

ISB Global Smart Solutions

Patterns and Features List

The page sets out the high-level reusable features, patterns or methods (technical or functional) ISB has developed on top of the OutSystems best practices which can be leveraged into any new product. It is not customer or project specific.

The page is intended for anyone who needs or wants to understand more of the OutSystems solutions ISB has developed. These exclude any OutSystems standard features.

Topic	Description
Security Group Management	<p>Users: Employees, IT Support, Customers or Vendors who need to access specific functionalities, reports, screens or processes. Within Security group management we have built a framework where you can create these groups and assign the required reports, screens or processes based on the type of user. No need to manage at user level.</p> <p>Management of the security groups has its own security framework with processes and rules for admin.</p> <p>Example: Security group for Customer Portal, where access needs to be granted to relevant customers.</p>
Security Data Segregation	<p>Specific user groups may need to see data for a specific region, area, customer type or business object status. This is achieved in the built framework called data segregation where the level of data segregation is defined based on business requirements and then implemented with a standard pattern to be consistent throughout the OutSystems application.</p>
Approval Engine Management	<p>Each company will have different rules on who is allowed to approve and when approval is needed. Several levels of approval may be required.</p> <p>Approval Engine Management is built for configuring levels, standard approval patterns and rules which can be configured by an IT user. IT provides a proven, standardised way of implementing approval management. Please note this is not the same as the DocuSign Integration management solution for end customer and legal purposes (See DocuSign below).</p>
Toast Messages	<p>A toast message is a pop-up you see on a website or program next to your name as a warning, info or and action item needing your attention. It was built to toast messaging best practices and is part of our standards.</p>

<p>Multi-Currency</p>	<p>Multi-Currency is a solution which bridges the gap between customer, user currencies and finance system requirements. Within the Multi Currency framework we have built the ability to maintain conditions for spot rates, weekly or monthly rates/ This is managed by Security groups and can be used in customer requirements in a standardised way. Please note this also follows multi-currency concepts of SAP as we typically use this to send an order or invoice to SAP with Document, System and Local currencies. However, it can also be used to display prices in different currencies.</p>
<p>Condition Management</p>	<p>The Condition Management framework is built on industry best practices for managing different conditions: prices, taxes, or discounts at different levels. The framework allows configuration of any number of price types, discounts, or taxes. Additionally the conditions can be applied to quantity, growth hurdles, price based, or percentage based issues.</p> <p>The framework will return the most valid condition based on the criteria defined for it when used in a business object.</p> <p>Example: if you have a quote that needs to pull in taxes, and selling prices based on the customer's geographical area, the framework provides a standardized auditable framework.</p>
<p>Live Style Guides</p>	<p>OutSystems provides a standardized Live Style Guide accessible by developers. Within the ISB live style guide we have enhanced this with additional controls, screen templates, dashboards, example business objects and process screens (also called templates). These are linked to a central control by the customer where the CSS styles can be updated globally across the application built in OutSystems.</p> <p>Example: dropdowns formatting, font and button colors, for example, are centrally linked to the style guide framework and managed by the development team in one place.</p> <p>Template examples are customer take-on processes, quote creation processes, requesting information or even dashboards. These templates create a foundation for application built in OutSystems based on ISB's experience and UI/UX design.</p>
<p>DocuSign Integration Management</p>	<p>The DocuSign integration framework allows for DocuSign to be connected to OutSystems. Within the management of the framework, mapping is configured and developed for required data into a document developed in DocuSign or Adobe.</p> <p>Once the process triggers in OutSystems, an interface sends the data to DocuSign with the required data. DocuSign sends this to end users to sign. Once the DocuSign process is complete DocuSign updates OutSystems with the status and adds a copy to original request.</p> <p>The framework includes audit logs for all integration.</p>

<p>ERP Integration</p>	<p>If there is a need to send or receive ERP business objects to or from OutSystems we can leverage the integration framework built to achieve this in a proven standardized way. The framework includes Async or Sync integration concepts. The same framework can be used to send data to multiple analytical or destinations.</p> <p>Example: Once a customer is approved, details need to be sent to SAP to create them in the SAP system as a customer. The same process applies for sales orders, quotes purchase orders, for example.</p>
<p>Scheduled Job Management</p>	<p>Within Scheduled Job Management the framework caters for the needs of end users (with right security groups) who need to schedule reports to be emailed or system tasks to be performed at the predefined settings the user has saved and applied.</p> <p>This is a consistent proven built framework which is used regularly.</p> <p>Example: At a certain time and day of the week, old quotes need to be closed.</p>
<p>Business Object Management</p>	<p>ISB has built a predefined robust framework to design, define and manage the state of business object regardless of the business process used to interact with the business object which leverages our standards for managing data objects. This is tightly integrated into the security and data segregation management.</p> <p>Example: A customer has specific details which need to be stored, including the status of the customer, and requires a change log (audit log) of change made to it. This requires consistency to the customer business object regardless of the change is via business process for customer update via back office or customer portal processes.</p>
<p>Grid Reports Management</p>	<p>A framework built to create operational reports within OutSystems in the format of a "pivot" with the capability to save layouts, search criteria and schedule via a job manager a schedule to run the reports in into an excel version output which is mailed to a defined email.</p> <p>This is an important feature as it reduces the dependency on third party analytics and allows end users to select columns for output and schedule a job that needs to be sent via email/pdf.</p>

<p>Data Upload Tool</p>	<p>ISB has followed industry standards to create a framework to load data into OutSystems with standard data load validation, performance and history tracking. The framework defines how to use upload templates (CSV) or via API exposed to extract and transformation data.</p> <p>This is a built solution to define the scope of the business objects to be loaded or updated. The framework defines standard data validation, load results, create and update scope as well statistical data tracking which can be reused by the appropriate security groups.</p> <p>Example: during cutover customer accounts, where user information or sales orders need to be migrated.</p>
<p>ERP-compatible Enterprise Structure</p>	<p>ISB has taken a SAP approach to defining the enterprise structure of business objects to focus on a one-to-one integration to SAP. This is not limited to SAP. However, with SAP as foundation, the framework caters for companies, sales areas or purchase areas for retaining data without the need to duplicate the data multiple times for the same data.</p> <p>Example: Depending on the sales area a customer may require different payment terms or prices.</p>
<p>End User Configuration Management</p>	<p>End User Configuration management is a standard for creating new configuration screens which can be managed by super users to manage specific settings. The key benefit of this framework is the experience of creating configuration in a common way which is interpretable by any super user, allowing project resources and the configuration to add and not how to add it.</p> <p>Example: When creating a customer, the configuration allows the end user to select from a list preconfigured, currencies, payment terms, and regions.</p>
<p>Database Design Management</p>	<p>For building business objects, configuration or analytical views we have developed a consistent framework for which all developers use to name tables, fields or records.</p>
<p>Unique Number Ranges</p>	<p>The number range framework consists of configuration and management standards which work closely with business objects, conditions and/or transactional data to create number ranges as required by the business objects as a consistent model.</p> <p>Example: Different customer types can be allocated different customer numbers.</p>