on key performance indicators (KPIs) relevant to maintenance operations, including:

Asset Reliability: MTBF, MTTR, Availability

Maintenance Efficiency: Planned Maintenance Percentage, Wrench Time, Schedule Compliance

Maintenance Costs: Maintenance Cost per Asset, Labor Costs, Parts Costs

Inventory Performance: Inventory Turnover, Stockouts, Carrying Costs

Safety: Incident Rate, Near Misses, Safety Training Compliance

