

## Request for Needs

Strategy Discussions for

**UWORFNCN-1682 Computerized Maintenance Management System (CMMS)**

**Issued Date: November 9, 2022**

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### SECTION 1 - PURPOSE

Western University (Western) is issuing this **'Request for Needs' (RFN)** document to schedule strategy discussions from interested Suppliers with experience in Computerized Maintenance Management Systems (CMMS) Replacement.

The intent of these strategic discussions is to gather information and obtain feedback from Suppliers to assist Western in developing a more accurate Scope of Work and overall approach for an upcoming Request for Proposal (RFP).

This RFN will not result in a contract award, constitute a commitment by Western to procure any goods or services, or form a legally binding "Contract A".

Supplier participation in these discussions are voluntary and not mandatory. Supplier participation is not required in order to participate in a future RFP that is directly related to this project.

### SECTION 2 - FORMAT

Western prefers to conduct these informal strategy discussions via a virtual conference call (via Zoom). If the Supplier cannot participate virtually, Western may consider phone conferencing.

The discussions will be performed individually on a "1-on-1" basis between each interested Supplier and Western. Western anticipates spending about 1-hour on each call. The content & topics of the strategy discussions are provided in Section 7. Western is NOT requesting or seeking a formal written response to these questions or topics. All information will be collected and discussed via the virtual call.

Western anticipates that the Supplier will have 1-3 personnel in attendance for this discussion, which may include: the primary point of contact such as an Account Representative or Project Manager; and at least one representative who can speak to technical and functional aspects of this project (Subject Matter Expert). However, there are no minimum or maximum requirements on Supplier personnel that can attend and participate in this meeting.

### SECTION 3 - KEY DATES

The critical dates for this RFN are shown below. These dates may be changed/adjusted by Western if necessary.

Issue Date of RFN: November 9, 2022  
RSVP Deadline: **December 5, 2022 at 12:00 Noon**

### SECTION 4 – WESTERN CONTACT

All questions, inquiries, or communications regarding this RFN must be directed to the Western Contact listed below (via email). Suppliers must not contact any other Western employee.

Colleen Nunez  
Email: [cburne@uwo.ca](mailto:cburne@uwo.ca)

### SECTION 5 - ALLOTTED TIME SLOTS

Suppliers that would like to participate in these Strategy Discussions must complete and submit Attachment A to RSVP. Due to time and resource constraints, Western anticipates performing discussions with the first 10 Suppliers that submit an RSVP. Western reserves the right to conduct discussions with additional suppliers if necessary. Time-slots will be scheduled on a first-come, first-served basis. Once your time-slot is confirmed, Western will provide a link to the conference-call or video-call.

### SECTION 6 – SUBMISSION INSTRUCTIONS

All submissions must be uploaded electronically at <https://uwo.bonfirehub.ca>.

Hardcopy submissions will NOT be accepted.

Proponents are solely responsible for the delivery of submissions in the manner and time described.

#### A) Requested Files:

Organize your submission into the following individual files (note the required file types):

**Attachment A – Strategy Discussion RSVP Form - MS Word or PDF**

Each file has a maximum size of 1000 MB. You will upload each file individually.

#### B) Important Notes:

Uploading large documents may take significant time, depending on the size of the file(s) and your Internet connection speed. Allocate sufficient time for all uploads to complete prior to the closing time - do not wait until the last minute to upload your files. Bonfire allows Proponents to submit each Attachment separately as they are completed by the Proponent until the Submission Closing time.

#### C) Technical Support:

Western is using a BonfireHub public portal for the submission process. Please contact Bonfire at [Support@GoBonfire.com](mailto:Support@GoBonfire.com) for technical questions related to submitting your documents. You can also visit their help forum at <https://bonfirehub.zendesk.com/hc>.

### **RFN Submissions Should Be Submitted on Time at Prescribed Location**

RFN submissions should be submitted in the method set out above on or before the Submission Date.

When submitting through Bonfire electronic bid submission, please note that submissions will be time stamped with the time at the end of the upload process not the beginning.

Submissions to Bonfire after the specified closing time will be rejected.

## SECTION 7 - ADDITIONAL TERMS AND CONDITIONS

*Parties to Bear Their Own Costs:* Western will not be liable for any expenses incurred by a Supplier, including the expenses associated with the cost of participating in the discussions to this RFN. The parties will bear their own costs associated with or incurred through this RFN process.

*Disclosure of Information:* Western does not intend to disclose the individual contents of each Supplier discussion, but rather use the information gathered from each discussion to help shape the strategy and path forward on a future RFP. However, information provided by a Supplier may be released in accordance with governing laws. Therefore, the Supplier should not include information in their response that is proprietary or confidential.

*Future RFP:* Western may elect to proceed, by way of open tender, where all potential Suppliers, including those that did not respond to this RFN, are eligible to compete for the award of a contract for the supply of any good or service; or may elect not to procure the good or service that is the subject of this RFN.

*Additional Clarification:* Western may conduct another round of RFN Strategy Discussions with the same or different suppliers or may seek subsequent information or clarification with any of the Suppliers that initially participate in this RFN.

## SECTION 8 - PROJECT BACKGROUND

This Section provides a brief overview of the outcomes, objectives and expectations of the future state or scope of work of the upcoming project. The information provided in this Section is for general background to assist with the Strategy Discussions. Western makes no representation, warranty, or guarantee as to the accuracy of this information.

Western is expecting to issue a Request for Proposal (RFP) to solicit proposals from qualified and experienced firms to provide and implement Enterprise Asset Management (EAM) software for the replacement of the current Computerized Maintenance Management System (CMMS) that is approaching end of life.

The chosen EAM software will act as the centralized system used to achieve Facilities Management (FM) core goals; planning, executing, and optimizing all maintenance tasks for 90+ campus buildings, while maintaining accurate costing, activity lists, resource inventory, and historical data for a wide range of building equipment. The EAM will provide a user friendly and intuitive application for all levels of users. This application will provide FM with accurate institutional data, along with actionable and easily customizable reports for facilities managers.

The chosen solution will also provide natively, or integrate with software providing complex Labour Management tools and reporting for employees across multiple collective bargaining units, with varying vacation accruals and entitlements; ensuring that all maintenance tasks are associated with a corresponding time-card entry.

### **Background/Current State**

Facilities Management (FM) at Western currently relies on a CMMS that is hosted on-premises and is soon reaching end-of-life status. The Avantis Computerized Maintenance Management System (CMMS) FM has used for over 25 years will be phased-out in December 2026.

The current Avantis Computerized Maintenance Management System (CMMS) solution was implemented in 2008 and upgraded in 2018. Over time, numerous add-ons, in-house applications and diverse methodologies were implemented to receive and process data from internal and external sources.

This system has a long history of providing adequate support for the work order lifecycle and inventory management, complex support for preventative maintenance (PM) scheduling and inventory management, while providing the ability to pull information out of the system to establish reporting and KPIs.

Being an older system, there are concerns surrounding ease-of-use, lack of mobile support, and limited options for external clients to access a work request platform, track requests, or review costing data on submitted requests. Internally, there is significant room for improvement by allowing tradespersons to be assigned tasks via mobile devices, providing them with equipment-specific details, procedural information, as well as safety notices all from a centralized software on their mobile device, driven by a modern CMMS.

**Strengths:**

- The current application has many un-deployed features available
- Application is reliable and stable
- Integration with centralized PeopleSoft environment (Finance & HR)

**Pain Points:**

- Integration error information and troubleshooting between systems
- Limited integrations lead to manual data entry and manipulation
- Dated application appearance and unintuitive workflow

**Quantities:**

- Hundreds of thousands of work orders (~44,000/year)
- 2300 inventory items turning over three times per year
- Timecard entries (~155,000 /year)
- 100 campus buildings, multiple sites, varied building equipment in both age and design

**Unique/Challenging Conditions**

- A challenge exists to consolidate existing data from multiple sources, and ensure we are following best practices while reviewing/modifying existing processes during implementation.
- Facilities Management at Western is comprised of both union and non-union employees, as such there exists a need for complex payroll, entitlement and time-tracking functions and calculations across multiple bargaining units.
- Within some labour groups, distributed hours are required, meaning that time worked must be tied to a specific job task within our maintenance system. Challenge exists in avoiding duplication of time entry within CMMS and Payroll systems, while ensuring accurate data exists in both systems.
- Western uses PeopleSoft Financials, PeopleSoft Human Resources (HR), and Jaggaer Procurement. Facilities Management's current CMMS application relies heavily on integrations with PeopleSoft Finance and PeopleSoft Human Resources to do business. (7 financial and 1 HR) Our goal is to maintain and improve these integrations and develop some additional ones to provide process efficiencies and accurate reporting.
- Diverse user base requires an intuitive application to overcome technology adoption to ensure all standard functions are being performed within the application properly and completely. Training and support methods likewise need to be accessible and clear to users with varying degrees of technological comfort.

**Project Goals and Expectations**

The primary goal of this project is the successful deployment of a modern and fully supported CMMS system before the end of 2023. This system will provide all expected CMMS functionality such as work order management, preventative maintenance (PM) scheduling, asset tracking and costing.

**FM's expectations include:**

- Improvement of user experience for both external FM clients (work requests, costing Information) and internal FM staff (work order management, task information, financial reporting, timecard entry)
- Provide functionality for accurate and reliable facility data collection
- Use work orders, preventative maintenance (PM) tasks, scheduling functionalities, inventory management and have the ability to issue and replenish materials accurately and efficiently (mobile devices for inventory management)

- Create valuable reporting options (customable reports and dashboards) that are actionable
- Robust integrations with PeopleSoft Financials and HR (used centrally by Western) in support of financial and budgetary business processes as well as payroll functionality
- Ability to automate integrations with new Labour Management System or provide LMS support directly
- Thorough training and process documentation for both system administrators and users
- Web-accessible application with full mobile support from a dedicated mobile application
- Reports; to be able to create detailed and customable reports and exportable to various file formats (PDF, Word, Excel)
- Alerting and notifications (required approvals, critical requests, system errors, material handling) using various methods of communication (SMS, E-mail, Push notifications)
- Auditing and trailing logs for actions taken within the system (changes to work orders, entities, timecards, etc.)
- Vendor support with regular updates/upgrades is crucial, while establishing a dynamic partnership for future enhancements and product roadmaps
- Flexible feature configurations within the application to meet evolving business needs, without relying on customized code/programming changes
- Application must be easy to use and intuitive to end-users with role-based security profiles

## Requirements

### Functional Requirements

These points identify the main functionality required from the software. Specific requirements are listed further below.

- Preventative, corrective and request (billable) work order handling, including billable and non-billable work orders with cascading asset hierarchy and flexible work order structure for multi-trade and portfolio-based assignments
- Time reporting for complex collective agreement rates applied to work orders and integration into PeopleSoft for HR and payroll
- Inventory and labour management with flexible tracking, costing and labour applied to work orders and integration into PeopleSoft Financials
- Job costing including labour/time and parts/supplies for billable work orders and analysis
- Flexible, easy reporting, dashboards, and exports for analytics
- Mobile capability (via cellphone) and browser based
- User friendly and efficient interface

### Specific Feature Requirements

These points identify anticipated key feature requirements in narrative form for initial understanding and discussion purposes.

A more detailed listing of functionality that is required, preferred and optional will be provided during the Request for Proposal procurement phase of this project.

### Assets

- Standardized hierarchy, naming convention with multiple levels including campus, area, building and then assets with hierarchy like Uniformat II
- Attachments of all kinds connected to assets and available to mobile users as well. Includes all main document types from Microsoft, Adobe PDF, Image formats and CAD formats
- Accommodate bar codes / QR Codes on assets and printed on work orders, etc. with scanning enabled via mobile phones
- Tracking labor and inventory costs by asset (at lowest level with roll up)
- Asbestos flag for buildings and attachment of asbestos inventory

### Work Orders

- Attachments of all kinds with work order like Assets, including ability to add attachments via Mobile in the field (i.e., photographs) or Web browser

- Work order status categories with comments by status, notifications, etc. (i.e., for delay, waiting for parts, re-schedule, work complete, etc.)
- Flexible assignment of work orders to assets, trade, building, area/zone, campus, trade including batch assignment, automatic assignment based on work order type, manual assignment (via planner or supervisor/manager)
- Assignment by zone instead of actual trade, then when trade accepts work order, they become the assignee. Ability to track, report, manage work orders by zone as well
- Job Safety Analysis attached to work orders and available to read by technician, with requirement to tick off that it was read and adhered to
- Re-assignability of work orders (example: first to building automation team, then re-assigned to trade staff)
- Multiple resources on work order (example: building automation team + one or more trade staff) – or a parent/child relationship
- Notifications for priority work orders or at different stages of work order milestone. Process or user ability to select notification or not
- Automatic generation of work order based on BAS alarm, other interfaces
- Easy to find duplicate requests and either connect work orders or ensure only one work order is generated
- Unlimited space for adding notes and comments, searchable, organized, etc. Ability to flag people, etc. and dialog within the work order
- Enable 'ongoing' work orders that are open for a fiscal year and accumulate time, costs, and comments (With discrete tracking of time and costs for audit/analysis purposes)
- Resource management – work order labour time requirements, totals, matching resources, availability based on individual schedules, vacation, time off, etc.
- Warranty Flag (and warranty certificate or supplier) for work orders on a warranted asset
- Microsoft Teams (or similar tool) integration for communication on work orders

#### Preventive Maintenance

- Ability to schedule maintenance with odd timings (summer only, winter only, non-recurring patterns, etc.)
- Ability to schedule a single PM for a group of like assets in a single building with ability to easily apply/track time and costs by asset if needed
- Work order/PM includes parts, tools, or supplies list for the job, including part numbers, quantities, inventory numbers, etc. for easy ordering or automatic ordering
- Estimated hours in the system for each task and actual time applied, for analysis and work loading.
- Inspection checklist for PM where required and fillable via handheld
- Ability to add a corrective work order as a child to a PM work order for work that comes from a PM routine

#### User Interface

- Include tips / info boxes for guidance on entering fields
- Long or unlimited length for comments and other information
- Self-populating and drop-down lists to reduce typing and ensure consistent spelling of key fields
- Ability to flag fields as required for populating. (i.e., fault code, comment, etc.)
- Dashboard for performance and work order progress, including all status, past due times, etc.
- Dashboard for costs by work order, asset, building, etc.
- Macro ability for populating with frequently used text (Macro set up by user)
- Autofill based on first letters or numbers typed in key fields such as building numbers, account codes, names, etc.
- User configurable pages, preferences, etc.
- Easy search for entity numbers, work orders (single search, not multiple clicks)
- Control user access and capabilities by role, user, etc.
- Least number of clicks, use drop down population, single page, pre-selected fields for some activities, etc. for efficiency and ease of use

#### Integration



- PeopleSoft integration
- Improved error reporting and handling, so entire file will not be rejected due to one error (if file upload is part of integration)
- Matterport 3d integration
- Integration with VFA/Slam cap (i.e., capital planning software)
- BAS integration for alarms
- GPS tracking (GoGPS)
- Tree inventory integration (Arch GIS)
- Integration with room booking (via Archibus) to know which rooms are in use.

#### Reporting

- Built in reporting
- Additional sorting, filtering, column selection, cross tables, etc.
- Easily export to excel with sort, filters, field selection, etc.

#### Time Tracking

- Transfer of time to timecards and integration with PeopleSoft, Financials and HR automatically based on work order entries
- Validation for timecard entry to remove possibility of error – or messages ‘do you really want to do this’
- Copy over a timecard from previous period
- Audit trail for all changes
- Able to select days and post a selection of timecards, in addition to one by one or all.
- Sickness time off, etc., with totals, tracking, etc.
- Track wide variety of different job types and pay rates, premiums, extra pay based on certification, applied to regular and overtime pay, etc.
- Track actual clock time of work activity (i.e., scan in and scan out on a task, work order, job, etc.)
- Vacation balance tracking – historical and remaining
- Ability to revise incorrect or timecard entries
- Limit charging to work order except to actual assigned trade person(s)
- Single work order with different trades/assignees or child work orders for different trades

#### Inventory Tracking

- Automatic inventory check and ordering based on work order needs
- Automatic notification to assigned trade when inventory item is available (ordered or packaged for the trade person)
- Flexibility and easy to modify for changes to quantities, sizes, etc.
- Ability to use average inventory price for billables and for tracking costs to work order
- Ability to include a markup (a % or \$ for billable, 0 for non-billable) Ideally flexible based on client being billed or product
- Need to readily separate and identify tax paid on inventory
- Barcode scanning for products to add to inventory
- Backorder reports based on trade, work order, etc.
- Re-order either automatically or notify manager for re-order decision, based on selection
- Batch changes when new vendor is used for a product (change price, part number, quantity, vendor name, etc.)
- Ability to have inventory located at remote locations or on trucks, different departments, etc.
- Need Inventory matching between inventory system and PeopleSoft

#### Special/Unique Requirements

- Multiple labour units with differing skill sets required for completion of tasks
  - Uncertainty around the need/ability to have an included or discrete Labour Management System to handle complex payroll functions
- Maintaining two different rates (Earn Rate and Charge Out Rate) for completed work
- Implementation timelines (cannot implement during critical times (Start of Term, Fiscal Year End))

- Integration with systems already existing and in enterprise-level use on campus, namely PeopleSoft Financials (Labour Transactions, Inventory issuance/adjustments, cycle counts, Purchase Orders, vendors, and Speed codes) and PeopleSoft HR (payroll information), with further integrations needing to be created



## SECTION 9 - SCRIPT FOR STRATEGY DISCUSSIONS

Western intends to discuss the following items during the "Strategy Discussions" with each Supplier. Note: A written response is NOT required or requested.

1. **Based on our requirements identified in the Requirements section above, is your software able to provide the functionality listed? If not, what functionality is not available?** *(About 10 Minutes)*
2. **Integrations with our PeopleSoft Financials, PeopleSoft Human Resources and Jaeger applications are crucial. Is your application able to integrate with all/some of them and do you have experience with these integrations? Please explain how the integration works (live, file transfer, etc.)** *(About 5 minutes)*
3. **Regarding the Payroll software requirements** *(About 10-15 Minutes):*
  - a) **Is this something that your CMMS software performs or has the ability to perform?**
  - b) **If not, what recommendations or suggestions do you have to accommodate our needs in a different way?**
  - c) **Have you ever done this before, particularly for a complex unionized pay rate environment?**
4. **Facilities Management started to integrate with Geographic Information Systems/Building Information Modeling (GIS/BIM). Does your application integrate/interact with GIS/BIM? Briefly describe how that integration is handled.** *(About 2-5 Minutes)*
5.
  - a) **Does your company perform the integration/installation of your software yourself, or will this be performed by third-party integrators? Please identify your integration partners.** *(About 1-2 Minutes)*
  - b) **Outline your company's project implementation plan through to live customer support/experience.** *(About 2-5 minutes)*
6. **To enable your firm to prepare an accurate proposal at the RFP stage, what is the most critical information for Western to provide about our Current Conditions (Current State Environment)?** *(About 5-10 Minutes)*
7. **To enable your firm to prepare an accurate proposal at the RFP stage, what is the most critical information for Western to provide about our Future State Requirements? And our overall vision/goals/objectives/desired outcomes?** *(About 5-10 Minutes)*
8. **Are there any other factors/issues/items Western be considering at this time?** *(About 5-10 Minutes)*
9. **What is the financial/licensing structure you operate under?** *(About 2 minutes)*

**ATTACHMENT A**  
**Strategy Discussion RSVP Form**

Suppliers that would like to participate in Strategy Discussions must complete and submit this Attachment. Interested Suppliers should RSVP as soon as possible. Time-slots will be scheduled on a first-come, first-served basis. Once your time-slot is confirmed, Western will provide a link to the conference-call or video-call.

**SUPPLIER INFORMATION**

Full Legal Name of Supplier: \_\_\_\_\_  
 Company Website (if any): \_\_\_\_\_  
 Contact Name and Title: \_\_\_\_\_  
 Contact Phone: \_\_\_\_\_  
 Contact Email: \_\_\_\_\_

**SUPPLIER INFORMATION**

Please identify the timeslots that your team would be available to participate in Strategy Discussions with Western. Due to the number of Suppliers that may RSVP, please identify all date(s)/time(s) that will work for your team.

DATE	TIME	AVAILABILITY
December 7	1:00 pm – 2:00 pm	<input type="checkbox"/> Yes <input type="checkbox"/> No
December 7	2:30 pm – 3:30 pm	<input type="checkbox"/> Yes <input type="checkbox"/> No
December 8	1:00 pm – 2:00 pm	<input type="checkbox"/> Yes <input type="checkbox"/> No
December 8	2:30 pm – 3:30 pm	<input type="checkbox"/> Yes <input type="checkbox"/> No
December 9	9:00 am – 10:00 am	<input type="checkbox"/> Yes <input type="checkbox"/> No
December 9	1:00 pm – 2:00 pm	<input type="checkbox"/> Yes <input type="checkbox"/> No
December 9	2:30 pm – 3:30 pm	<input type="checkbox"/> Yes <input type="checkbox"/> No
December 12	10:00 am – 11:00 am	<input type="checkbox"/> Yes <input type="checkbox"/> No
December 13	9:00 am – 10:00 am	<input type="checkbox"/> Yes <input type="checkbox"/> No
December 14	8:30 am – 9:30 am	<input type="checkbox"/> Yes <input type="checkbox"/> No