

Scope of Work #16-2-9

Integration of Schneider Electric's Responder OMS with Trilliant AMI

Version 1.2

Prepared For:



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Work to be performed by





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1 Overview

To satisfy Denton Municipal Electric's ("DME") stated requirements of seamlessly utilizing the Trilliant Advanced Metering Infrastructure ("AMI") System information within the Schneider Electric ("SE") Responder Outage Management System in the back office, SSP Innovations ("SSP") is proposing a comprehensive integration project between the two systems.

SSP will work with DME and Trilliant to implement an integration between the Trilliant AMI system and the Responder OMS based on the information provided by DME based on past workshops. These integration points will include Responder accepting power-down and power-up messages from the AMI system via a new custom web service that will be implemented by SSP. This web service will not use the Responder Integration services.

SSP will also implement a meter ping utility that will allow users to ping one or more meters from Responder/ArcMap to determine if the meters are up. The status for the meters will be displayed on the map.

Finally, SSP will implement a new CIS integration to track non-pay customers with coloration changes on the map for non-paying customers. More detail is available for all of these integration points in the provided DME documentation.

At times this project may require several different SSP, Trilliant and DME resources. However, throughout the entirety of the project, the selected SSP Project Manager (TBD dependent on start date) will be the sole person responsible for executive project communication, issue resolution, resource management & scheduling, and ultimately, an on-time delivery of the stated solution. Additionally, the SSP Account Manager (Dean Perry) will be available to DME throughout the project duration to discuss any non-technical or personnel-specific concerns or questions.

DME is already utilizing and is familiar with Esri ArcGIS and the Schneider Electric ArcFM software. This project will interface DME's Responder OMS with the Trilliant AMI system to provide a more streamlined, efficient, and ultimately valuable usage of the OMS.

The following section describes the tasks required to perform this implementation in detail.



1.1 Design Phase

1.1.1 Kickoff and Workshop

Prior to kicking off the project, SSP will internally meet to review the goals, roles, risk items and plans for the project. This shall ensure all SSP project personnel have a clear understanding of the plan ahead of work beginning.

Next, the SSP Senior Consultant and PM will remotely host a project kickoff meeting with DME. This meeting will consist of a review of the project goals, roles, personnel and schedule. Time will be allowed for questions and answers. IT team members from DME and technical representatives from Trilliant are required to attend and participate.

Upon the Kickoff Meeting's conclusion, SSP will conduct remote workshops with DME Rx administrators, Trilliant, and the CIS department to determine the exact approach for integrating the systems. The integrations will all be based on a services oriented architecture (SOA) approach utilizing web services. Trilliant will be responsible for designing the AMI side of the integration and the CIS department will be responsible for designing the CIS side of the integration.

1.1.2 Documentation

Upon completion of the workshops, SSP will create a document detailing the design approach of the integration from the Responder perspective. SSP will then review the document with Trilliant and DME remotely to ensure the design specifications match the expectations from both parties.

Upon completion of the joint review meeting, SSP will update the document as required and submit it to Trilliant and DME for each recipient's future usage.

Provided all issues raised in the review meeting were addressed sufficiently, the Design Document will be considered approved for development at this time.



1.2 Development Phase

*Per updated SSP internal technology policy, in order for SSP to utilize DME's Schneider Electric licensing for development and/or testing purposes, SSP will require DME to accommodate one of two activities for SSP's proper access:

1. If permitted within its software license agreements and preferable to DME, DME will provide SSP the required Schneider Electric software installers via FTP or Sharefile for SSP's use on development machines. DME provides access to its network via VPN along with the IP address and machine name of its license server. SSP will reference the license server for the term of testing any code / processes only. The network access will support allowing SSP machines onto the DME network to reference the server.
2. Alternatively, DME will provide a desktop or server that SSP is provided login rights to, on DME's network. SSP will deploy our software development tools to this machine and use it to develop and test all new functionality. SSP will remote desktop to this environment to perform this work. This machine can be either physical or virtual. If virtual is preferred, SSP can provide the machine to DME. SSP's TFS source control can and will still be used for code control.

It has been assumed that the DME environment inclusive of the Responder application will have been previously replicated at the SSP or DME offices per the prior Clevest integration work.

SSP will first create the web method signatures that will be required for development by Trilliant and/or the CIS department. Once created, SSP will provide the WSDL for these web methods for reference by the respective development groups.

Next, SSP will create the required integration code for the four interface points. The code will be unit tested at SSP and interface installation and configuration documentation will be created.



1.3 Deployment Phase

To deploy the solution, SSP will travel onsite to DME offices for ~four days. It is expected that Trilliant and the CIS department would also be present onsite for this implementation, testing, and validation exercise.

SSP will install the integration code into the client production environment. SSP will test and validate the functionality within each system as well. For the balance of the visit, SSP will provide onsite production support as DME users test and validate the new functionality. Any issues will be addressed by either SSP or Trilliant as needed to ensure that the integration is working as designed. DME will be expected to validate that the functionality meets the design documentation and operates correctly.

Finally, upon completion of the onsite trip, SSP will provide remote support for the solution, up to 40 hours, over the following 10 business days. If support is required beyond the 10 business days or the 40 hours (whichever is achieved first) a change order may be required.

Additional time has not been included for a second environment installation, however if this becomes a requirement, the DME SSP retainer may be utilized for the work. At the completion of the offsite support period, the integration project will be considered complete.



2 Assumptions

The following assumptions have been made regarding the description of this work:

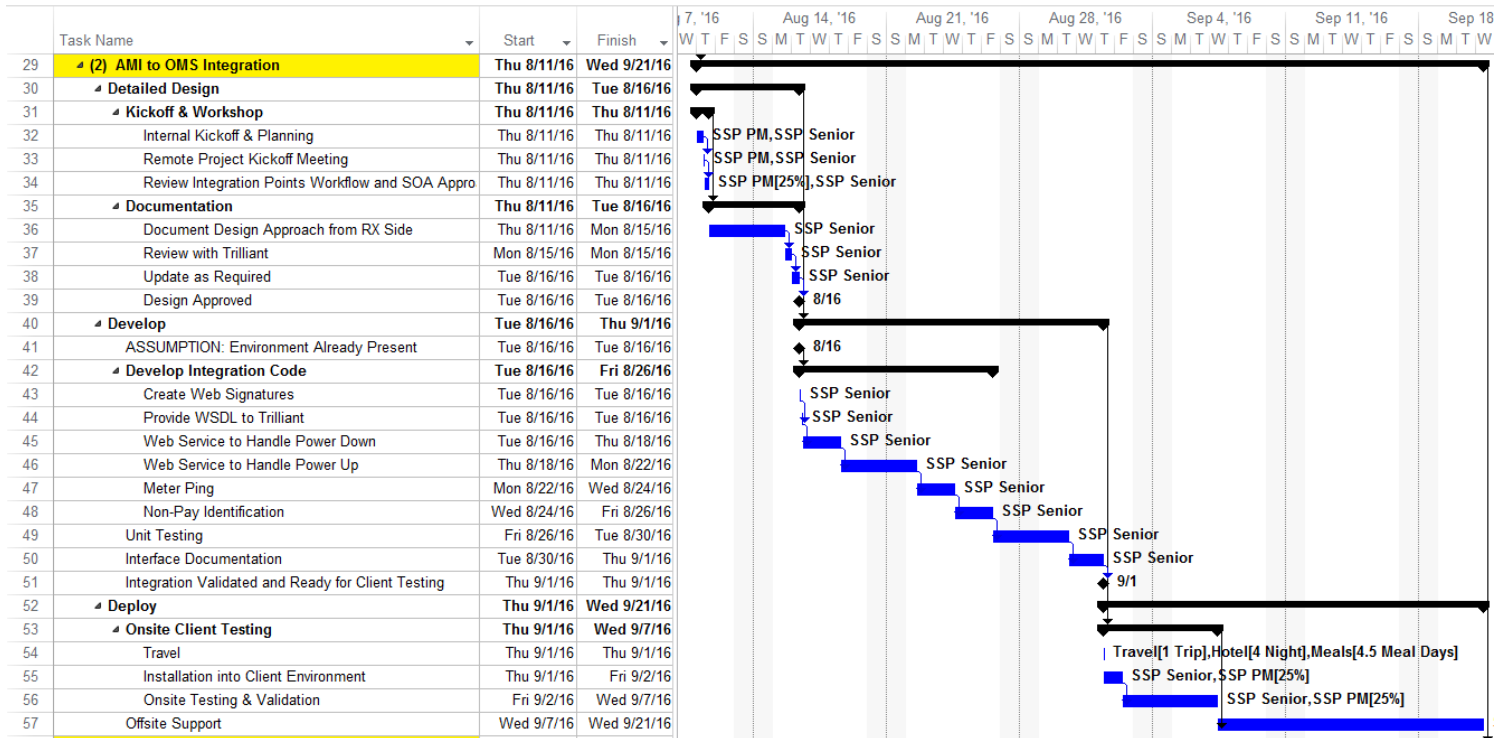
- SSP will already have a functioning DME test Rx environment up and running at our offices per previous projects.
- DME IT will provide all servers and will install all core Operating Systems.
- DME IT will be available to support any environmental, system access, or operating systems issues throughout the project.
- DME IT will provide all required environmental access in a timely manner (response time within 24 hours of request).
- DME must provide the targeted Oracle database version to SSP in writing at the project kickoff.
- DME will provide appropriate staff commitment levels to ensure the success of the integration project.
- Trilliant will provide appropriate staff commitment levels to ensure the success of the integration project.
- Alterations to the design documentation after acceptance may require a change order depending on the significance of the change.
- Only the functionality described in Section 1 will be implemented as part of this project.
- SSP has not included any time to train Schneider Electric on the support of the code, the usage of the code, the test harness, or the integration. If training time is needed, a change order will be required.
- DME will be responsible for ensuring that any required Responder data is in place to support the integration.
- DME and/or Trilliant will be responsible for developing any formal test cases of the integration points based on their usage within the Trilliant software. SSP will not create or deliver any formal test cases.
- Post deployment support will be provided for up to 10 business days following the onsite go live visit or 40 hours of work, whichever expires first. Once this support phase expires, the project will be deemed complete. If additional support time is required a change order will be required.
- The integration will be developed against Responder version 10.2.1.
- No formal training has been included in this statement of work. It is expected that the DME staff will be trained on Responder and Trilliant usage independent of this project.



3 Project Plan

The detailed project plan that was used to scope and budget this project has been included below. It can be reviewed for additional information on tasks and duration.

Dates depicted in the project plan are tentative and subject to change dependent on actual project start date and other factors; they're included here to communicate duration of tasks.





4 Quote

This quote is tied directly to the scope of work detailed within this document. Any changes to the scope of work before or during the project would result in a change order.

This quote is provided as a fixed priced number inclusive of all expenses and is good for 90 days from the date listed on this SOW.

Upon completion of this project, a single invoice will be provided to DME for its entirety.

Project Task	Est. Duration*	Subtotal
DME Responder-Trilliant Integration		
Design Phase	4 Bus. Days	\$6,800.00
Project Management		
Kickoffs & Workshops		
Documentation		
Development Phase	12 Bus. Days	\$24,000.00
Project Management		
Develop Integration Code		
Unit Testing		
Interface Documentation		
Deployment Phase	14 Bus. Days	\$20,370.00
Project Management		
Onsite Installation, Testing, Validation		
Offsite Support		
Grand Total 30 Bus. Days \$51,170.00		

*Duration estimates are subject to many project factors, some of which are outside of SSP's control. Therefore, all durations depicted are non-binding estimates only.

Note: All travel costs are included in the above quote.