Everything You Need to Know:

Xelence's Communications Engine

xelence

What is the Communications Engine?

The communications (comms) engine is a bundle of functionality in Xelence, Sagitec's low-code/no-code platform. The comms engine helps create, maintain, and publish any communication that leaves your organization and goes to external stakeholders via any venue or mechanism. Comms include, but are not limited to, letters, forms, emails, web portal announcements and notifications, web portal direct messages, and text messages.

Business Benefits of Communications Engine

Powerful Functionality

The communications engine can scale horizontally or vertically to handle a larger load of communications, assign templates for specific communications, and integrate with other platforms for SMS and voice communication.

Seamless Experience

Sagitec's comms engine provides an improved and more secure experience for your users. For example, users can personalize communication using a security resource and do tamper checks to ensure communications haven't been tampered with outside of your application.

Optimum Performance

You can generate more communications faster and prioritize them too.

Xelence Communications Engine Features and Benefits

Feature	Benefit
GENERAL	
Open XML	The comms engine uses Open XML. The Open XML standard is to decouple documents created by Microsoft Office applications so other applications can manipulate them independently of proprietary formats without data loss. Open XML is more efficient and has greater interoperability.
Bookmarks	The Xelence comms engine supports different types of bookmarks to support dynamic content. • Field bookmarks: Value for field bookmarks can be replaced with data value, formatted data value, HTML, or even images. • Conditional paragraphs: When you (users) define a template, you can have conditions in the template itself or conditions coming from entity rules. • Table bookmarks: The rows can be created based on the actual rows of a collection and each column can have formatted data or images or HTML. • Repeater bookmarks: The exact formatted block is repeated for every row of data. • Template bookmark: An existing template can be added to the generated correspondence.
Standalone Communication Engine	You can run multiple comms engines independently to process the communication generation load without affecting performance.
Asynchronous Communication Generation	Your line of business application can create a database (DB) record for generating the communication, and the system serializes the bookmarks to the DB. You can reproduce any communication at any time by accessing the archived records.
Graceful Shutdown	If you shut down the comms engine while in the middle of generating communications, the engine brings it to a logical step before shutting down. Once back on, it will start where it left off and deliver it based on the communication preferences.
Multi-Threaded Architecture	Each communication generation thread can process communications in parallel. The benefits of multi-threaded architecture include: • Better fault tolerance: The system can restart at the point of failure. • Configurability: We can enable and disable threads so that print management can happen on one server while communication generation and PDF conversion happens on other servers. • Optimum performance: The system provides optimum performance while generating communication.
Separate Code Assembly for Independent Upgradability and Project Customization	The structure of the comms engine code allows project teams to override functionality without breaking it. This feature allows customers with unique requirements to develop custom code while maintaining the upgradability of their base comms engine.
Enhanced Fault Tolerance	Because of multiple threads in the comms engine, you can restart communication at the point of failure without restarting the process from scratch.
COMMUNICATION TEMPLATES	
Support Template Versioning and Priority	Business users can upload newer versions of communication templates with an effective date, creating versions within the database. You can prioritize templates as "high" or "low" as well. For example, a one-time password message template that expires in 10 minutes can be marked as a high priority so that it is not held up by a batch that might generate 20,000 communications.

Feature	Benefit
Tamper Check	If enabled, the comms engine can verify if a communication template or document was modified outside your application. The comms engine can mark these changes as an error and prevent further communication delivery.
Support PDF Enclosures	You can upload PDF forms to a template as enclosures so you can include more documentation in one communication.
Due Date Calculation	The engine calculates the due communication date based on the application-provided date instead of the communication generation date or print date. This helps receivers act on the communication with sufficient time in hand.
SMS Delivery Method	The architecture of the comms engine allows for integration with other platforms to send communications as SMS/text messages.
Template Configuration	You can determine whether to upload the whole mail packet to ECM or individual files based on specific flags on the templates.
Secure User Permissions	You can set custom permissions based on user roles. Provide authorized users access to edit manually generated communications and others to view-only. This security feature ensures a greater level of control over communication messages.
PRINT MANAGEMENT	
Support Communication Scheduling	You can hold communication to ensure that they are accurate before releasing them to the recipients.
Support Envelope	If multiple communications go to the same end-user, you can group them in the same envelope to save on postage costs as long as they have the same print doc type.
Support Centralized Print Room vs. Print Vendor	You can configure communications to be printed either in the centralized print room or sent to a print vendor.
Print Batch	You can print communications in batches for efficiency and avoid lost communications.
Support Aspose Integration	For Word to PDF conversion, the communication engine supports Aspose. Neevia and ActivePDF will be supported at a later date.

About Sagitec

Sagitec Solutions, LLC is a low-code/no-code platform provider. Sagitec's Xelence platform puts speed, simplicity, and evolution at the core of enterprises. Xelence allows citizen developers and IT professionals to quickly design, test, and deploy simple to complex enterprise-grade software applications. Over 30 complex mission-critical software applications run 24x7x365 with demonstrated ability to evolve and scale to incredibly high demands with the Xelence platform.

Accelerate excellence and learn more about Xelence at https://www.sagitec.com/xelence

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