



# Gravity

## Project Overview

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# The Gravity Project

## High Level Overview

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Gravity is SecuTix project that aims to **innovate** the online shopping experience.

The main goal of the project is to offer **any web integrator** the tools required to build a fully **customised** online journey based on the SecuTix system. Moreover, Gravity aims to provide a **reviewed and simplified interaction** with the ticketing system and leverage **external integrations**.

To provide such flexibility, the online shopping funnel of SecuTix is broken into small building blocks, that can be reassembled in a simple way. These building blocks are called **Widgets**.

Every Widget handles a **specific business case**, and interact with other Widgets to build a fully integrated experience in any website. Moreover, Widgets are **fully customizable** in their aspect. The underlying API, built to allow Widgets communicating with the SecuTix system, is also freely accessible and allows to build new interactions in a simplified way.

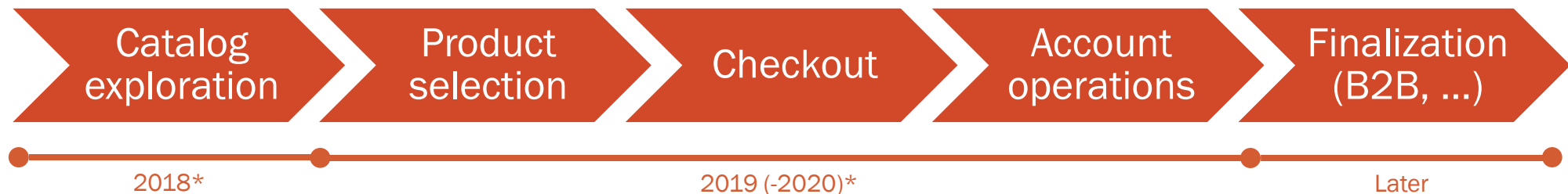
# The Gravity Project

## Scope and Project Streams

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The Gravity project is divided in **two streams** that run in parallel. The first stream has the goal to provide standalone building blocks, **Widgets**, that will be available to build new online sales funnels. The second stream aims in **modernizing all front-ends** of SecuTix: online ticketing, box office sales and the vending machines, by **reusing the same building blocks** provided in the first stream (macro-widgets, encapsulating all widgets that build a complete process).

In the first stream, Widgets will be provided in **decreasing order of value**, starting from the features that impact the most an end user purchase choices. A macro-level planning is shown in the following illustration:



\* Planning is subject to change

# Foreseen Widgets

## Phase 1: Catalog exploration

Widgets delivered in this first phase of the project, aim to provide a rich set of tools to **present the catalog of products** that have been configured in SecuTix. Each Widget automatically displays the selling state of the product (not yet on sales, available, sold-out), the promotional products associated and all specificities supported by the system.

The following table illustrates the main Widgets that are foreseen:

Widget(s)	Description	Delivery objective
Standalone product	Widget that allows to display product information in a card layout. Action buttons redirect to the purchase funnel or to custom actions.	Q3 2017 – Beta Q1 2018 – Final
Section – Card based	Widget that automatically proposes a series of products (or product occurrences) in a container section with card layout presentation. Sections can be dynamically configured in SecuTix.	Q1 2018
Section – List based	Same as previous, but with vertical paginated list-based layout	Q1 2018
Catalog calendar	Calendar that displays product occurrences by date with navigable months. Multiple products and multiple occurrences can be configured to be displayed in the calendar.	Q3 2018
Event / Pass occurrences calendar	Calendar that display all occurrences of a product in navigable months. Only one product is configured to be displayed in the catalog.	Q3 2018
Search bar	A search bar that allows to browse the product catalog in multiple axes (name, dates, venue, ...). A paginated search results section is attached to this widget.	Q1 2019
Dynamic header / footer items	Login information, links to the ticketing pages and other small items that allow displaying information from the ticketing system inside the header/footer of a website.	Q1 2019
Social share	Widget that allows to share in main social media the information and links to one product. The information is automatically built and enriched with ticketing data.	Q1 2019
Promotional code	Allows the input of promotional codes used to unlock special offers in the ticketing system.	Q1 2019 (Q3 2018 if possible)
Mini-cart	Displays the summary of the items that are currently added to the shopping cart and allows starting the checkout process.	Q1 2019 (Q3 2018 if possible)

# Foreseen Widgets

## Phase 2: product selection

Widgets delivered in the second phase of the project, will provide the tools to support **product selection for the supported product families in SecuTix**. Customers will be able to customize their product, choose the desired quantities and add them into the shopping cart.

The following table illustrates the main Widgets that are foreseen:

Widget(s)	Description	Delivery objective
Event selection	Selection of events (and championship products) in two steps: performance/match browsing, quantity/seat category/rate customization for the selected performance. It is possible to bypass the first step by providing an occurrence id to the Widget.	Q1 2019
Event selection on seat map (supporting 3d seat maps)	Same as previous widget, but supporting seat selection in an interactive map. The widget supports panoramic views from seats, selection of blocks/seats in a 3d rendering of the venue.	Q1 2019
Visit pass (timeslot) selection	Selection of visit passes or timeslot passes in two steps (see event selection widget).	Q1 2019
Services / vouchers / donations / membership selection	Selection of simple product families. Only one step is necessary to configure the product and add it to the shopping cart.	Q3 2019
Goods selection	Selection of merchandising products. Similar to the previous widget, but allowing to browse merchandising products and visualize multiple pictures/characteristics of the items.	Q3 2019
Non dated pass selection	Selection of the simplest form of pass. No date or timeslot is required (validity by period).	Q3 2019
Package selection	Selection of multiple forms of packages. The process is guided through a series of steps to simplify the configuration.	2020
Season ticket selection (championship / fixed price / dynamic price)	Selection of multiple forms of season tickets. The process is also in these cases guided through a series of steps that aim to simplify the configuration.	2020
Cross-selling section	A section that displays cross-selling products that are linked to a given product. Multiple configurations are possible: simple cross-selling, one-click cross-selling (immediate addition to the cart), cross-selling defined with dynamic rules based on cart content / quantities.	Q3 2019
Advantage selection	A section that displays the advantages that are available to the customer, and allow for a rapid access to these restricted sales.	Q3 2019
Unique code advantage selection	Allows entering unique usage codes and sales of products that are restricted. In simple configurations, tickets are obtained without any checkout step.	Q3 2019

# Foreseen Widgets

## Phase 3: Checkout

Widgets delivered in the third phase of the project, will allow to **build a complete checkout process** that is independent from the current online sales ticketing module. It will be possible to simplify checkout steps and apply only the steps that a customer needs.

The following table illustrates the main Widgets that are foreseen:

Widget(s)	Description	Delivery objective
Login	Widget that allows to login in the SecuTix system as a customer. Standard login, social login and SSO facilities are provided by the widget.	Q1 2019
Registration / profile editing	Forms that allow a user to create/edit his account. Fields are dynamically presented, based on their configuration in SecuTix.	Q1 2019
Password modification	Allows to request a new password for the SecuTix login.	Q1 2019
Reservation result	Displays the information of the product that has just been added to the cart. It integrates cross-selling facilities.	Q3 2019
Shopping cart	Displays the content of the current shopping cart. Allows to remove/modify items in the cart.	Q3 2019
Delivery options and order summary	Allows the input of order-related options, like delivery modes, voucher usage, ... and displays the summary of the order that is about to be finalized.	Q3 2019
Payment and confirmation	Allows to pay in SecuTix with the configured payment methods. Displays the result of the transaction.	Q3 2019

# Foreseen Widgets

## Phase 4: Account Operation

Widgets delivered in the fourth phase of the project, will allow to **construct a customized account management portal** that will offer all the features available currently in the online shopping module of SecuTix.

The following table illustrates the main Widgets that are foreseen:

Widget(s)	Description	Delivery objective
Address book	Management of addresses linked to the user profile.	Q3 2019
File list	List of past orders that have been performed in the system.	Q3 2019
File summary	Details about an order that has been done in the system. Allows to print tickets and order-related documents, pay instalments and add tickets to fixed price season tickets.	Q3 2019
Upcoming events	Displays the information about the upcoming event for which a customer has purchased tickets.	Q3 2019
Last order	Displays a summary of information linked to the last order performed in the system.	Q3 2019
Personal advantages	Displays a list of advantages that are only accessible by the connected user.	Q3 2019
Navigation menus	Menus that link to the online sales system's account features.	Q3 2019
List of tickets	List of tickets that are available to the customer. Features like printing or downloading tickets are embedded in the widget.	Q3 2019
Subscription list / details	List of all purchased subscriptions of the customer with a summary of the information.	Q3 2019
Subscription renewal	List of subscriptions that can be automatically renewed, with the related process supported.	Q3 2019
Automated cup scheme	List of cup scheme subscription, with automatic purchase options.	Q3 2019
Subscription transfer	List of subscriptions for which single tickets can be transferred to another user, with the related process supported.	Q3 2019

# Foreseen Widgets

## Phase 5: Finalization

Widgets delivered in the last phase of the project will cover mainly B2B and B2B2C features. In the scope of this last phase, also the support for resale platforms will be migrated to Widgets.

The following table illustrates the main Widgets that are foreseen:

Widget(s)	Description	Delivery objective
B2B option requests	Widget that allows asking for quotes on products (deprecated, could be abandoned in favour of quotes performed in a standard purchase funnel).	2020
B2B option follow-up	Lists options that have been requested and their current status (deprecated, to abandon in favour of file details actions to convert or abandon quotes).	2020
B2B Distribution (on seat map)	List of tickets that are available for relays to be distributed inside a B2B organization.	2020
B2B Distribution cockpit	Cockpit that allows to see the details of the current distributable/distributed tickets.	2020
Reporting	A subset of reports that can be generated by operators that do not have access to the SecuTix back office	2020
Resell tickets (C2C)	Widget that allows to resell tickets.	2020
Purchase tickets (C2C)	Widget that allows to browse tickets that are currently in resale and start the purchase process.	2020



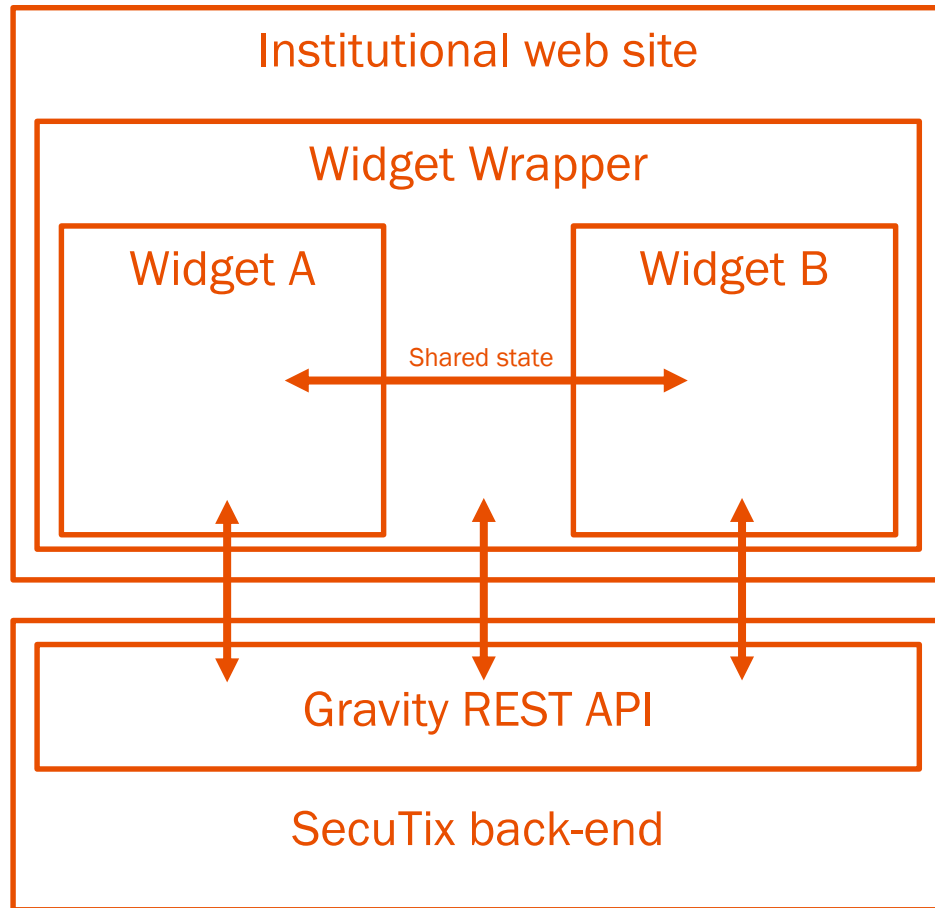
## Gravity Widgets

### Architectural Overview

The base communication channel between the Widgets and the SecuTix back-end system is performed through a **REST API**, which defines a set of high level endpoints.

Widgets belong to a **Wrapper**, which is included in the institutional web site and provides a shared state machine available for Widgets inter-communication and common data obtained from the REST API. This wrapper is responsible of loading the required dependencies and the actual Widgets.

**Widgets** can also communicate directly with the REST API to fulfil their business requirements. They are using **standard SecuTix front-end components** that are built based on the SecuTix online sales graphical chart, and that offer CSS overriding possibilities through CSS classes. Texts are overridable in SecuTix configuration screens, to allow complete customization.



# Gravity Widgets

## Example of Website Integration

```
<div id="stx-widget-4"></div>
<div id="stx-widget-5"></div>
<div id="stx-widget-6"></div>
```

```
<script type="text/javascript" src="../../../Product.js"></script>
<script type="text/javascript" src="../../../Catalog.js"></script>
<script type="text/javascript" src="../../../Wrapper.js"></script>
```

```
<script type="text/javascript">
STX.Wrapper.init({
  apiKey: '43e38c19-718c-4bbe-b08c-abd5e8826996',
  hostname: 'special-mosa.int1-shop.secutix.com',
  language: 'fr',
  widgets: [
    {
      widget: STX.Catalog,
      root: '#stx-widget-4',
    }, {
      widget: STX.Product,
      id: '101047223159',
      aspectRation: 2 / 3,
      root: '#stx-widget-5',
    }, {
      widget: STX.Product,
      id: '101047223159',
      aspectRation: 2 / 3,
      root: '#stx-widget-6',
    }
  ]
});
STX.Wrapper.start();
</script>
```

1 – Creation of the HTML container elements for widgets

2 – Inclusion of Widgets Javascript files

3 – Initialization and configuration

a – The wrapper is initialized with the general required setup: API Key, host name, language

b – Widgets that are going to be displayed in the page are initialized inside the wrapper and configured with their options

c – The rendering of the widget is triggered at user's discretion with a start() method

In this case, the Catalog Widget is initialized with two other Product Widgets inside the same page.

# Gravity Widgets

## Example Pages and Dynamic Documentation

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During the first phases of the Gravity project, SecuTix will setup a documentation portal and demo website. Currently, the development is in progress, and a first version of **automated documentation portal** is expected to go live at the end of Q1 2018.

The aim of the automated documentation portal, is to provide for every Widget an example of the code that needs to be integrated in the web site, the description of customization parameters and a working example.

Example pages, integrating the first Gravity Widgets are under construction.

Examples from customers integrating Gravity technology for their online sales landing pages:

<https://billetterie.tfc.info>

<https://billetterie.centrepompidou.fr>

<https://billetterie.opera-lyon.com>

# The Additional Steps of the Gravity Project

## Widget-Based Front-Ends at SecuTix

The second stream of Gravity is responsible of modernizing the existing SecuTix front-ends, by reusing the same Widget technologies. The following topics are part of the goals:

Widget(s)	Description	Delivery objective
New online sales interface	Substitution of the current monolithic online sales module. Widget-based solution, that will assemble individual Widgets to construct a full purchase funnel.	2019 (> under active dev 2018-2020)
New vending machines	Vending machines based on Widgets (simplified process, direct payment via attached hardware).	2017 (> under active dev 2018-2019)
New portable Box office	Based on new vending machines: widget-based solution to allow operator-enabled sales via tablets with attached payment/printing hardware.	Q3 2018 (> under active dev 2018-2020)
Facebook integration	Frictionless sales integration on Facebook based on Gravity Widgets/REST API.	Q1 2019
NFC-enabled screens sales	Based on new vending machines: widget-based solution to sell tickets on NFC integrated screens (NFC-based payment and ticketing)	2019
Chat BOTs	BOTs that allow purchases and order handling in SecuTix, based on Gravity REST APIs and API.AI.	2019



# SecuTix 360°

The Ticketing Engagement Platform