



CASE STUDIES



Using Aspose.Total for .NET Framework to automatically generate documents from data driven workflows

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ABOUT DYNECON

DYNECON is an Advanced Infrastructure Services consultancy founded on principles of integrity, quality and trust. We are truly dedicated to our employees, clients and community and focus on technology areas which are prevalent in the industry and consistent with both emerging and sustainment technologies. Our team is a dedicated group of experts that deliver quality deliverables using proven methodology and execute strategies which are critical for sustainability and profitability.

In addition to its professional services offerings, DYNECON also helps its clients develop Business Process Automation and data-driven Workflow Automation using custom-built solutions leveraging commercial off-the-shelf products and rapid application development products.

PROBLEM

There is a significant advantage in being able to generate Microsoft compatible file-formats seamlessly from data-driven sources used in its custom process automation solutions. Dynecon needed a solution that generated Microsoft compatible Word documents, Excel spreadsheets, and Visio diagrams from customer generated data. Additionally, Dynecon needed the ability to use the Aspose .NET libraries to seamlessly transform generated artifacts to an enterprise Wiki without losing the ability to “transform back”.

Since Dynecon’s engineering and process automation documents are built using custom data-driven applications, the ability to generate Microsoft interoperable files and reports was critical.

SOLUTION

Dynecon’s initial research determined that Aspose’s .NET libraries could programmatically generate Word documents, Excel spreadsheets, PowerPoint slides, Visio diagrams and Adobe PDF documents.

During its pilot testing, Dynecon was able to leverage Aspose’s libraries to seamlessly and reliably generate Microsoft compatible files using data generated and extracted from its clients’ enterprise data sources – using its customized .NET wrapper.

Currently we are using Aspose.Total for .NET to automate engineering workflows and business processes using COTS products and plan to make it a standard part of our ‘platform’ offering to our clients.

<p>Introduction This Engineering and Installation Plan provides the basis for change in the FIS environment and will outline the approach and associated details for the titled change. This EIP is generated by the Network Engagement Model (NEM) Engineering Workflow and any changes to the document are driven by the document owner through that system. Each section, once finalized will be available on the FIS NEM Wiki for further review.</p> <p>Change Summary ChangeSummaryChange ChangeSummaryStatus</p> <p>Current State Current State Summary CurrentStateSummary</p> <p>Current State Drawing CurrentStateDrawing CurrentStateDrawingSummary</p> <p>Additional Current State Information CurrentStateAdditional</p> <p>Detailed Discovery Data Discovery Wiki Links DiscoveryDataWikiLink</p> <p>Discovery Drawing Links DiscoveryDataDrawingLink</p> <p>Additional Discovery Data DiscoveryDataAdditionalLink</p> <p>Proposed State Proposed State Summary ProposedStateSummary</p> <p>Proposed State Drawing ProposedStateDrawing ProposedStateDrawingSummary</p> <p>Change Outcomes Anticipated Change Outcomes / Benefits ChangeOutcomeDetailList</p> <p>Customer Impacts Change Impact Summary CustomerImpactSummary</p> <p>Known Impacts CustomerImpactKnown</p> <p>Unknown Impacts / Dependencies CustomerImpactUnknown</p> <p>Impact Artifact Links CustomerImpactLinks</p> <p>Configuration Items</p>	<p>Known Dependencies KnownDependencyTable</p> <p>Dependencies and Risks DependencyRiskTable</p> <p>Dependency Artifact Links DependencyLinks</p> <p>Pre-Change Approach Scaffolding Overview PreChangeSummary</p> <p>Scaffolding Steps / Changes PreChangeStepsTable</p> <p>ASI Detailed Steps The ASI to execute this change will consists of the following steps:</p> <p>ASI Phases and Description DetailedASITable</p> <p>Network Team Test Plan The following testing will be done once the traffic is migrated:</p> <p>Test Plan Summary NetworkTeamTestPlanSummary</p> <p>Testing Script NetworkTeamTestPlanTable</p> <p>Customer Test Plan Customer Testing Requirements CustomerTestingRequirements</p> <p>Customer Test Plan CustomerTestPlanSheet</p> <p>Configurations & Diagrams Approved Configurations ConfigurationLocation</p> <p>Approved Drawing Package DrawingPackageLocation</p> <p>Rollback Plan Rollback Summary RollbackSummary</p> <p>Rollback Time Line RollbackTimeline</p> <p>Rollback RACI RollbackRACI</p>
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Figure 1 - Aspose Words Output for Fully Templatized Engineering Document

The figure above is an example of a template created by the Aspose Words .NET library – allowing us to programmatically automate the engineering workflows. In addition to the Word template, we have been able to use Aspose Cells to produce inline sheets and embed them into the final outputs:

Listener Name	Listener IP	All Listener Device IPs	Listener Service	Listener Port	Listener OS	Listener Is Virtual
HIDDEN	::	10.236.252.111; 10.237.140.15	TermService	3389	Microsoft Windows Server 2012 R2 Standard	yes
HIDDEN	::	10.236.252.111; 10.237.140.15	TermService	3389	Microsoft Windows Server 2012 R2 Standard	yes
HIDDEN	::	10.236.252.111; 10.237.140.15	TermService	3389	Microsoft Windows Server 2012 R2 Standard	yes
HIDDEN	0.0.0.0	10.236.252.111; 10.237.140.15	OutSystems SMS Connector Service	12004	Microsoft Windows Server 2012 R2 Standard	yes
HIDDEN	::	10.236.252.111; 10.237.140.15	OutSystems SMS Connector Service	12004	Microsoft Windows Server 2012 R2 Standard	yes
HIDDEN	127.0.0.1	10.236.252.111; 10.237.140.15	VRTSpxb	49207	Microsoft Windows Server 2012 R2 Standard	yes

Figure 2 - Aspose Cells Automated Table Creation

EXPERIENCE

Aspose was on the short list based on the number of file types that we wanted to support for our custom solution. We evaluated several products including Microsoft’s own products for file generation and found that our experience using

Aspose was extremely positive. The implementation and integration of Aspose into Dynecon's custom solution was seamless.

NEXT STEPS

As a next step, we plan to leverage more of Aspose's more than 100 other file formats using their native APIs for .NET.

SUMMARY

Our overall experience with Aspose's product has been very impressive. Aspose integration into our product suite reduced our internal product development overhead and ensured accurate and reliable generation of files in a seamless and secure manner. We at Dynecon wish Aspose all the very best and look forward to its future product roadmap, our continued association and the mutual success of our products.