Epic: Automate product catalog updates and order transfers between 1C ERP and the website

Objective:

Implement a stable, automated integration between the 1C ERP system and the e-commerce website to ensure product data is always up-to-date and online orders are seamlessly transferred to the back office.

Business Value:

- Increase operational efficiency by eliminating manual catalog and order entry
- Improve user experience with accurate stock and pricing
- Enable scalable e-commerce growth with real-time synchronization

Key Deliverables:

- Automatic SKU card creation and updates from 1C to website
- Real-time or scheduled sync of product prices and availability
- Website-to-1C automated order transfer
- Independent category/filter structure on the website
- Editable rich content and SEO data in CMS
- Operational stability, with logging and supportability

Stakeholders:

- Product Owner
- Business Owner
- 1C ERP admin
- Developer / integrator team

Related Tools and Tech:

- Bitrix CMS
- 1C ERP (outdated version, third-party connector used)
- Custom integration code and sync scripts

Definition of Done (DoD):

The Epic is considered complete when:

- Product data (SKUs, availability, prices) is automatically synced from 1C to the website
- Website orders are automatically pushed to 1C with mapped fields and confirmation logging
- At least one scheduled sync job (daily or real-time) is functioning and monitored
- The website's product catalog structure is independently manageable from the ERP structure
- SEO and rich content for SKUs can be edited in the CMS without ERP conflicts
- The solution includes error logging, retry logic, and a basic admin interface for monitoring
- Internal team can maintain or modify sync behavior based on documented procedures
- Process and configuration details have been documented in the Administrator Manual, including integration settings, sync scheduling, error handling, and basic recovery steps
- All Acceptance Criteria for linked user stories are satisfied and validated by stakeholders

User Stories

User Story: SKU Auto-Sync from ERP

As a Business Owner, I want SKU cards on the website to be automatically created and updated from the 1C ERP inventory,

so that the online catalog stays current and reflects available stock and prices.

Acceptance Criteria:

- SKU cards are automatically created on the website when a new item appears in 1C ERP.
- All essential fields (name, article number, price, stock level, producer, etc.) are transferred correctly.
- Sync process logs each transfer and shows success/failure status.
- Admin users are notified in case of sync failure.

User Story: Real-Time or Scheduled Updates

As a business owner, I want SKU prices, availability, and stock data to sync regularly from 1C ERP to the website (e.g., daily or when changed),

so that customers see accurate and up-to-date information.

Acceptance Criteria:

- Price and availability fields are updated from 1C at a scheduled time (daily or on change).
- Website reflects updated prices within 15 minutes of 1C change (or per sync schedule).
- No duplication or removal of existing valid product records.
- A fallback mechanism is in place if sync fails (e.g., alert and retry).

User Story: Website-to-ERP Order Sync

As an 1C ERP administrator, I want orders placed through the website to appear in the 1C ERP automatically,

so that we eliminate manual data entry and streamline order fulfillment.

Acceptance Criteria:

- Website orders are pushed to 1C within 5 minutes of order placement.
- All fields (customer info, SKU, quantity, price) are mapped correctly.
- Duplicate orders are not created on retry or failure recovery.
- ERP system logs incoming orders with source tag (e.g. "from website").

User Story: SEO-Friendly URLs

As a Product Owner, I want to be able to upload product images, write extended descriptions, and manage SEO metadata in the CMS,

so that product pages look professional and rank better in search engines.

Acceptance Criteria:

- CMS supports editable product description, meta title, and meta description fields.
- Uploaded images are linked to SKU records and override ERP images if configured.
- SEO fields can be edited without affecting ERP data integrity.
- Changes in CMS remain intact after ERP sync.

User story: Flexible Category Structure

As a business owner, I want to manage an independent product category tree on the website — decoupled from the 1C ERP structure —

so that multiple intuitive navigation paths can lead customers to the right product (e.g., by category, car type, model), improving searchability and conversion.

Acceptance Criteria:

- Website category tree can be defined and edited independently of the ERP hierarchy.
- Products can be assigned to multiple categories or tags (e.g., by type and car model).
- Customers can reach the same product through at least two navigation paths.
- Filters and breadcrumbs reflect the active path used by the customer.
- Backend system supports assigning products to multiple views without ERP conflict.

Technical Tasks

Technical Task: Integration Feasibility Study

Description:

- Audit current 1C version and its integration module compatibility with the CMS (1C-Bitrix).
- Evaluate options: native module vs. third-party integration tool.

Technical Task: Third-Party Module Assessment

Description

- Test candidate module in staging:
 - Field mapping capabilities
 - Scheduling options
 - SKU attribute coverage
 - Support and update roadmap
- Get stakeholder buy-in and finalize procurement.

Technical Task: Custom Data Mapping

Description

- Define which 1C fields are needed for the SKU card.
- Create mapping schema (1C field → CMS field).
- Handle missing/optional fields with fallback values.

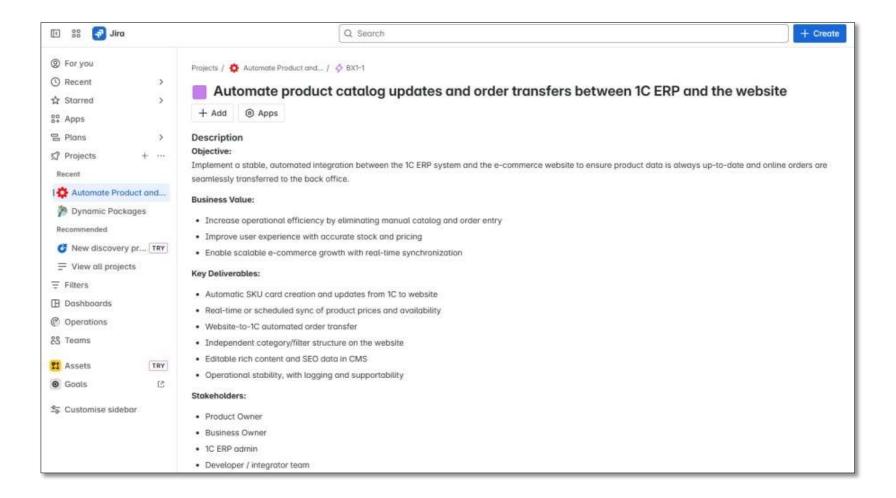
Technical Task: URL Structure Logic Study

Description

- Analyze existing product URLs: detect duplication and SEO risks.
- Implement logic to build unique URLs (e.g., name-article-vendor-code)
- Modify code in 1C script to inject internal SKU ID to guarantee uniqueness.
- Validate uniqueness across dataset and crawl simulated sitemap.

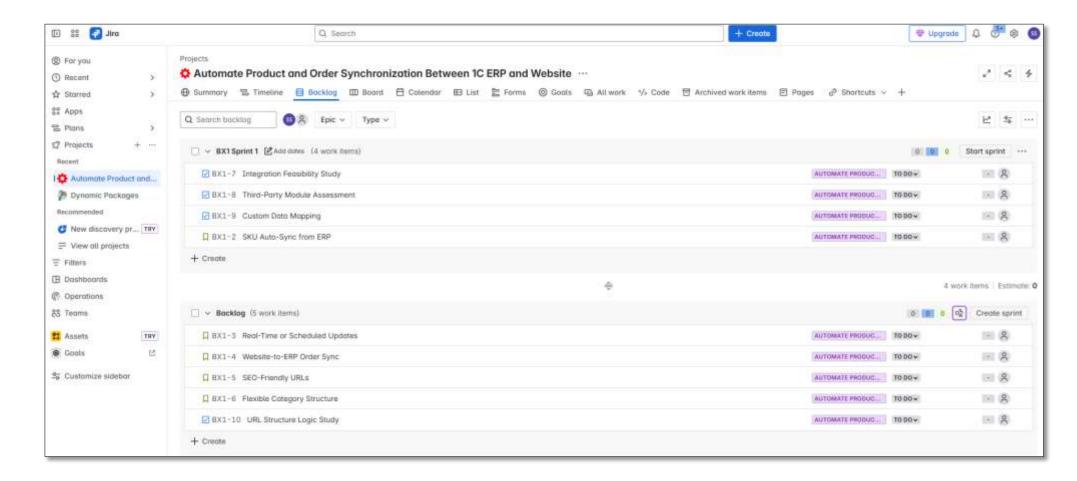
Jira Screenshots

Epic



Sergey Shcheglov Portfolio

Backlog and Sprint



Sergey Shcheglov Portfolio

User Story

