

# Move'n Modernize

An illustrated encyclopedia  
for optimization

November 5, 2024

**Jacopo Malnati, CEO**





We are a premium Swiss **tech consultancy** committed to maximizing the potential of your existing ECM platform by leveraging the capabilities of **Extended ECM** and **Module Suite**.



**opentext**™ | Partner  
Services Silver



120+

Projects  
completed

<29 Days

Average project  
delivery

20+

Years of IT  
expertise

15+

Industry  
Certifications

10+

Move & Modernize  
projects  
completed

## Chapter 1

# The Space Odyssey

Since AnswerModules established the certification process for Solex Partners on cloud containers, AnswerConsulting has defined the practices and exceptions that guide how professional service providers interact with the OpenText Cloud team.

It has been quite a ride!

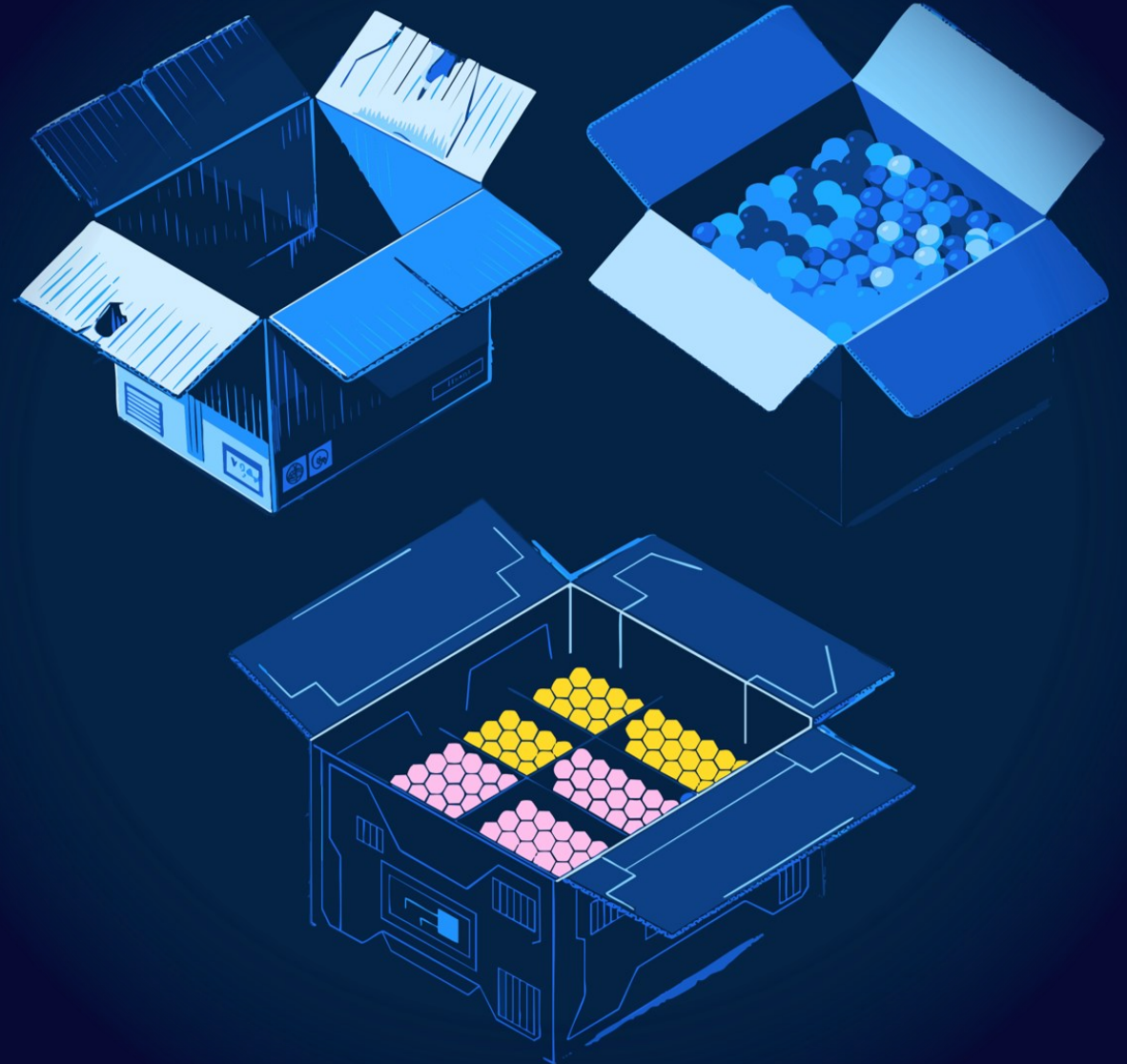




## Chapter 2

# New Order

How to survive the entropy of low-value containers in terms of data and functionality, by creating new paradigms where users interact with micro-applications rather than cardboard boxes.

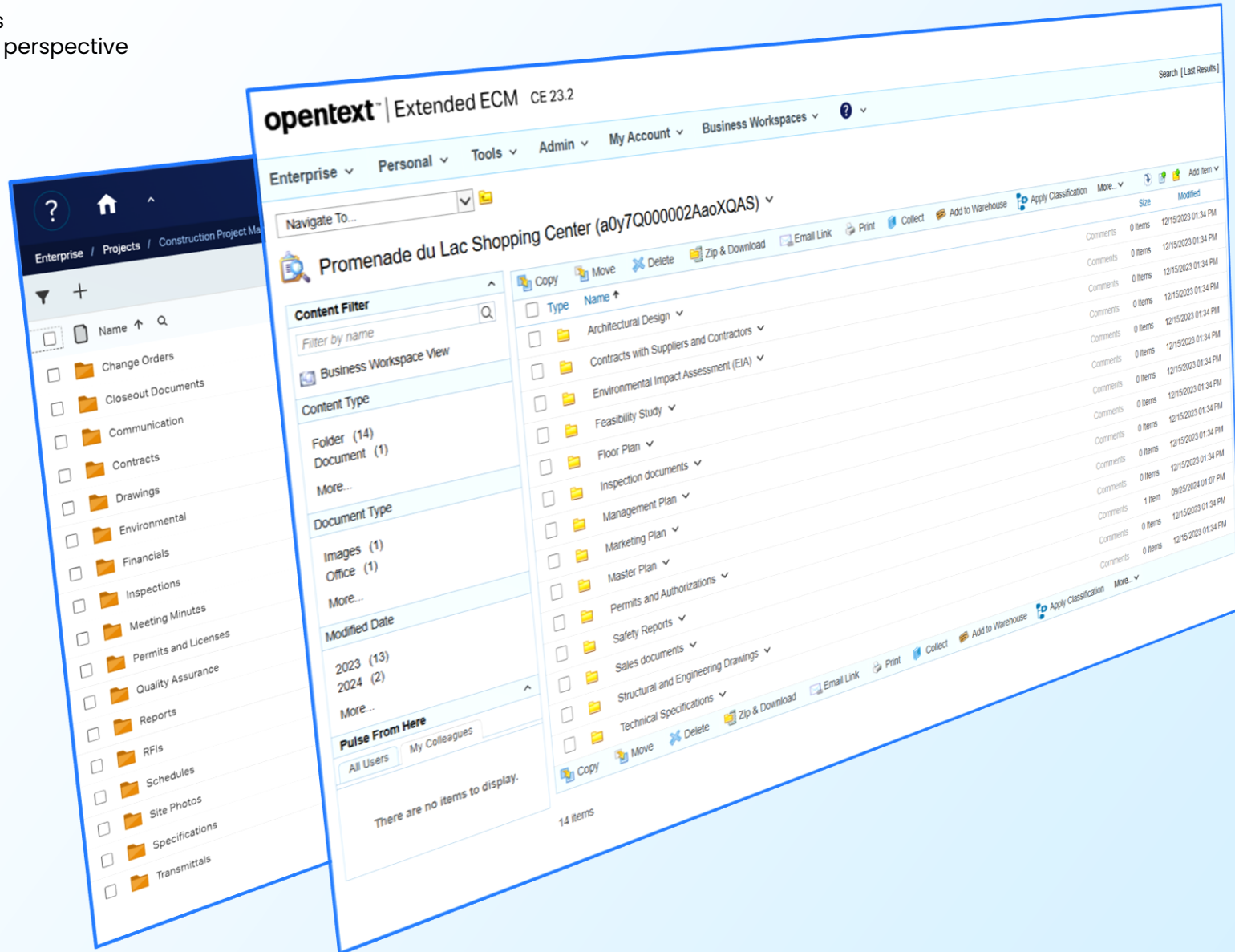




# Folders

**Plain** and **flat** containers

**Default** view, no custom perspective



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**Plain** and **flat** containers

**Default** view, no custom perspective

## Custom OScript Objects

Require a custom **OScript module**

Require a new **subtype** (ignored by the rest of the world)

**Complex development** (OScript & IDE)

Business logic **scattered** through the layers

**Complex deployment**

**Hard to extend and maintain**

**Not cloud-compatible**



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Default view, no custom perspective

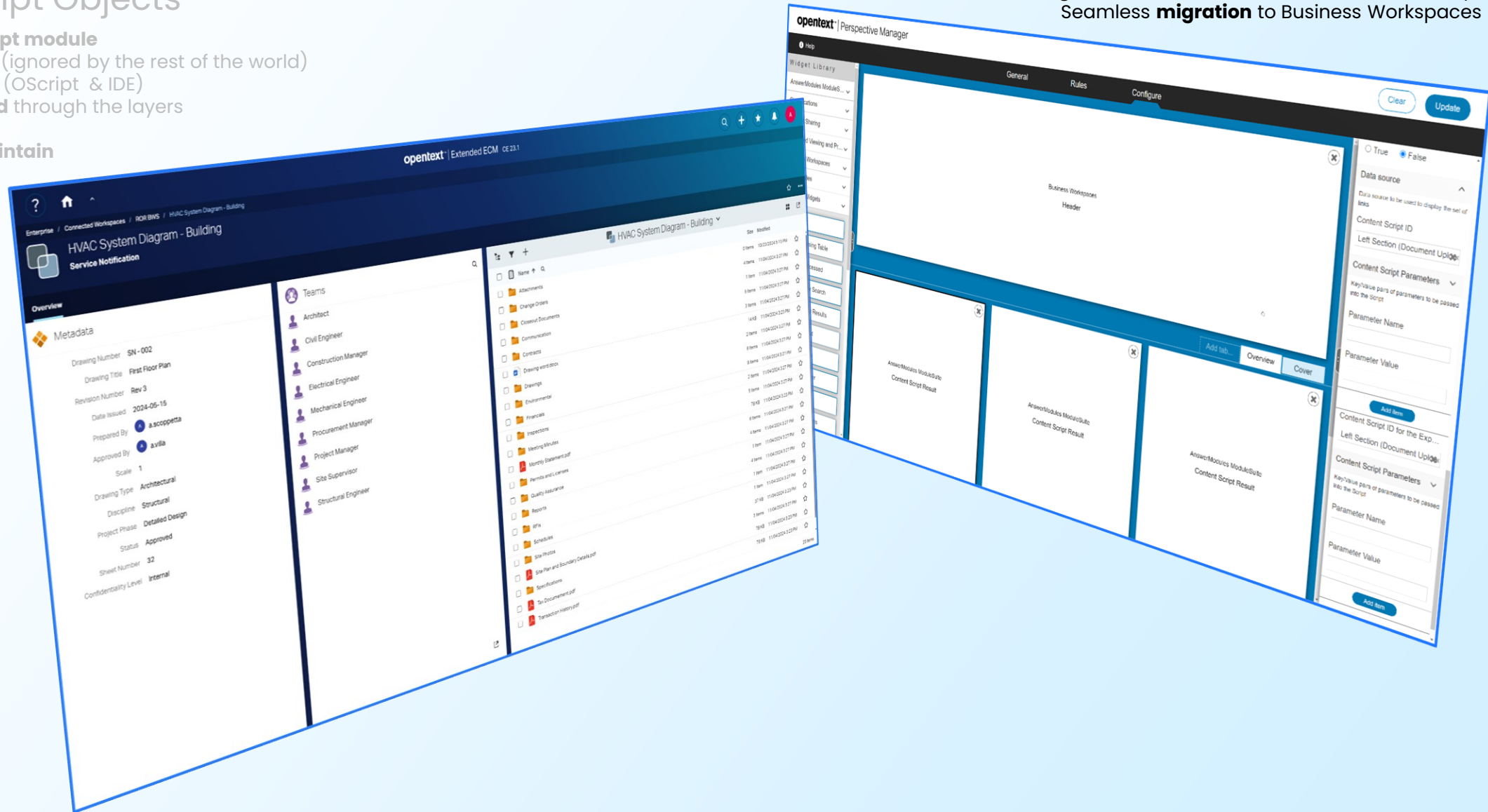
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# Business Workspace + Module Suite

**Smart** and **native** container  
**Custom perspective** (Perspective Manager)  
**Roles** management

**Extendable through the Module Suite** (UI/UX and functionality)  
Seamless **migration** to Business Workspaces





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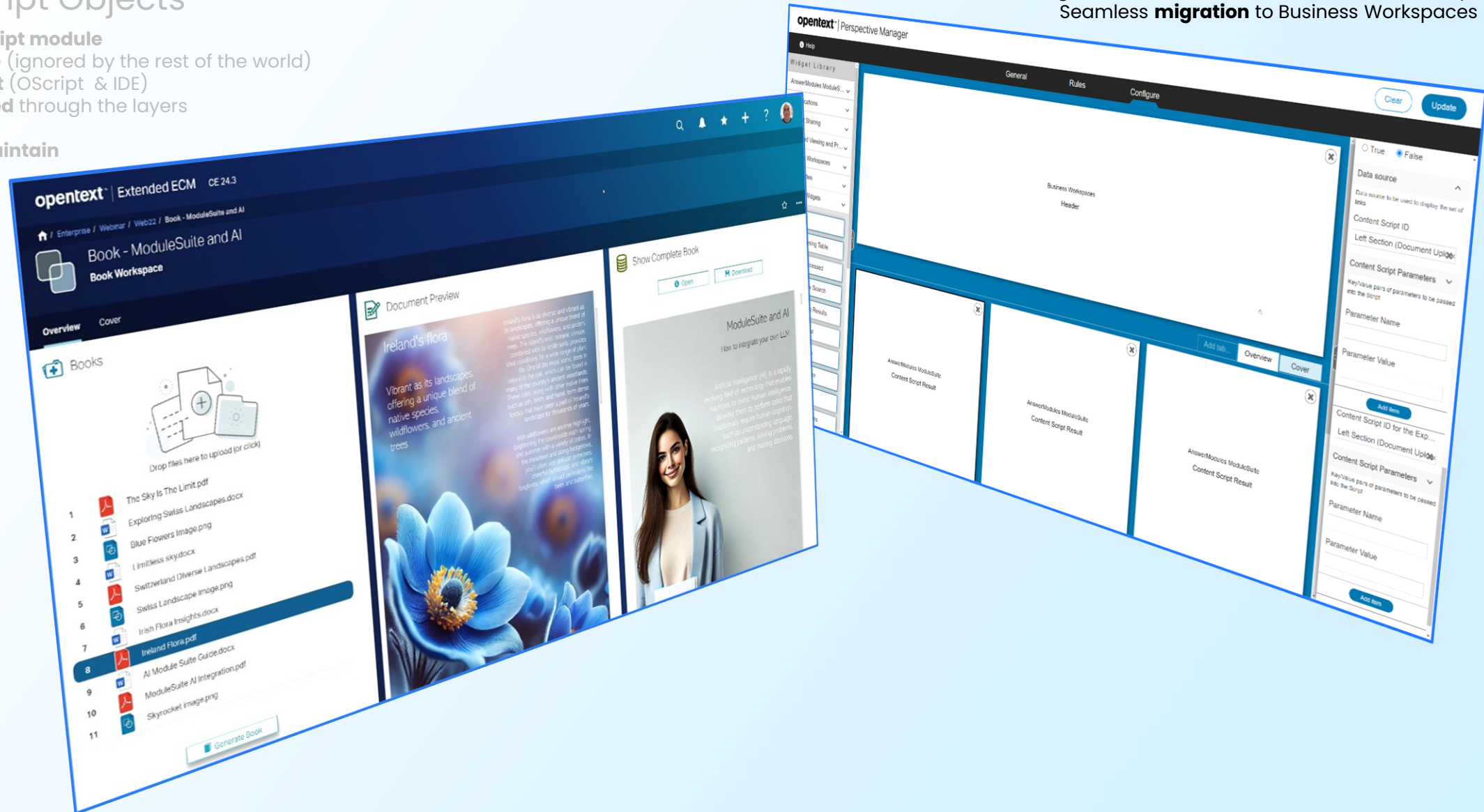
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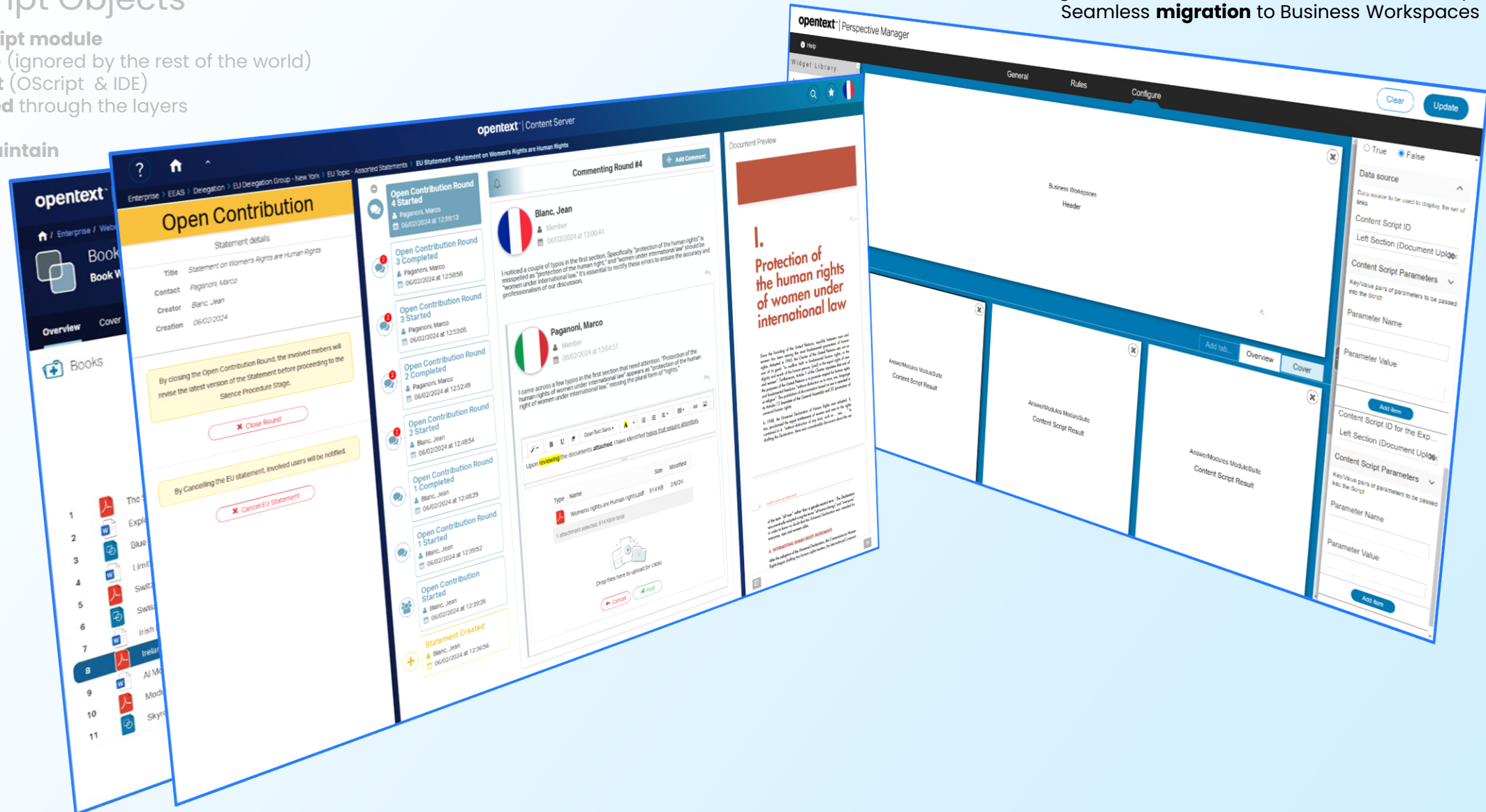
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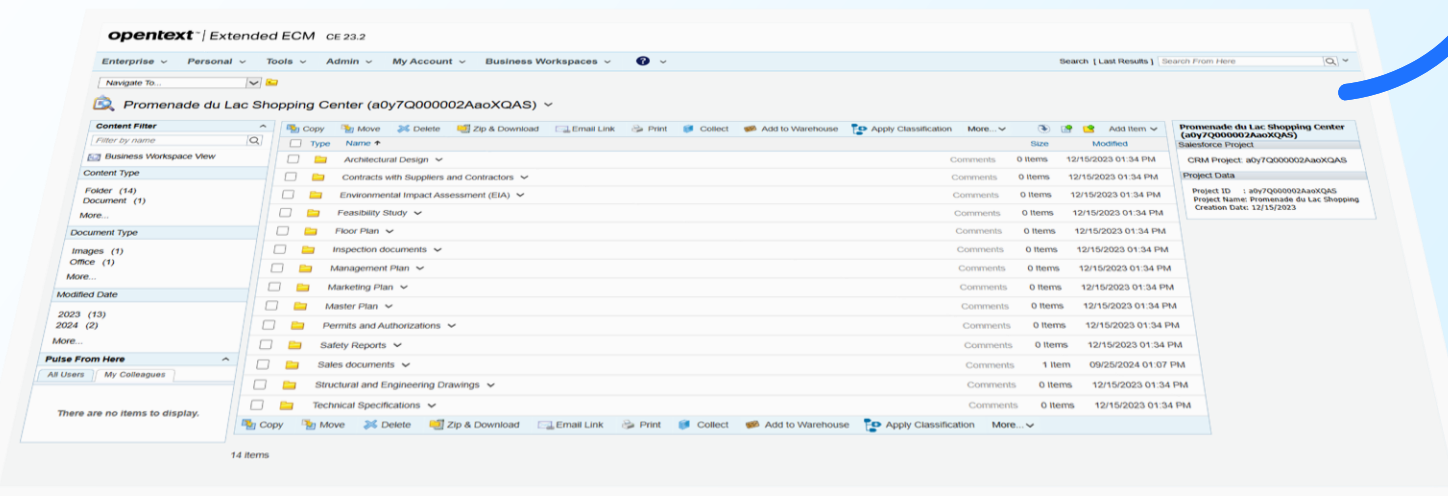
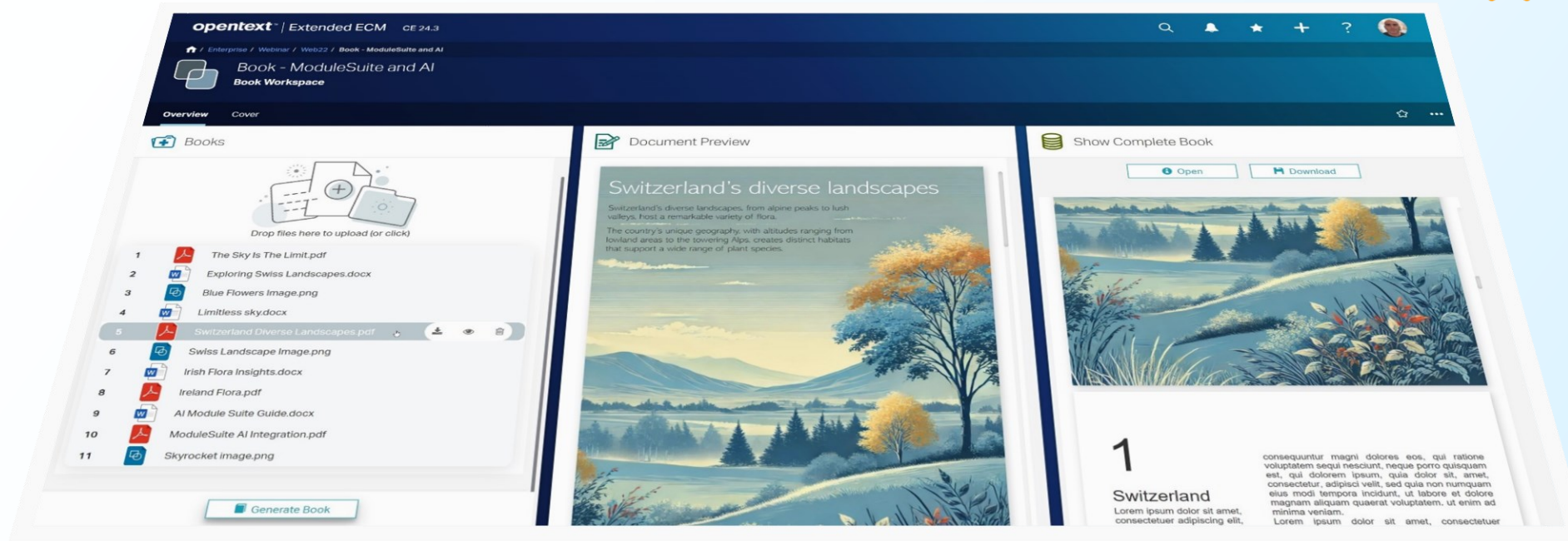
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# ★ How to Move&Modernize

Identification of legacy **containers**  
Content visibility by **role**  
Structured **data** presentation  
**Functional** requirements definition  
**Building block** strategy  
Legacy data **migration**





## Chapter 3

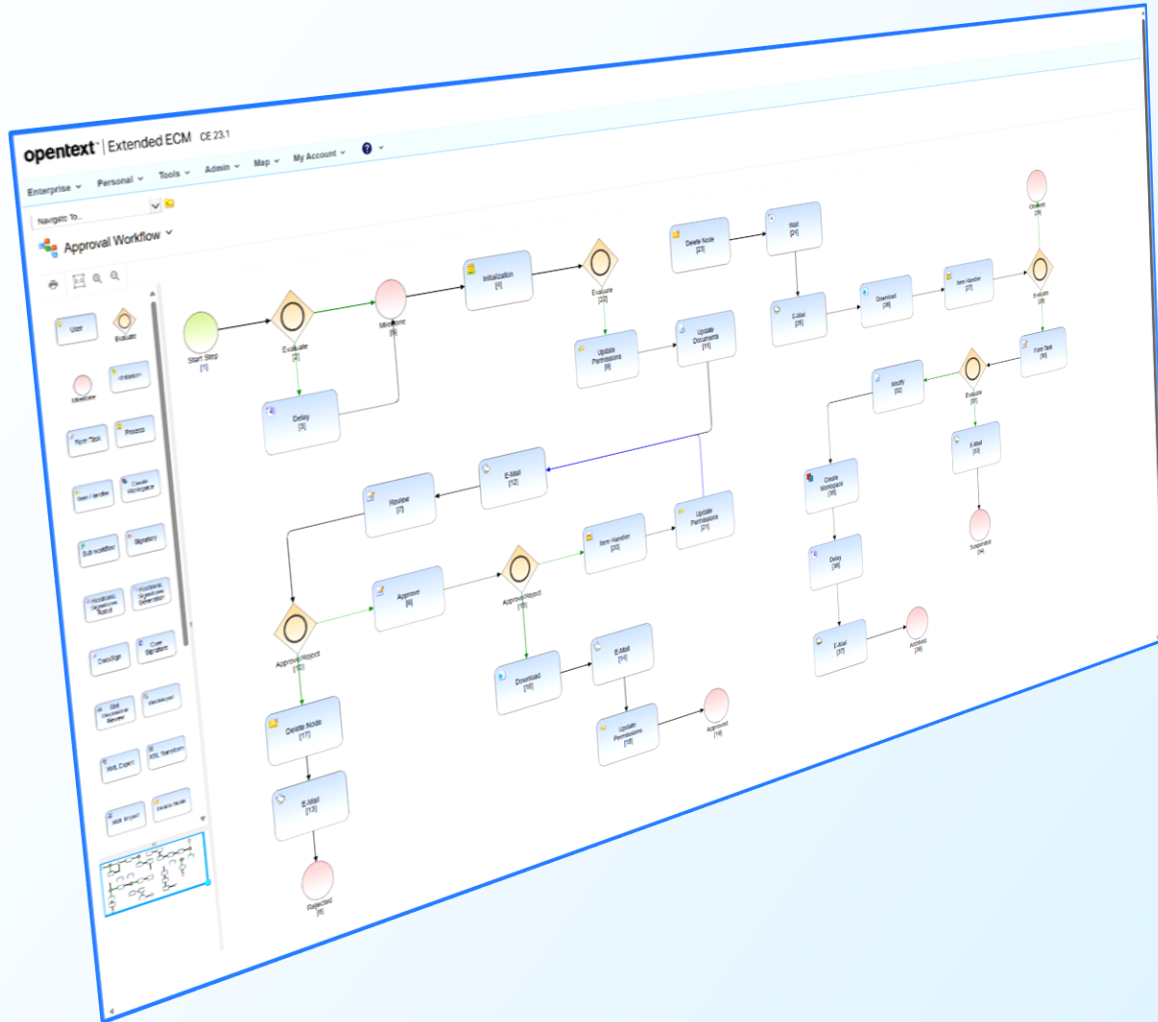
# The Maze

How to prevent technical debt from becoming an obstacle to daily operations.

When something simple becomes complex, users are the first to suffer for reasons they don't understand—and they don't like it.



### Hard to maintain

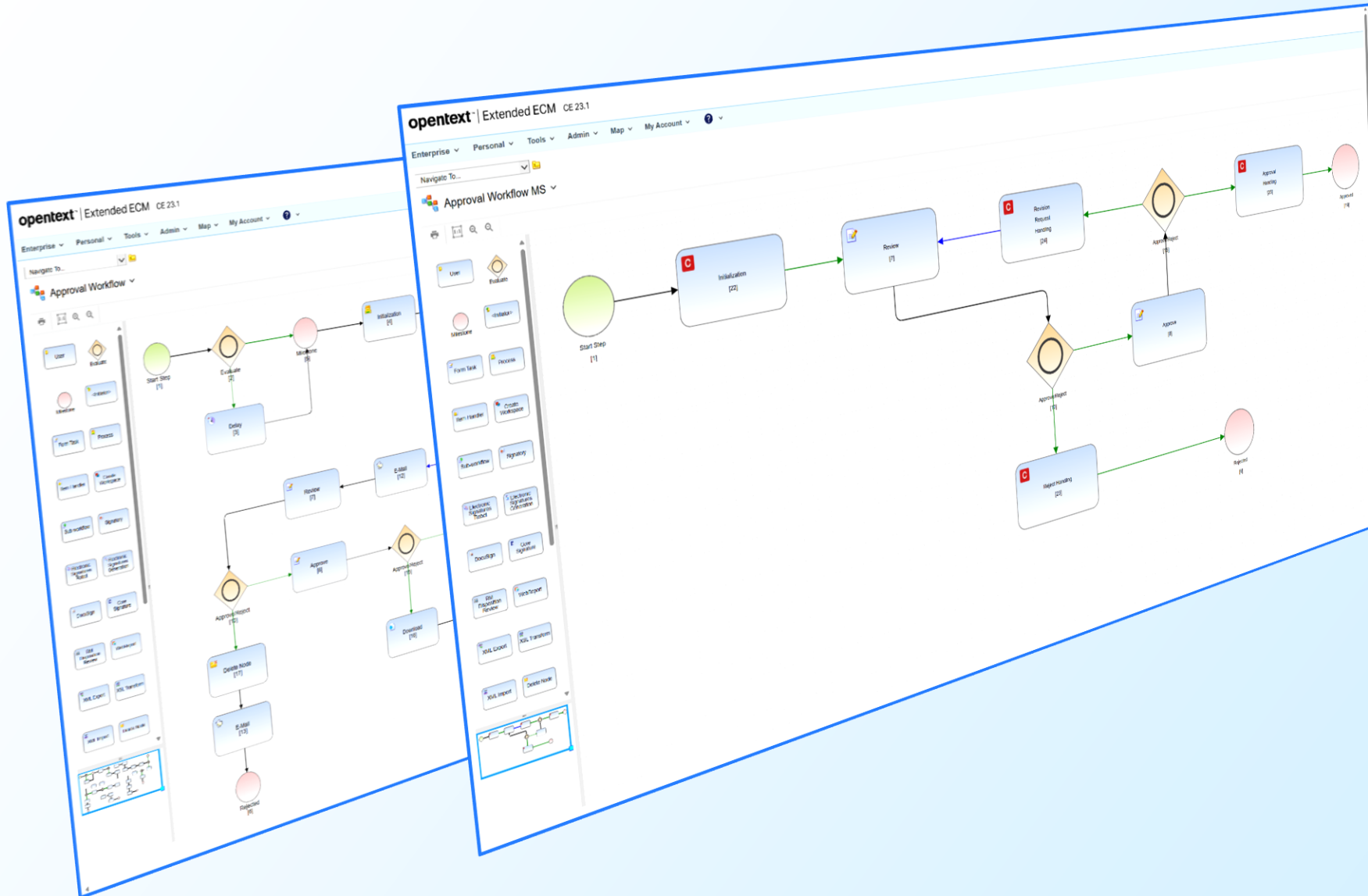


**Complex** design (editor limits)  
Might become **unreadable**  
**Hard to extend** (mix of retroactive changes, and not)  
**Hard to maintain**

## Hard to maintain



- Programmatic workflow control** (activities and routing)
- Improved process **efficiency** (**speed, resilience** and **reliability**)
- Enhanced workflow **understandability** (like a BPM)
- Simplified **maintenance**
- Ease of **evolution** (even retroactive)





# Messy Workflows

**Complex** design (editor limits)

Might become **unreadable**

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# Content Script Steps

**Programmatic** workflow **control** (activities and routing)

Improved process **efficiency** (**speed**, **resilience** and **reliability**)

Enhanced workflow **understandability** (like a BPM)

Simplified **maintenance**

Ease of **evolution** (even retroactive)

# OScript Callbacks

## Invasive

## Lack of resiliency and visibility

Require a **custom OScript module**

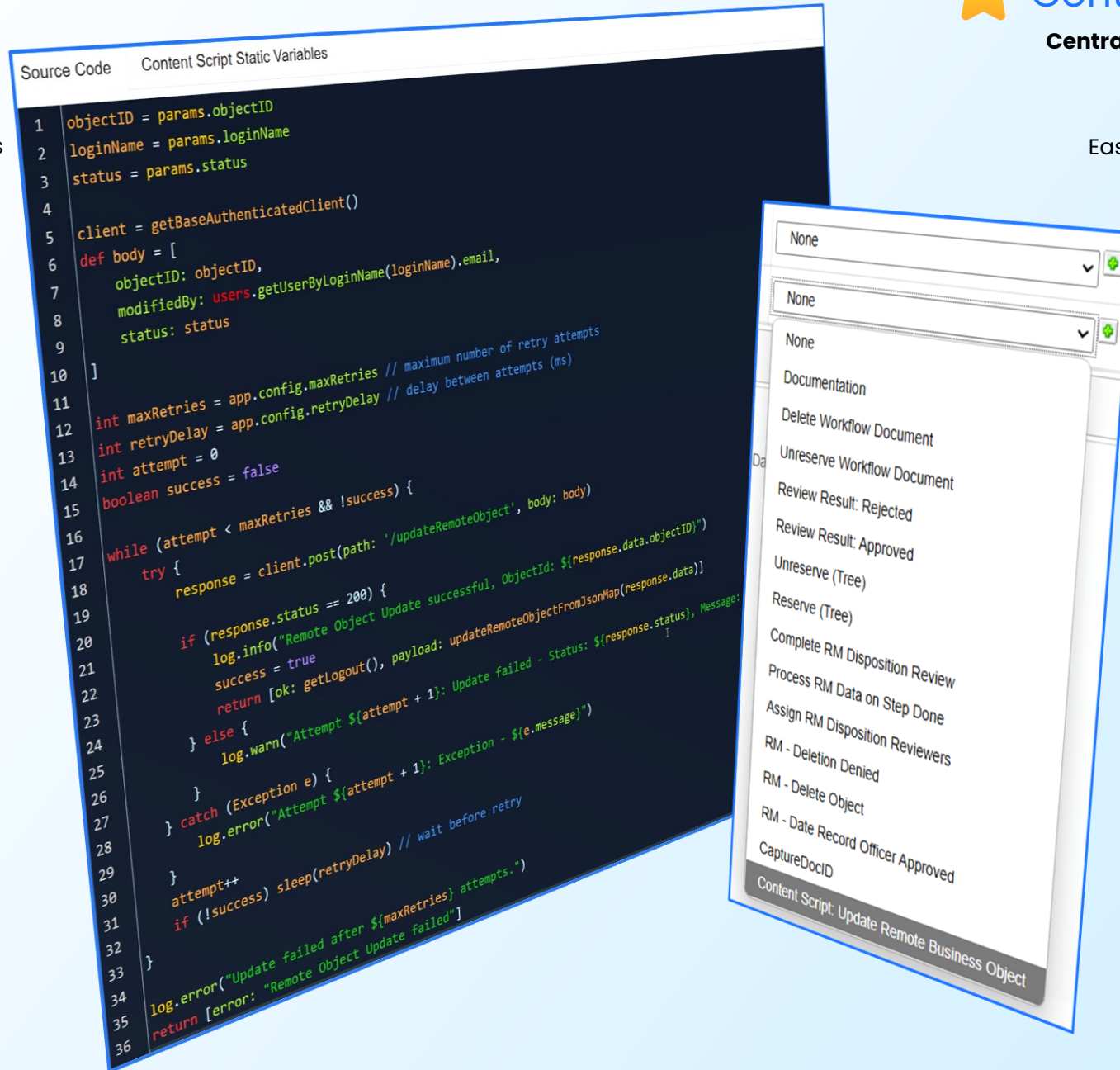
**Complex development** (OScript & IDE)

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# Content Script Callbacks

**Centralized or specific** to a single workflow

**Resilient** code

**Expressiveness**

Enhanced **visibility**

Ease of **implementation** and **evolution**

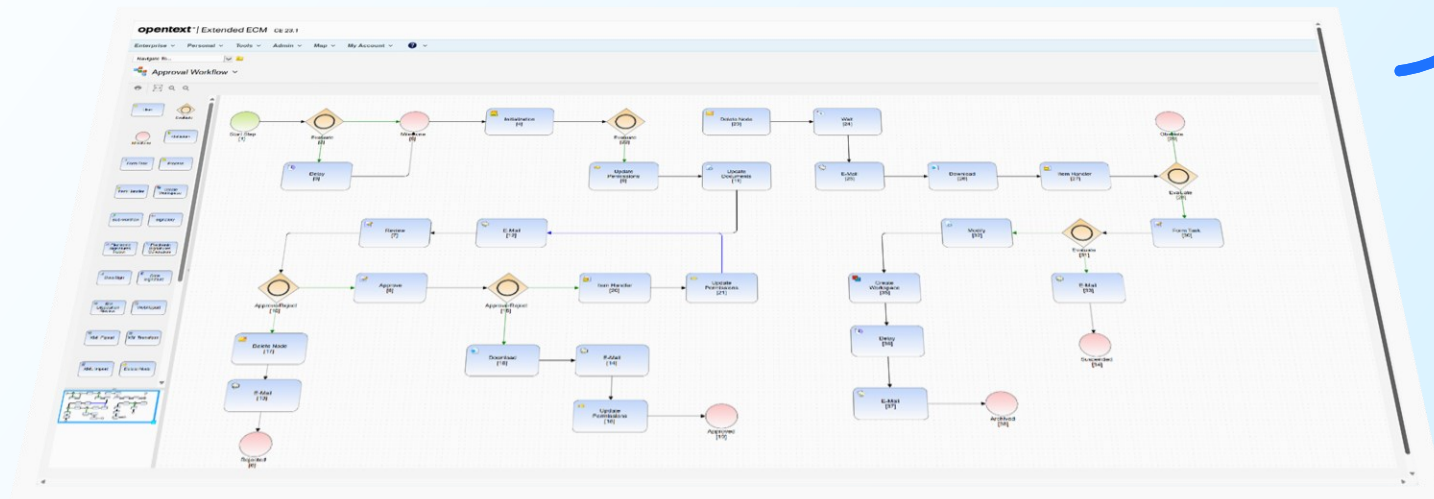


## Rewrite OScript Callbacks as Content Scripts

### Leverage **existing functionalities**

### Simplify technical steps

## Decommission external systems





## Chapter 4

# The Beauty

Beauty is in the eye of the beholder, but also in the hands of the user.

How to create a system that is not only visually appealing but also accessible and functional, one that doesn't make users regret coming to work.



## WebReport Forms

## Code based and **not really MVC**

## Limited expressiveness

## Lack of logs

Hard to extend and maintain (**spaghetti reports**)

# WebLingo Forms

Requires a **custom OScript module**

## Complex development (OScript & IDE)

Business logic **scattered** through the layers

## Not really MVC

## Complex deployment

## Hard to extend and maintain

### Not cloud-compatible

opentext | Content Suite Platform CE 20.4

Enterprise Personal Tools Admin My Account ?

## Run WebReport: Global Dashboard - Input Params

### Run WebReport: Workflow Report Screen

Filter Screen for Workflow Reports

- \* My Workflow:
- \* Start Date:
- \* Current Step:
- \* Step Due Date:
- \* Status:
- Assigned To:
- Priority:
- Category:
- Region:
- Tags:
- 

### Run WebReport: Global Dashboard

Global Dashboard

My Workflow

- Workflow n1s5
- Project Beta
- Project Gamma

Global Dashboard				
Global Dashboard				
My Workflow		Start Date	Current Step	Step Due Date
Workflow n1s5		2024-11-01	Kickoff Meeting	2024-11-05
Project Beta		2024-11-02	Requirements Gathering	2024-11-07
Project Gamma		2024-11-03	Design Phase	2024-11-08
Project Delta		2024-11-04	Development	2024-11-09
Project Epsilon		2024-11-05	User Testing	2024-11-10
Project Zeta		2024-11-06	Deployment	2024-11-11
Project Eta		2024-11-07	Client Feedback	2024-11-12
Project Theta		2024-11-08	Final Review	2024-11-13
Project Iota		2024-11-09	Launch Preparation	2024-11-14
Project Kappa		2024-11-10	Go Live	2024-11-15
Project Lambda		2024-11-11	Post-Launch Support	2024-11-16
Project Mu		2024-11-12	Maintenance	2024-11-17

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# Beautiful Web Forms

**Component** based (reusable and accessible)

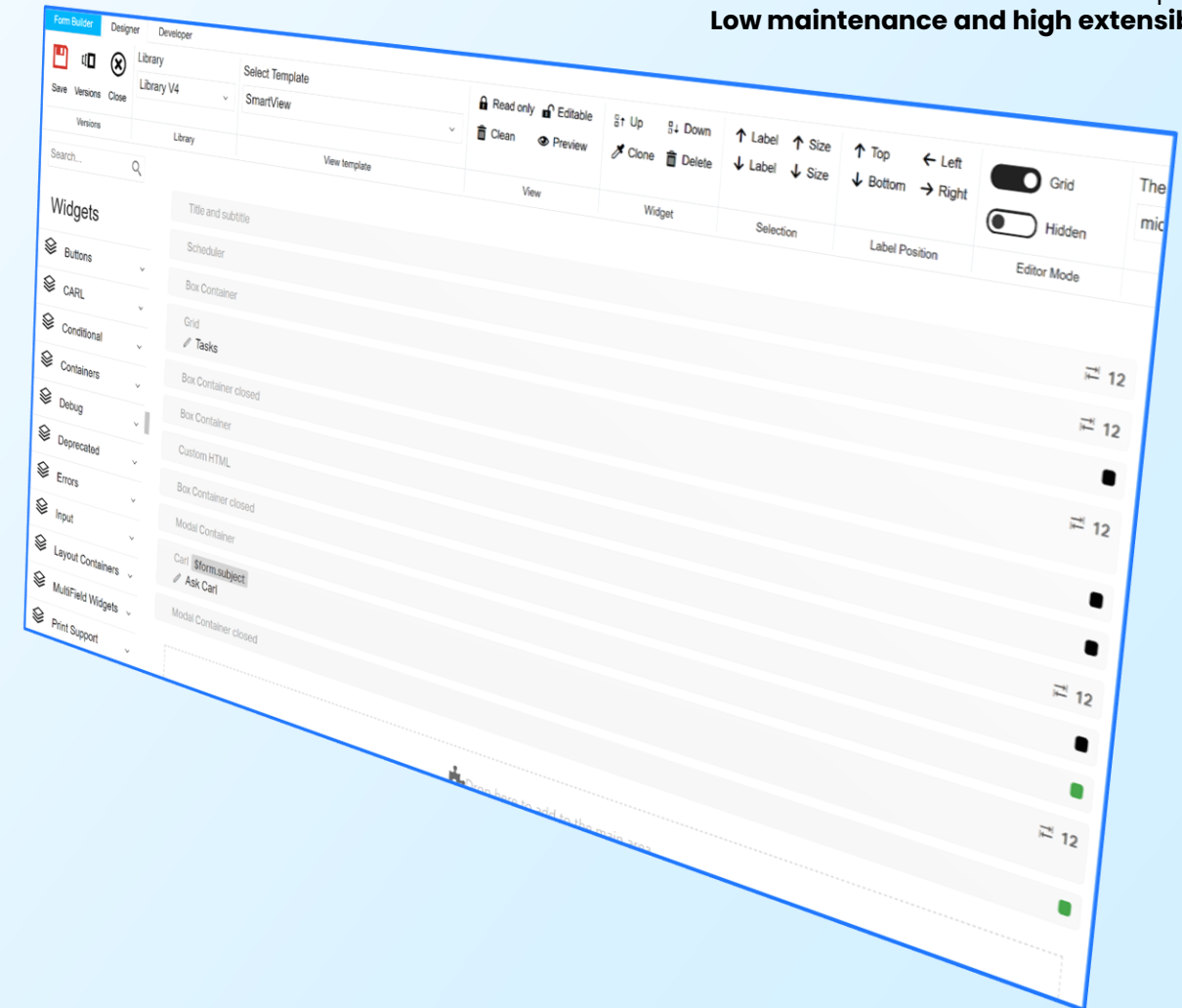
**WYSIWYG** editor (user-friendly form designer)

**Configuration over customization**

**Minimal coding** needs (with exceptional **expressiveness**)

Efficient development

**Low maintenance and high extensibility**





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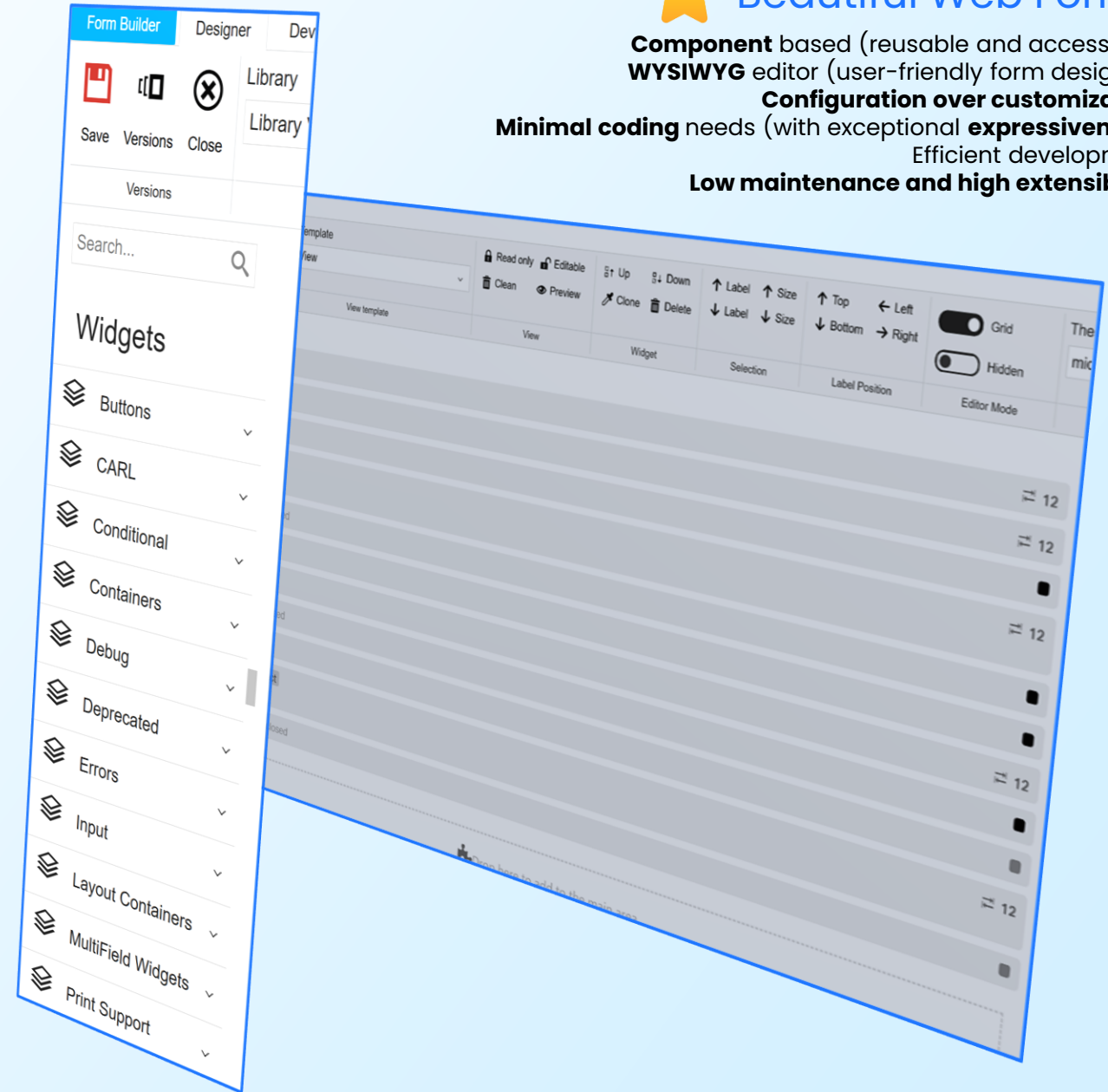
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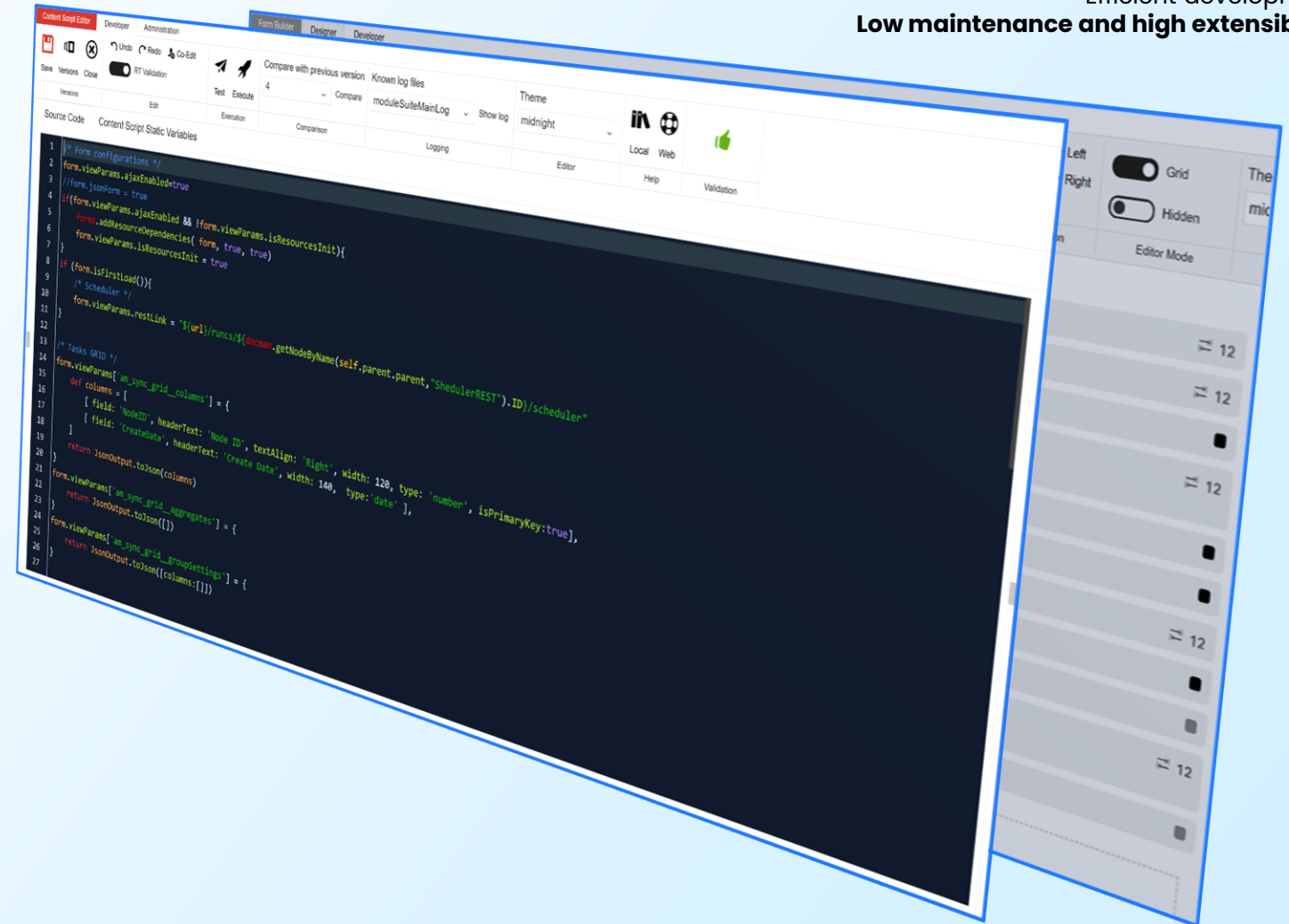
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**COMMERCIALEDGE REALTY**

## Construction Site Visit Request Form

This form is designed to facilitate the planning and organization of visits to construction sites. It collects essential information about the visitor, their associated company, the sales representative coordinating the visit, and the details of the construction site. Additionally, it ensures that all necessary safety and access requirements are met before the visit. Please complete all relevant sections of the form to ensure a smooth and safe visit experience.

Wednesday, 04 September 2024

**Visitor Information**  
This section captures all the necessary details about the visitor, including their personal and company information. It ensures that the visitor is properly identified and their registration is recorded.

\*Last Name: Young  
\*First Name: Andy  
\*Email: a.young@dickenson.com  
\*Company Name: Dickenson plc  
City: Lawrence  
State: United States  
Telephone: (785) 241-6200  
Company Representative: Jacob Thompson  
Postal Code: 66045  
Address: 1301 Hosh Drive

**Construction Site Information**  
This section allows you to select the construction project and its associated commercial spaces. By choosing the appropriate options from the dropdown menus, you ensure that both the visitor and the sales representative have accurate information about the specific site location for the visit.

\*Project: Promenade du Lac Shopping Center (a070000002AaoKQAS)  
\*Commercial Space: Art Gallery (AG012)

**Visit Details**  
This section captures all the specifics about the visit, including its purpose, the number of participants, and the proposed date and time. It helps in planning and organizing the visit efficiently.

\*Subject: Discussion on Art Gallery Commercial Space Purchase  
\*Details: This visit is intended to provide an in-depth tour of the available commercial spaces within the Promenade du Lac Shopping Center. The focus will be on evaluating the suitability of the Art Gallery location and other units for potential purchase. The tour will include a walkthrough of the facilities, a review of the site's amenities, and an overview of the surrounding area to assess its business potential. This will help in making an informed decision regarding the acquisition of a commercial space within the center.  
\*Duration (hours): 1  
\*Date and Time: 09/04/2024 15:00  
Participants Number: 2

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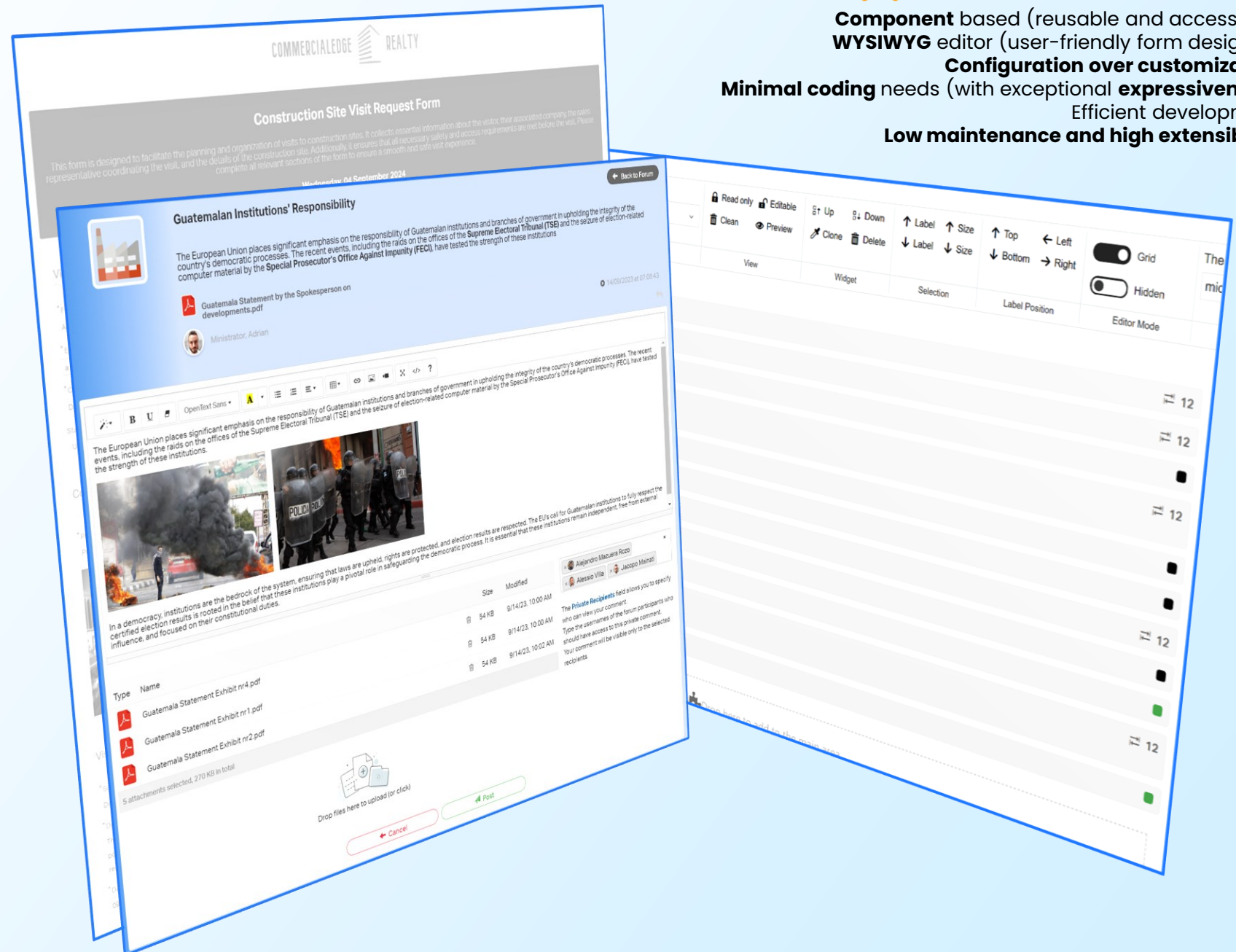
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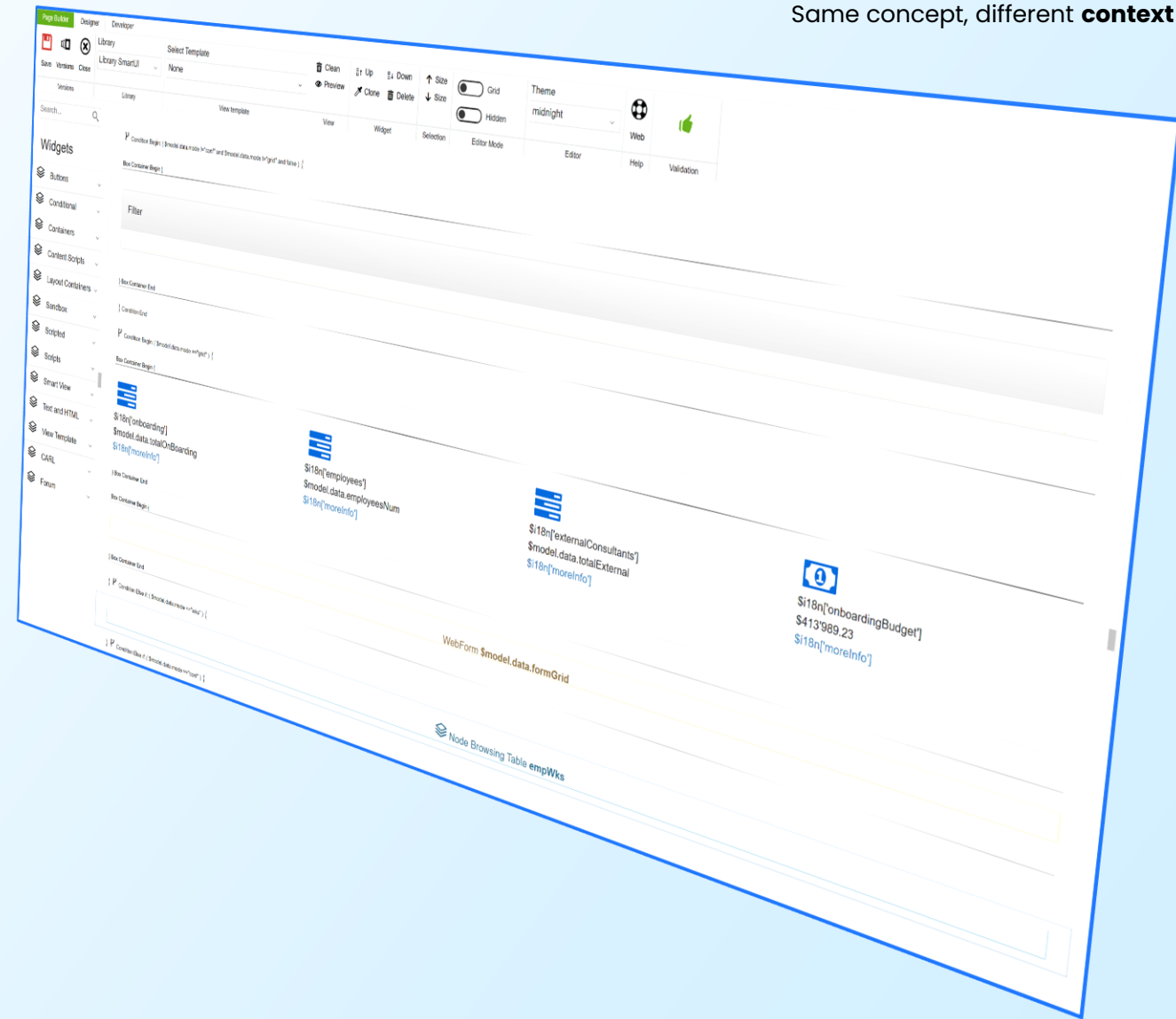
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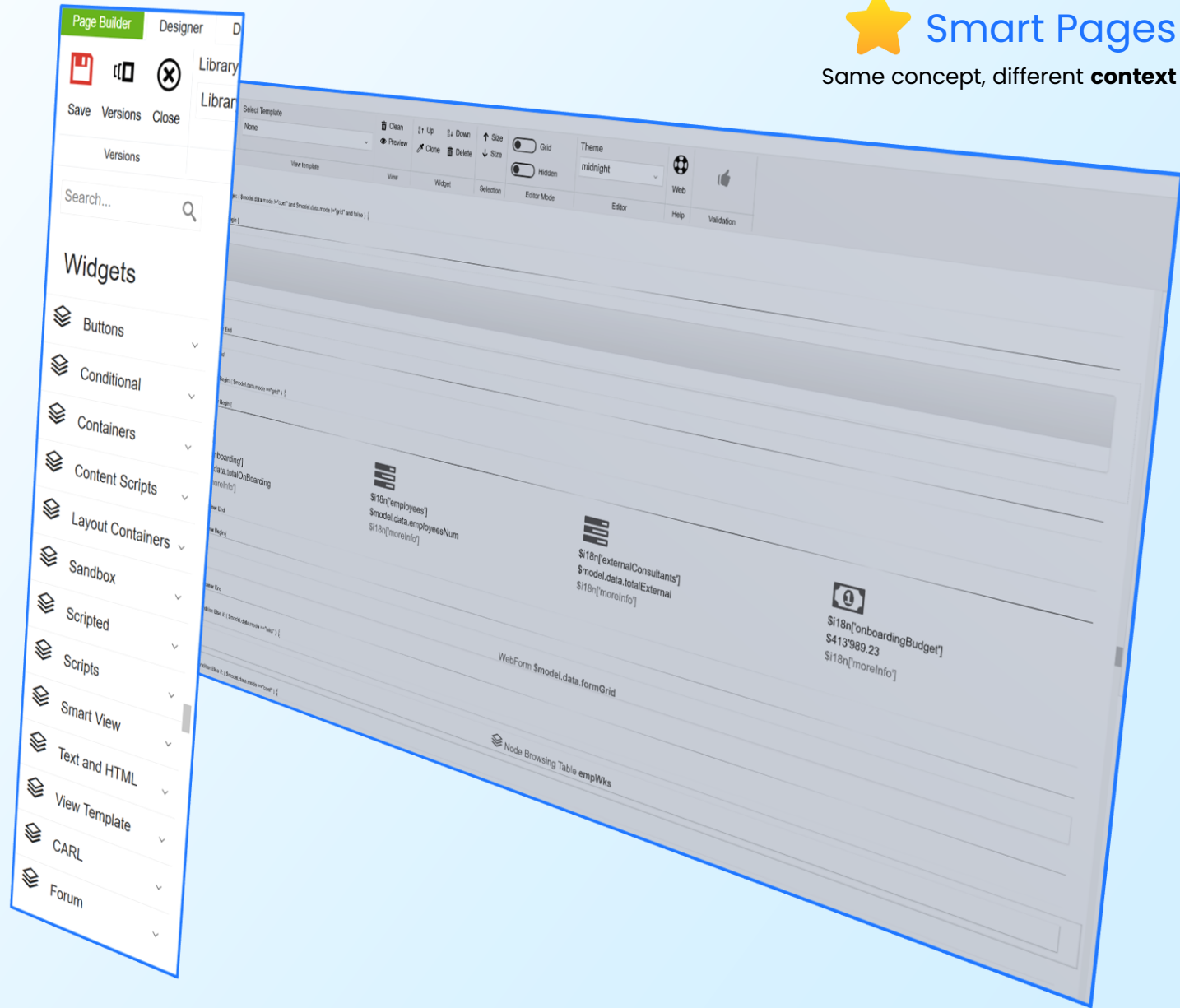
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The top form is a 'Construction Site Visit Request Form' from 'COMMERCIALEDGE REALTY'. It includes a header with the company logo and a title. The main content area contains a paragraph of text explaining the form's purpose. The bottom of the form has a date field set to 'Wednesday 04 September 2024' and a 'Back to Form' button.

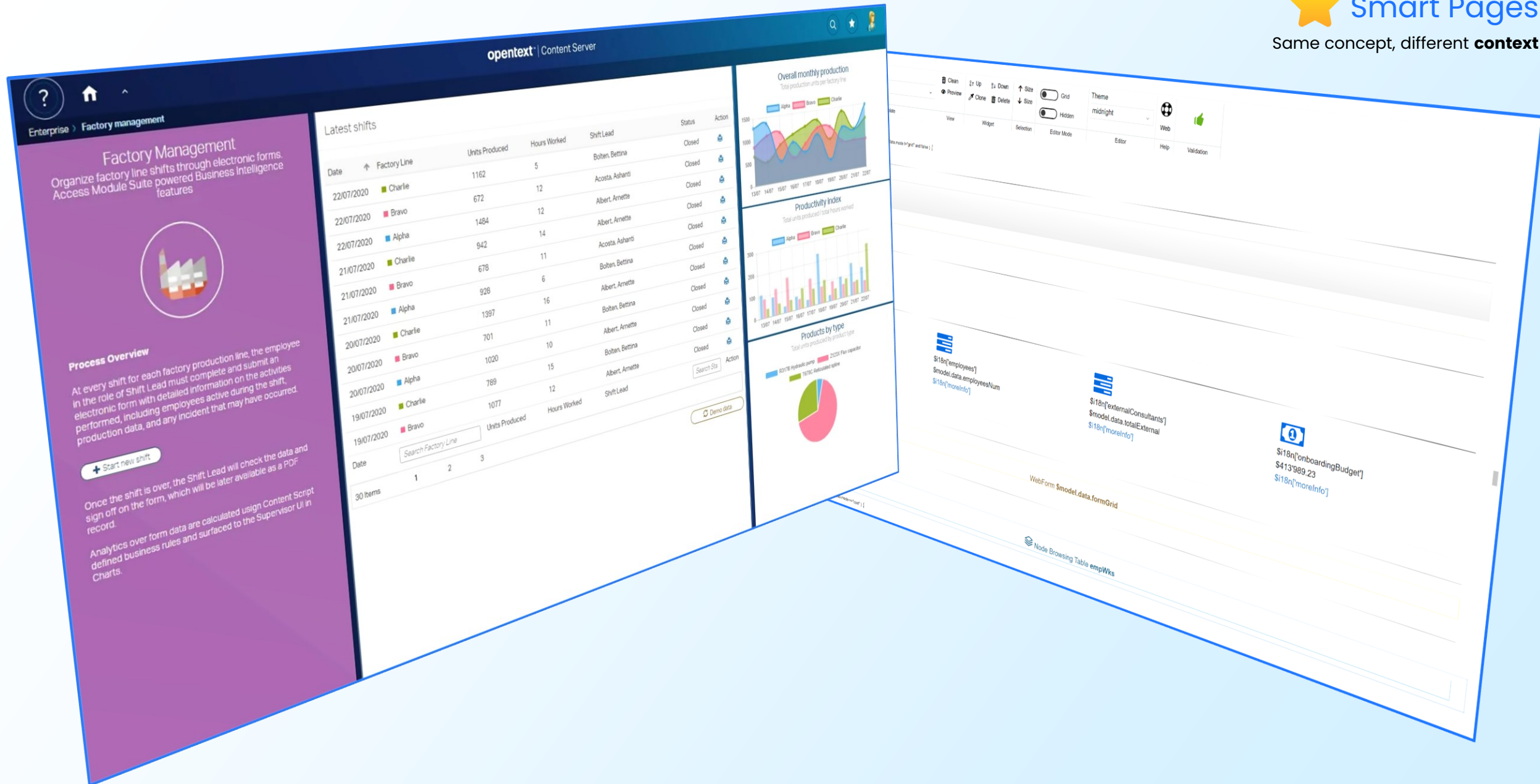
The middle form is 'Guatemalan Institutions' Responsibility'. It features a 'Register new employee' section with a dropdown menu to 'Please select the job grade of new employee'. Below this are four buttons: 'Associate', 'Manager', 'Director', and 'Partner'. The form includes fields for 'Employee ID', 'First Name', 'Last Name', 'Department', 'Employment Type', 'Start Date', 'Gender', 'Birth Date', 'Address', 'Email', and 'Phone'. There is also a 'Photo' field with a placeholder image. A 'Job Description' field contains text about software development. At the bottom, there are 'Register employee' and 'Cancel' buttons.

The bottom form is a 'Form Designer' interface. It has a top toolbar with various controls like 'Read only', 'Editable', 'Clean', 'Preview', 'Clone', 'Delete', 'Up', 'Down', 'Label', 'Size', 'Top', 'Bottom', 'Left', 'Right', 'Grid', and 'Hidden'. Below the toolbar is a table with columns for 'View', 'Widget', 'Selection', 'Label Position', and 'Editor Mode'. The table contains several rows of data, including a row with a 'Photo' field and a row with a 'Job Description' field. At the bottom, there is a 'Register employee' button and a 'Cancel' button.











Same concept, different **context**

**answer CONSULTING**

Enterprise / Connected Workspaces / Onboarding employees

## Employees

ONBOARDING  
13

More Info

EMPLOYEES  
256

More Info

EXTERNAL CONSULTANTS  
16

More Info

ONBOARDING BUDGET  
\$413'989.23

More Info

Drag a column header here to group its column

Employee ID	Start Date	Grade	Name	Manager	Department	Type
5674323201010	25.07.24	Associate	Wayne Bruce	a.acosta	Marketing	Full Time
3639283205597	17.04.24	Associate	Simpson Homer	a.acosta	Marketing	Full Time
CU0023	12.10.23	Sr. Buyer	Coleman Pat	a.acosta	Sales	Full Time
CU0002	26.01.23	Manager	Abolrous Hazem	Admin	Sales	Full Time
CU0007	18.11.22	Associate	Agarwal Nupur	a.acosta	Procurement	Full Time
3639286539944	29.01.21	Associate	West Wallace	a.acosta	Marketing	Full Time
3639282750528	29.01.21	Associate	Jeon Julene	a.acosta	Marketing	Full Time
1611822560702	28.01.21	Associate	Heger Hilda	b.bellfore	Marketing	Full Time
1611821459579	28.01.21	Associate	Dworkin Denver	a.acosta	Marketing	Full Time
1611767827219	27.01.21	Director	Dahmer Dustin		Marketing	Full Time

1 of 2 pages (16 items)

Items per page: 10

### Employee Management

A process for managing and creating new employees

The Employee Onboarding process, has been implemented as a sample Case Management application. It has the intent of demonstrating how it is possible to manage an the entire process by integrating a Connected Workspace, representing the newly hired Employee, with a task list representing the process flow.

- Register new Employee
- Employees List
- Employees Workspaces
- Open HR Application
- Employees By Status
- Analytics
- Configuration

The screenshot shows a web form in a browser window. The form has a header with a logo and navigation links. Below the header is a table with columns for 'Name', 'Age', 'Gender', 'Address', and 'Phone Number'. The table contains three rows of data. Below the table are several input fields and labels. The labels are: '\$18n[\"employees\"]', '\$model.data.employeesNum', '\$18n[\"moreInfo\"]', '\$18n[\"externalConsultants\"]', '\$model.data.totalExternal', '\$18n[\"moreInfo\"]', '\$18n[\"onboardingBudget\"]', '\$413989.23', '\$18n[\"moreInfo\"]', and 'WebForm \$model.data.formGrid'. At the bottom of the page, there is a footer that says 'Node Browsing Table empWks'.

opentext | Content Server

answer CONSULTING

Enterprise / Projects / Test Project / Transcripts / Meeting - The Expert

Meeting - The Expert Transcript

Overview Meeting Minutes Tasks Analytics

Video Preview

5:12 / 7:34

Transcript

The Expert

Owner: Justine  
Date: September 22, 2024

Summary: The company is launching a project to draw seven red lines, requiring specific colors and perpendicularity. Anderson, the expert, struggles with the task's feasibility, debating color and geometry. After much discussion, they agree on two red lines, two green, and the rest transparent. Justine suggests a kitten shape for one line, leading to further confusion. Ultimately, they plan to inflate a red balloon, humorously asking for it to be shaped like a kitten.

Speakers

OTCS User Justine

OTCS User Anderson

Transcript

Participants

Anderson

Justine

Pulis

Walter

Anderson

Confidence

two perfectly perpendicular red lines. And I will draw the rest with invisible, but I'll draw them.

Would this suit us? Yes, this will suit us. Yes, but at least a couple with Greed risk. Oh, and I have another question, if I may. Can you draw one of the lines in the form of a kitten?

A what?

In the form of a kitten. Market research tells us our users like cute animals. It would be really great if we could do. But why?

Look, I can of course draw you a cat. I'm no artist, but I can give it a try. But it won't be a lion. Any more. It will be a cat, a lion and a cat. These are two different things.

A kitten. Not a cat, but a kitten. They're little, cute, cuddly cats, on the other hand.

It won't make a difference.

Anderson, at least hear her out. She hasn't even finished speaking and you're already saying no.

Minutes Preview

Meeting Minutes - The Expert

Scouting session

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Participants

Anderson

Walter

Justine

Pulis

22 September 2024

Clean

Position

Up

Down

Size

Clone

Delete

Grid

Theme

midnight

Widget

Selection

Editor Mode

Editor

Help

Validation

employees]

data.employeesNum

reInfo]

\$!18n["externalConsultants"]

\$model.data.total[External

\$!18n["moreInfo"]

\$!18n["onboardingBudget"]

\$413'989.23

\$!18n["moreInfo"]

WebForm \$model.data.formGrid

Node Browsing Table empWks







# Reusable complex components

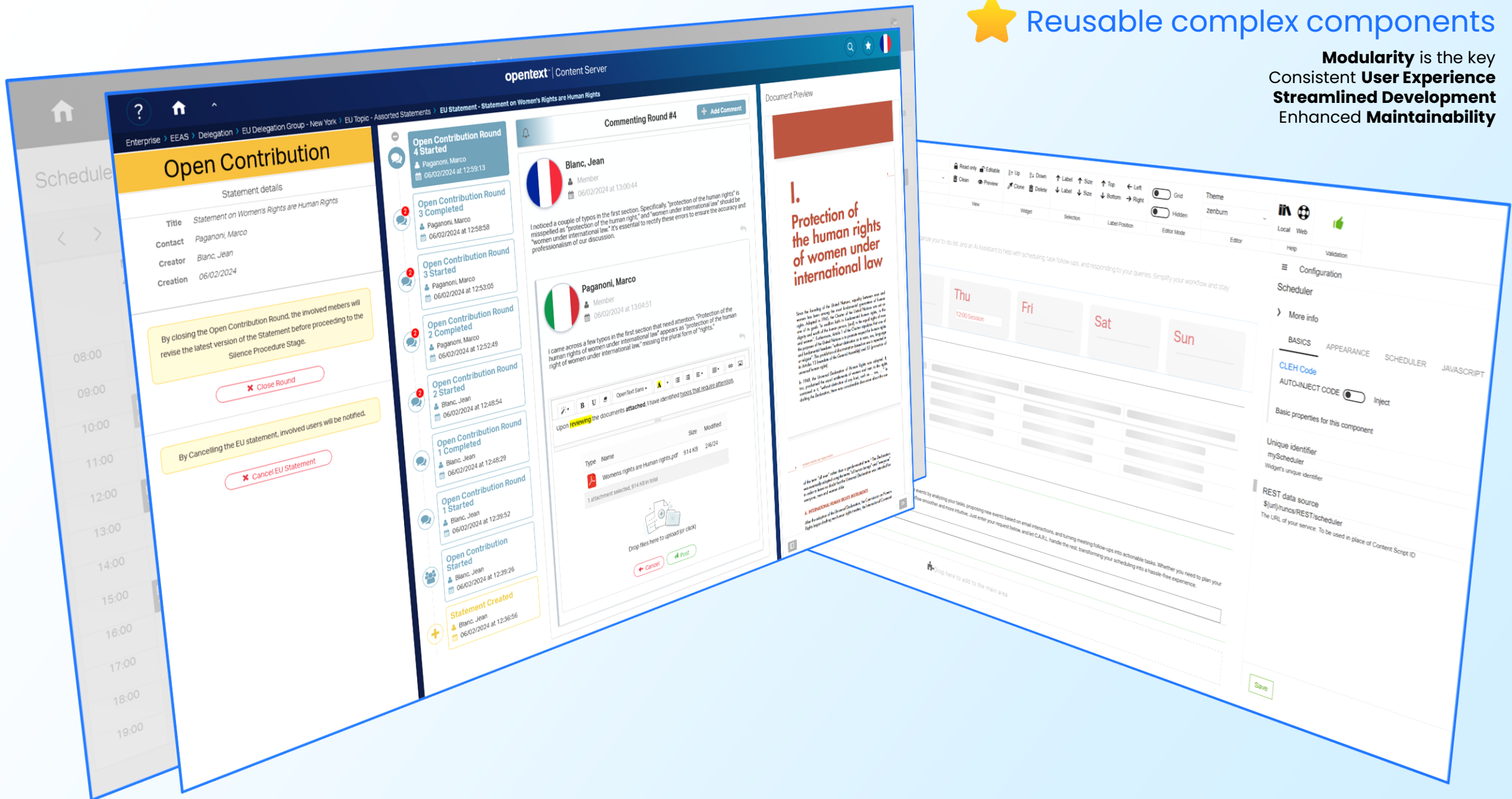
**Modularity** is the key  
Consistent **User Experience**  
**Streamlined Development**  
Enhanced **Maintainability**

The image displays the 'opentext' Extended ECM CE 24.1 Scheduler interface. The main view is a calendar for November 04 - 10, 2024. A 'New Event' dialog is open, showing fields for Title (Business Users UAT), Location (Microsoft Teams Online), Start (11/5/24 09:00), End (11/5/24 10:30), Start Timezone (UTC+02:00 Johannesburg), End Timezone (UTC+02:00 Johannesburg), Repeat (Never), and Description (UAT with the business users for the deployment of the last batch of updates on client's server). The dialog has 'Save' and 'Cancel' buttons. The background calendar shows events like 'Management Meeting' and 'Lunch'. To the right, a configuration panel for the Scheduler component is visible, showing tabs for BASICS, APPEARANCE, SCHEDULER, and JAVASCRIPT. The SCHEDULER tab is active, showing a table with columns for days of the week and a 'Save' button at the bottom.



# Reusable complex components

**Modularity** is the key  
**Consistent User Experience**  
**Streamlined Development**  
**Enhanced Maintainability**







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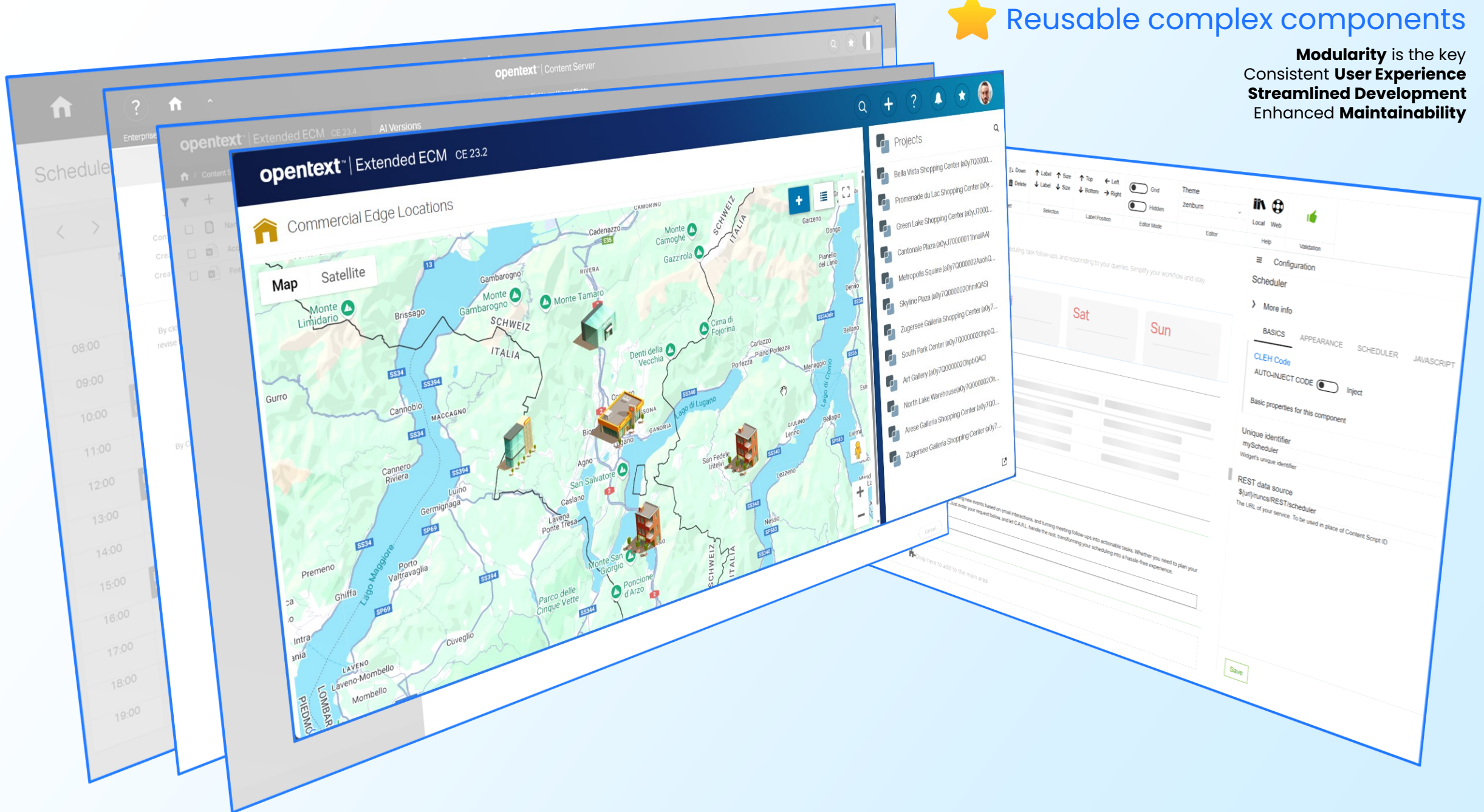






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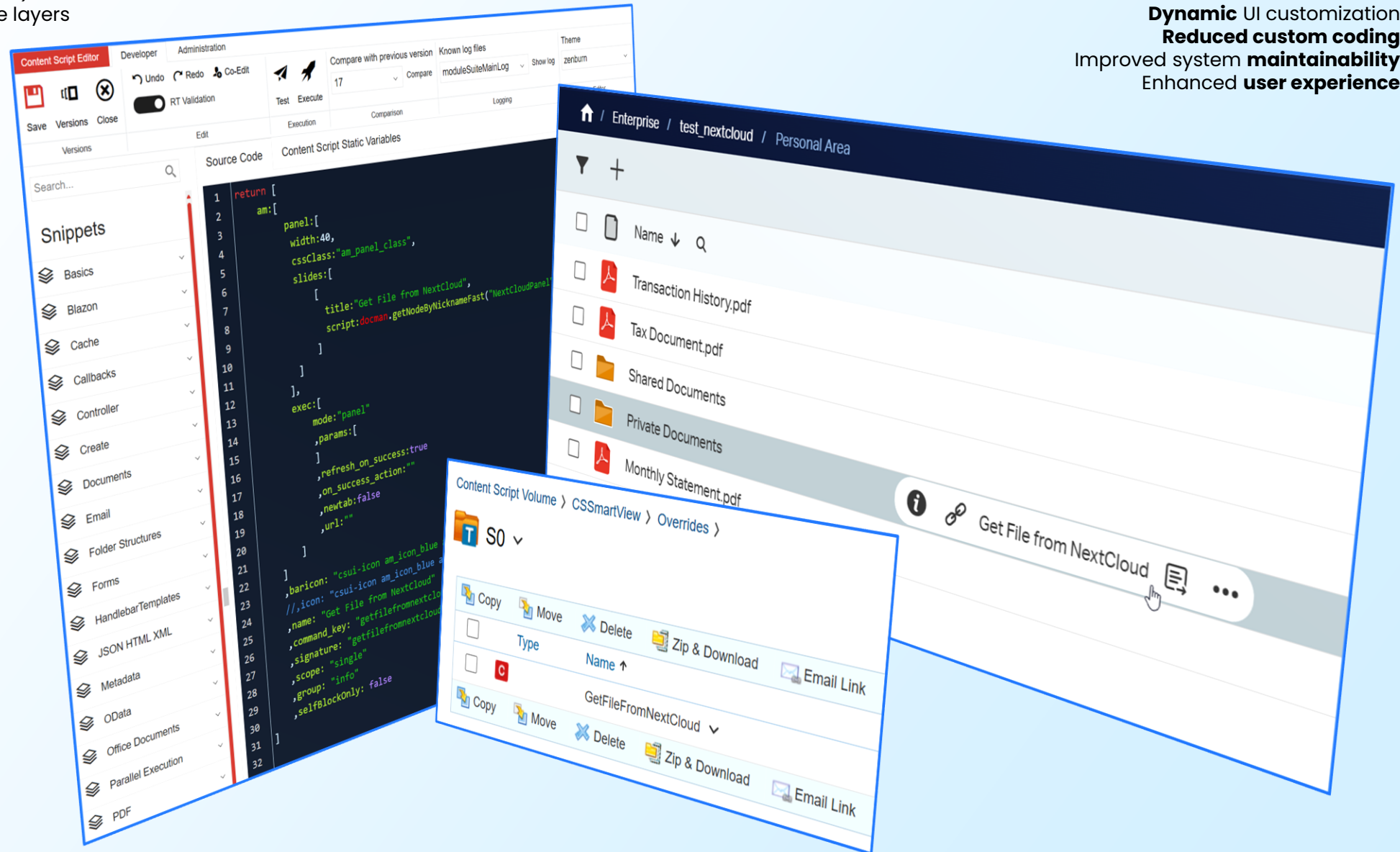
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# Module Suite UI Hooks

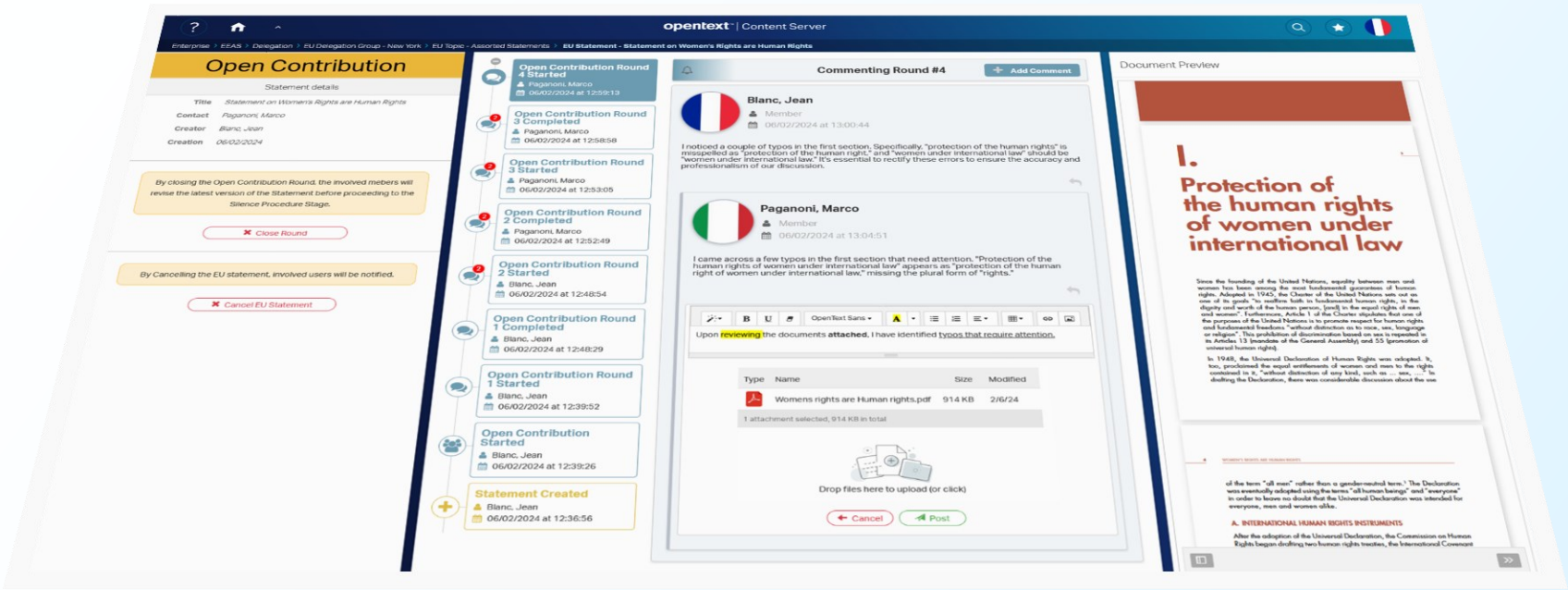
**Convention** over configuration  
**Event-Driven** code execution  
**Dynamic** UI customization  
**Reduced custom coding**  
Improved system **maintainability**  
Enhanced **user experience**





# How to Move&Modernize

Start from **business-oriented** descriptions  
Function analysis and rapid **prototyping**  
**Reuse** existing components  
**Decommission** external systems  
**Standardize** and abstract customizations  
**High-Level Reimplementation** of Low-Level customizations  
**Accessibility** needs assessment



Run WebReport: Global Dashboard

My Workflow	Start Date	Current Step	Step Due Date	Status	Assigned To	Priority
Workflow n1a5	2024-11-01	Kickoff Meeting	2024-11-05	In Progress	Alice Johnson	High
Project Beta	2024-11-02	Requirements Gathering	2024-11-07	Completed	Bob Smith	Medium
Project Gamma	2024-11-03	Design Phase	2024-11-08	Not Started	Charlie Brown	Low
Project Delta	2024-11-04	Development	2024-11-09	In Review	Dana White	High
Project Epsilon	2024-11-05	User Testing	2024-11-10	In Progress	Ella Green	Medium
Project Zeta	2024-11-06	Deployment	2024-11-11	Not Started	Frank Harris	High
Project Eta	2024-11-07	Client Feedback	2024-11-12	In Progress	Grace Lee	Medium
Project Theta	2024-11-08	Final Review	2024-11-13	Completed	Henry Adams	Low
Project Iota	2024-11-09	Launch Preparation	2024-11-14	In Progress	Ivy Carter	High
Project Kappa	2024-11-10	Go Live	2024-11-15	Not Started	Jake Smith	Medium
Project Lambda	2024-11-11	Post-Launch Support	2024-11-16	In Review	Lara Scott	High
Project Mu	2024-11-12	Maintenance	2024-11-17	In Progress	Mike Wilson	Medium

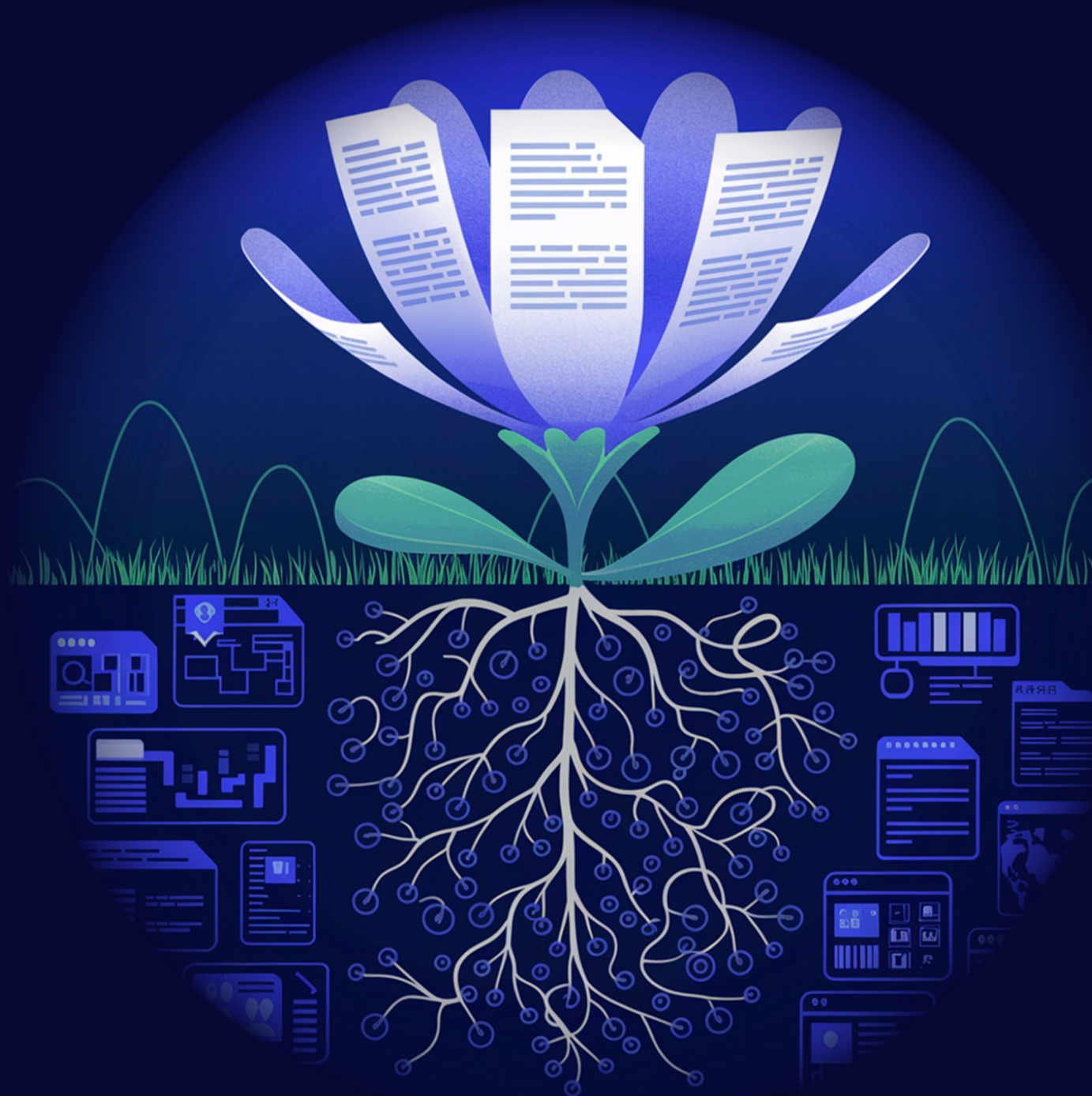


## Chapter 5

# The Doc.

How to let documents blossom from your data, minimizing user interaction and the need for editing and review by leveraging native mechanisms or the best engines available on the market.

PDF, DOCX, XLSX—you name it, each format handled in its ideal way.





## Custom code and libraries

Require a **custom OScript module**  
**Complex** development (OScript & IDE)  
Business logic **scattered** through the layers  
**Complex deployment**  
**Hard to extend and maintain**  
**Not cloud-compatible**

## External tools

**Lack of synchronous integration**  
Extended ECM **just** as document **storage**  
**Maintenance** costs

## External rendition engines

**Asynchronous** integration  
**Lack of native integration** mechanisms  
**Reduced visibility and resilience**  
**Slower** integration performance



## Out of the box functionalities

**Programmatic document creation and manipulation** (PDF, DOCX, XLSX, etc.)  
Synchronous operations with **immediate feedback**  
**Native interaction**  
Native **export** to PDF and XLS

## External rendition engines integration

Integration with **unlimited external rendition engines**  
*OpenText Blazon, Intelligent Viewing, Adlib, Global Cents Power Docs, and custom engines*  
Established networking and traffic **best practices** (with OpenText cloud team)

## Accessibility

Focus on document **accessibility**  
Integration with Accessibility Tools  
*OpenText Output Transformation Server*



## Custom code and libraries

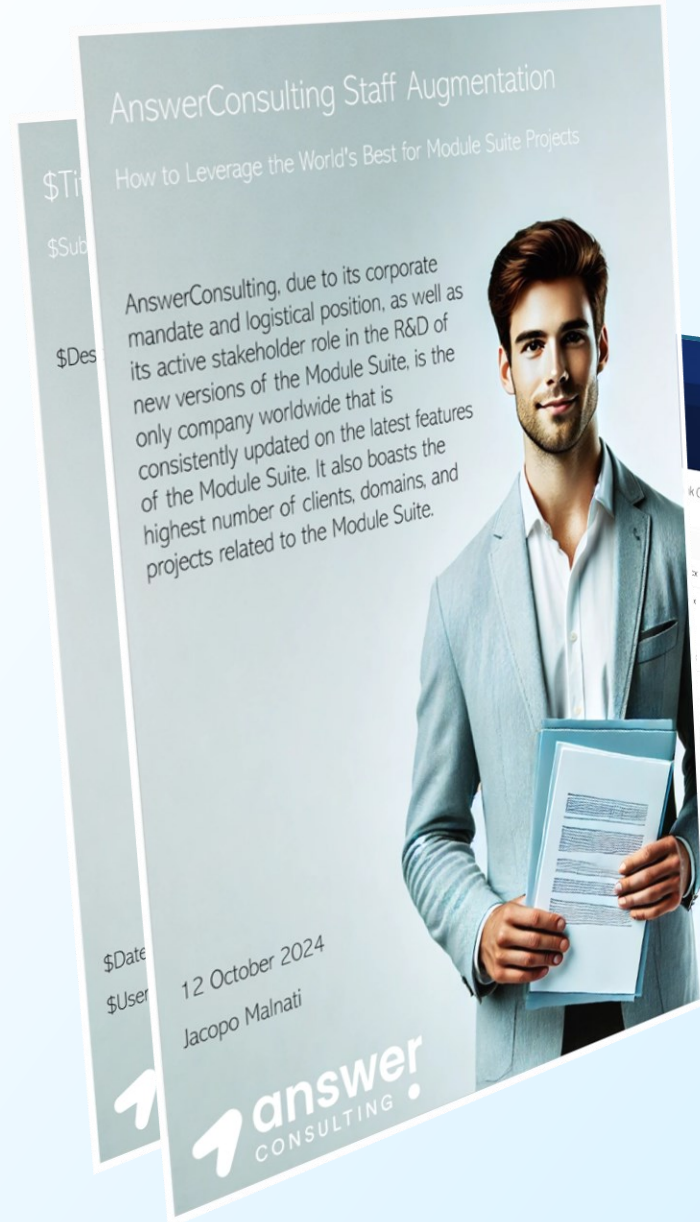
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Focus on document **accessibility**  
Integration with Accessibility Tools  
*OpenText Output Transformation Server*





# How to Move&Modernize

Analyze and **rebuild** document creation services  
**Minimize** code and effort  
**Decommission file-based** data exchange  
Promote **real-time** interactions  
**Accessibility** needs assessment  
Evaluate best **rendition engine** for the use cases



Chapter 6

# The Ripple Effect

A closed system is a dead system. If it's not dead, it means a user is doing a machine's job.

How to integrate any system bidirectionally, for any need, in any way.





## Custom code and libraries

Require a **custom OScript module**

**Complex** development (OScript & IDE)

Business logic **scattered** through the layers

**Complex deployment** (module and supporting files)

**Client side** WebLingo API calls (JavaScript)

**Hard to extend and maintain**

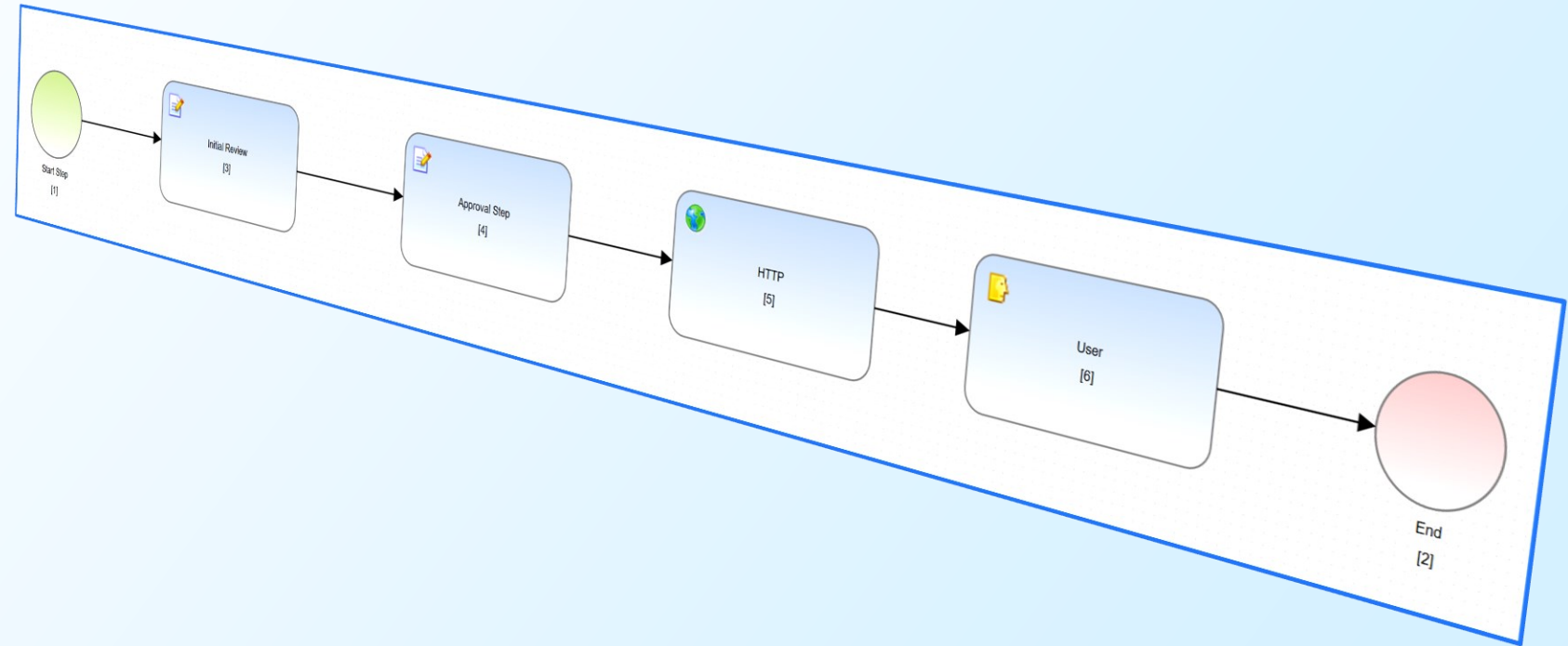
**Not cloud-compatible**

## Workflow URL step

**Hope-oriented** design

## Client side WebReport API calls

**Client side** WebReport API calls (JavaScript)



# Custom code and libraries

Require a **custom OScript module**

**Complex** development (OScript & IDE)

Business logic **scattered** through the layers

**Complex deployment** (module and supporting files)

**Client side** WebLingo API calls (JavaScript)

**Hard to extend and maintain**

**Not cloud-compatible**

## Workflow URL step

**Hope-oriented** design

## Client side WebReport API calls

**Client side** WebReport API calls (JavaScript)



## Content Script integrations

**Bidirectional** integration

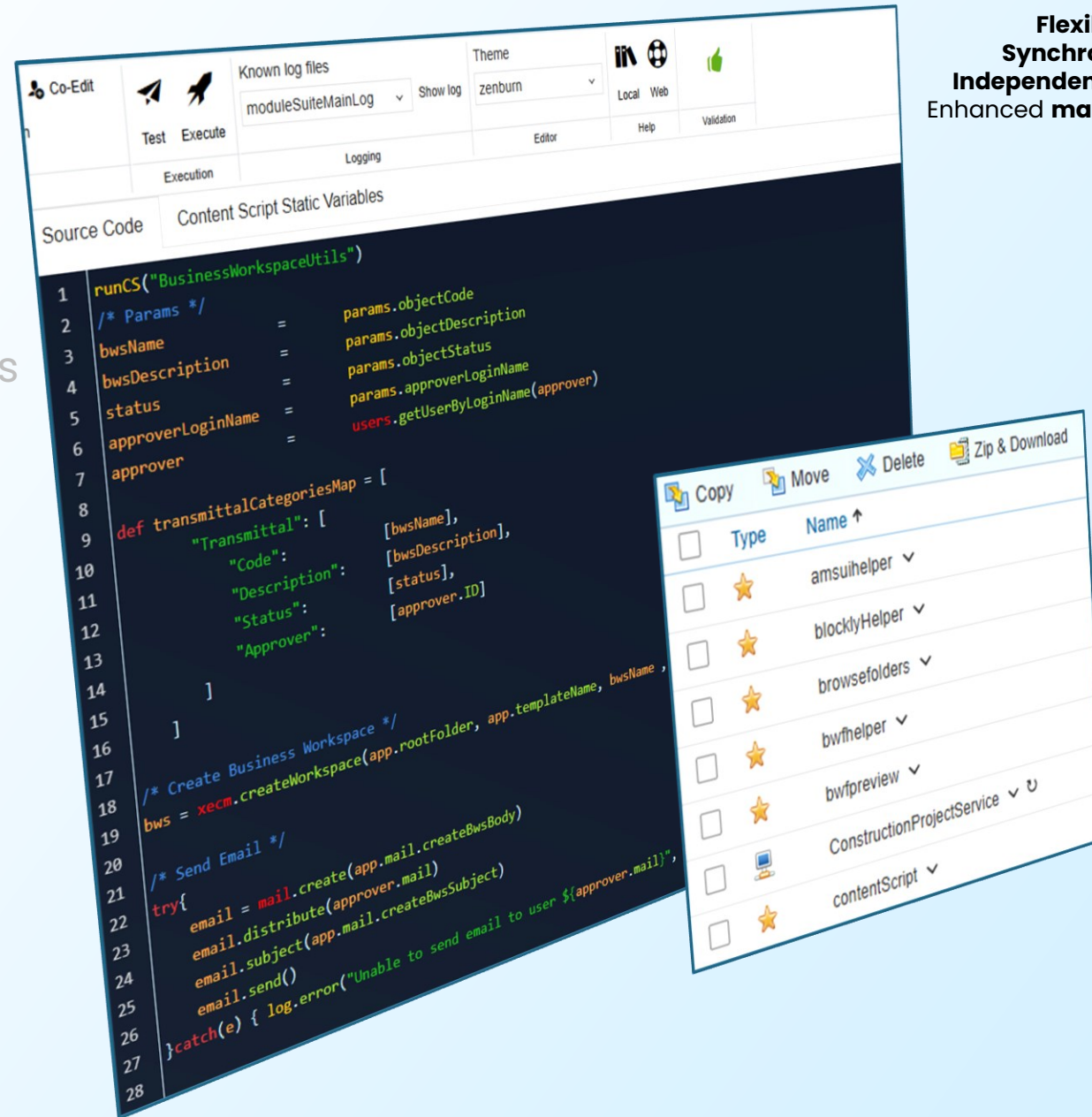
**Flexible** file exchange and custom APIs

**Synchronous and asynchronous** synergy

**Independent of OScript and external libraries**

Enhanced **maintainability** and **troubleshooting**

Custom **audit** and **visibility**

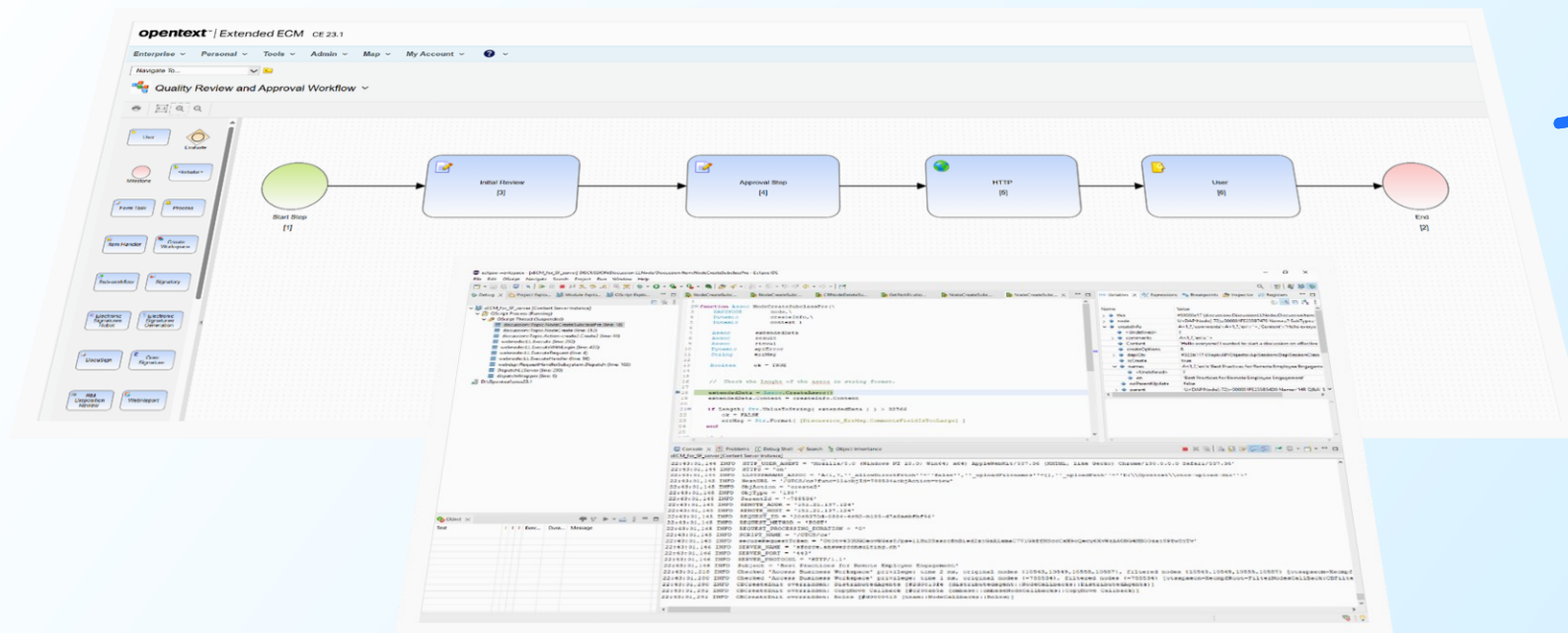
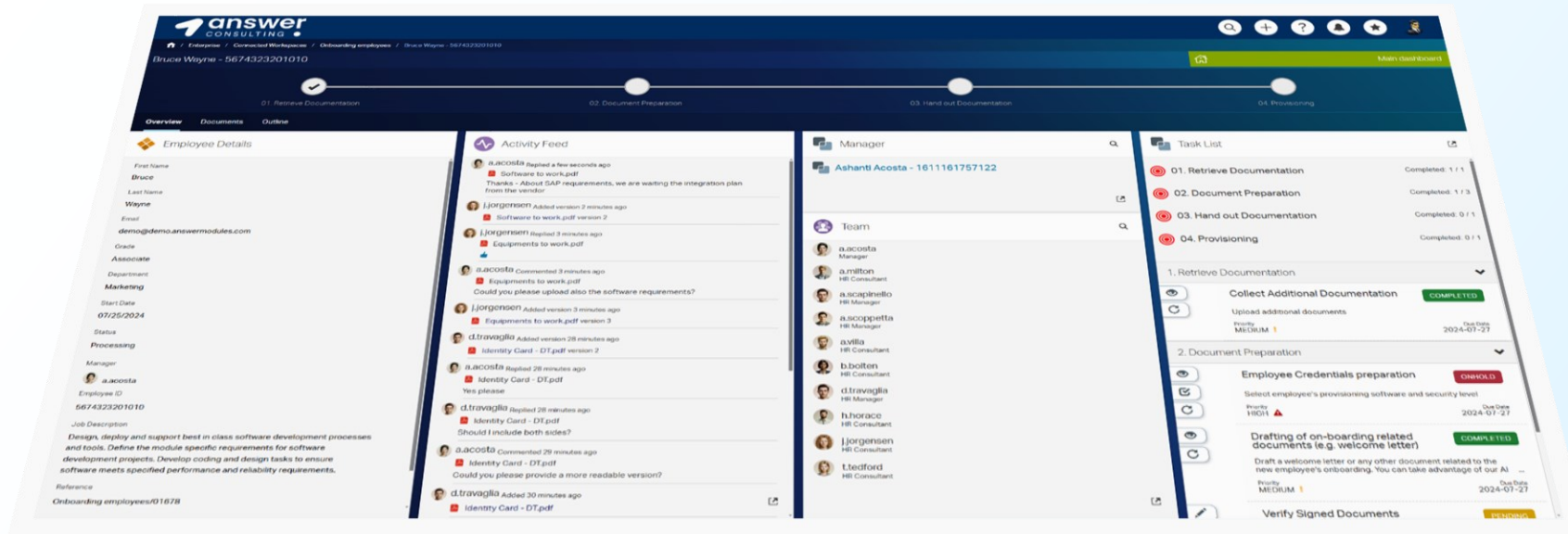




### Modernize communication mechanisms

## Transition from **file-based** to **API-based** communication

- Analyze **third-party interactions**
- Modernize** communication mechanisms
- Evaluate **synchronous vs. asynchronous** communication
- Transition from **file-based to API-based** communication
- Assess** potential for system decommissioning





Chapter 7

# The Winning Gear

How to run jobs without relying on hope, by removing the blindfold and knowing exactly what's happening.

Driving blind is never a good idea, especially when your business processes depend on it.

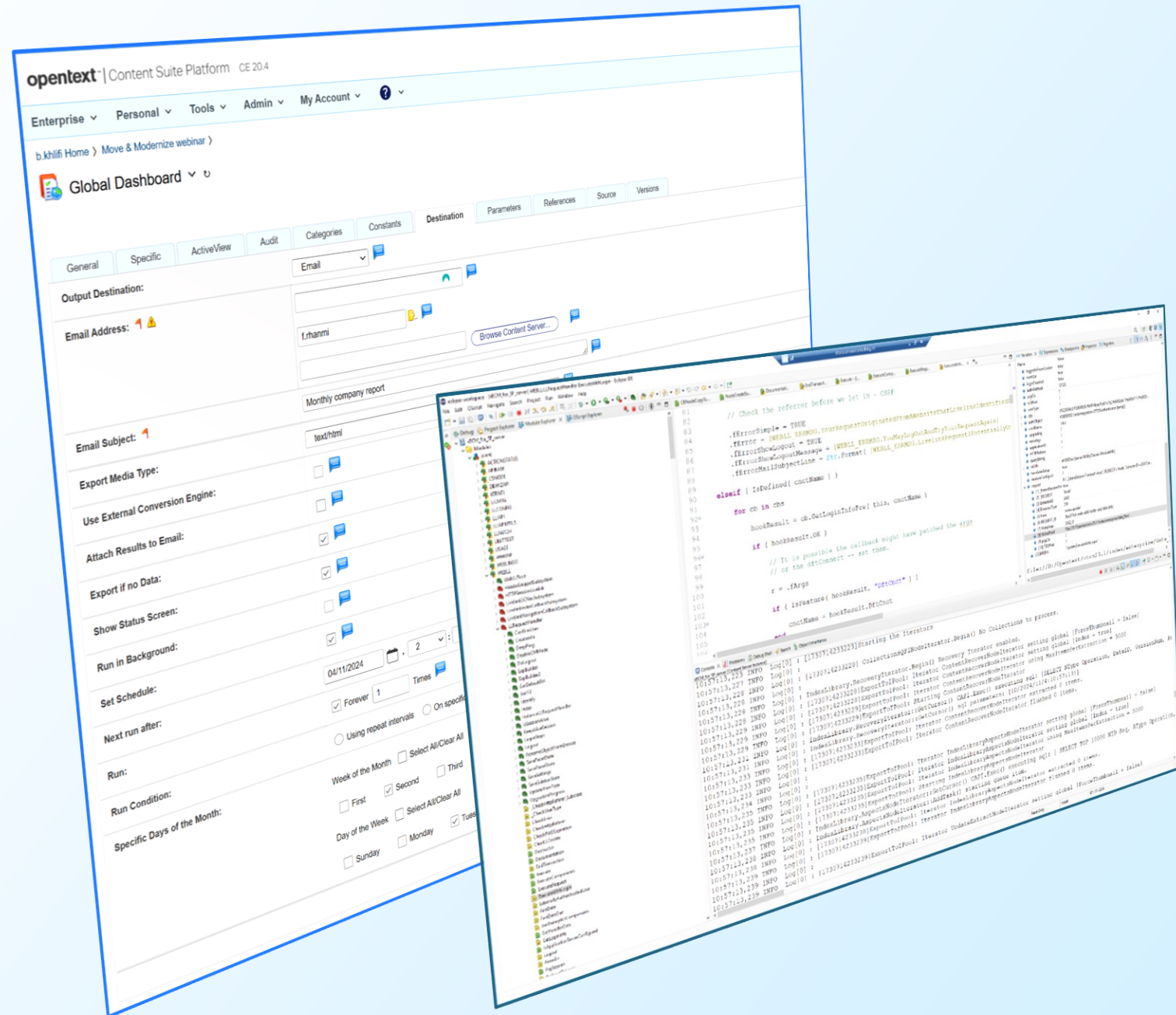


# Custom Agent

Requires a **custom OScript module**  
**Complex** development (OScript & IDE)  
Business logic **scattered** through the layers  
**Complex deployment**  
**Hard to extend and maintain**  
**Not cloud-compatible**

# Scheduled WebReport

**Limited expressiveness**  
**No resilience** or error handling  
**Lack of visibility**  
Business logic in **stored procedures**



# Custom Agent

Requires a **custom OScript module**  
**Complex** development (OScript & IDE)  
Business logic **scattered** through the layers  
**Complex deployment**  
**Hard to extend and maintain**  
**Not cloud-compatible**

# Scheduled WebReport

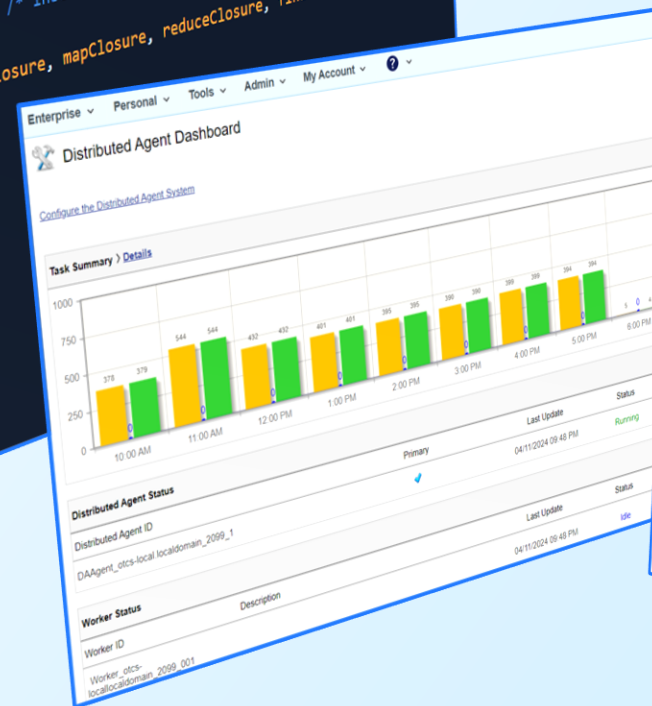
**Limited expressiveness**  
**No resilience** or error handling  
**Lack of visibility**  
Business logic in **stored procedures**



# Content Scripts as Jobs

**Background execution scheduling**  
**Map-Reduce** paradigm support  
High **expressiveness** and **simplicity**  
Enhanced **maintainability** and **troubleshooting**  
Enhanced **visibility**  
**Dedicated workers**

```
1 try {  
2     Closure splitClosure = { /* Insert your code here */ }  
3  
4     Closure mapClosure = { chunk -> /* Insert your code here */ }  
5  
6     Closure reduceClosure = { data -> /* Insert your code here */ sendSuccessEmail(message) }  
7  
8     Closure finalizeClosure = { data -> /* Insert your code here */ sendSuccessEmail(message) }  
9  
10    return distagent.mapReduce( splitClosure, mapClosure, reduceClosure, finalizeClosure )  
11 } catch(Throwable e) {  
12    log.error("error happend:{",e)  
13    sendFailureEmail(e)  
14 }  
15 }  
16  
17  
18  
19  
20  
21  
22
```



Run First: 1 item

Filter...

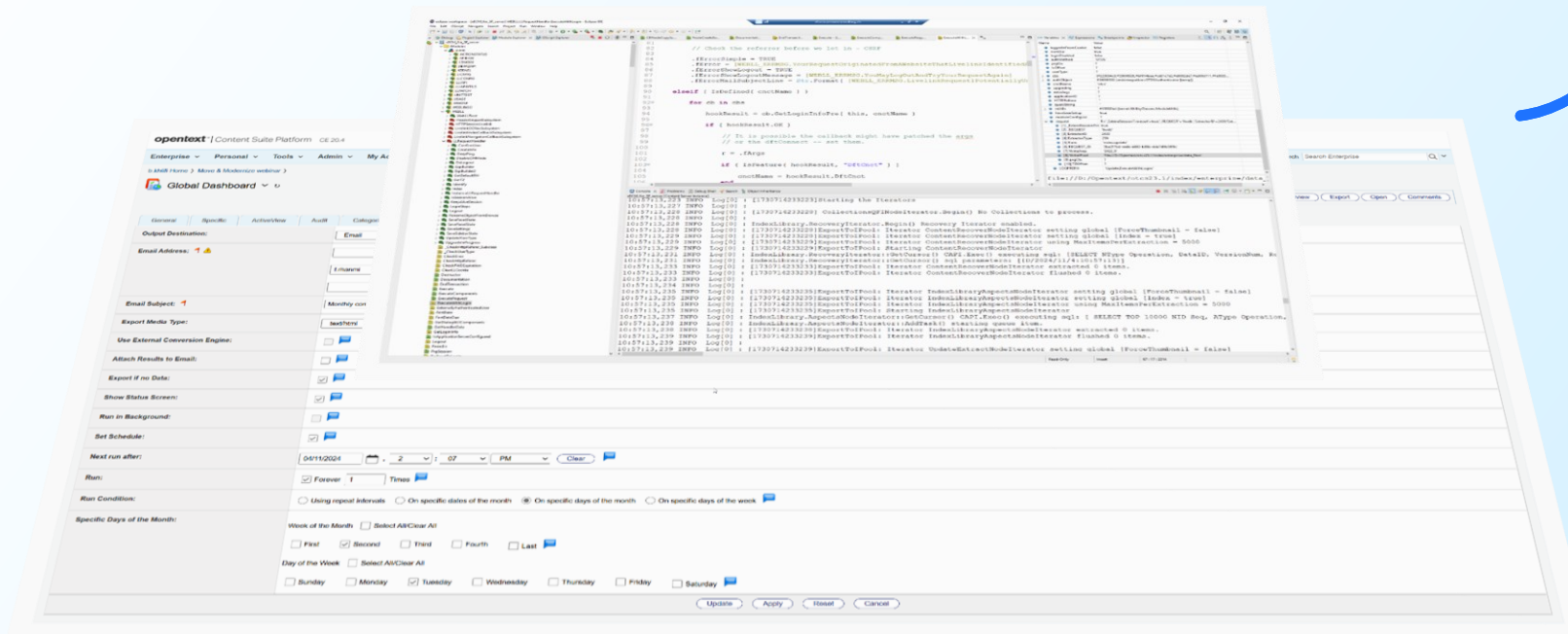
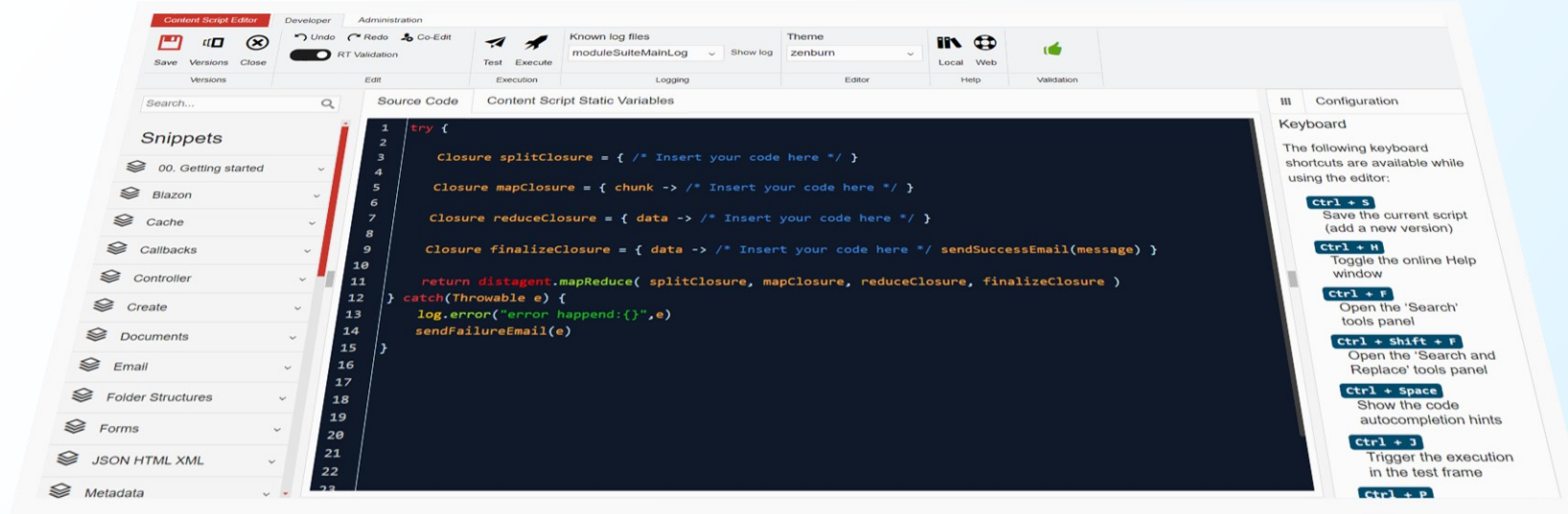
- ✓ ScheduleCSChain

Remove All Remove



# How to Move&Modernize

Review and **reimplement** scheduled **WebReports**  
**Replace** custom **agents** with Content Scripts  
Optimize xECM integration  
**Decommission** external systems  
**Optimize** throughput and load

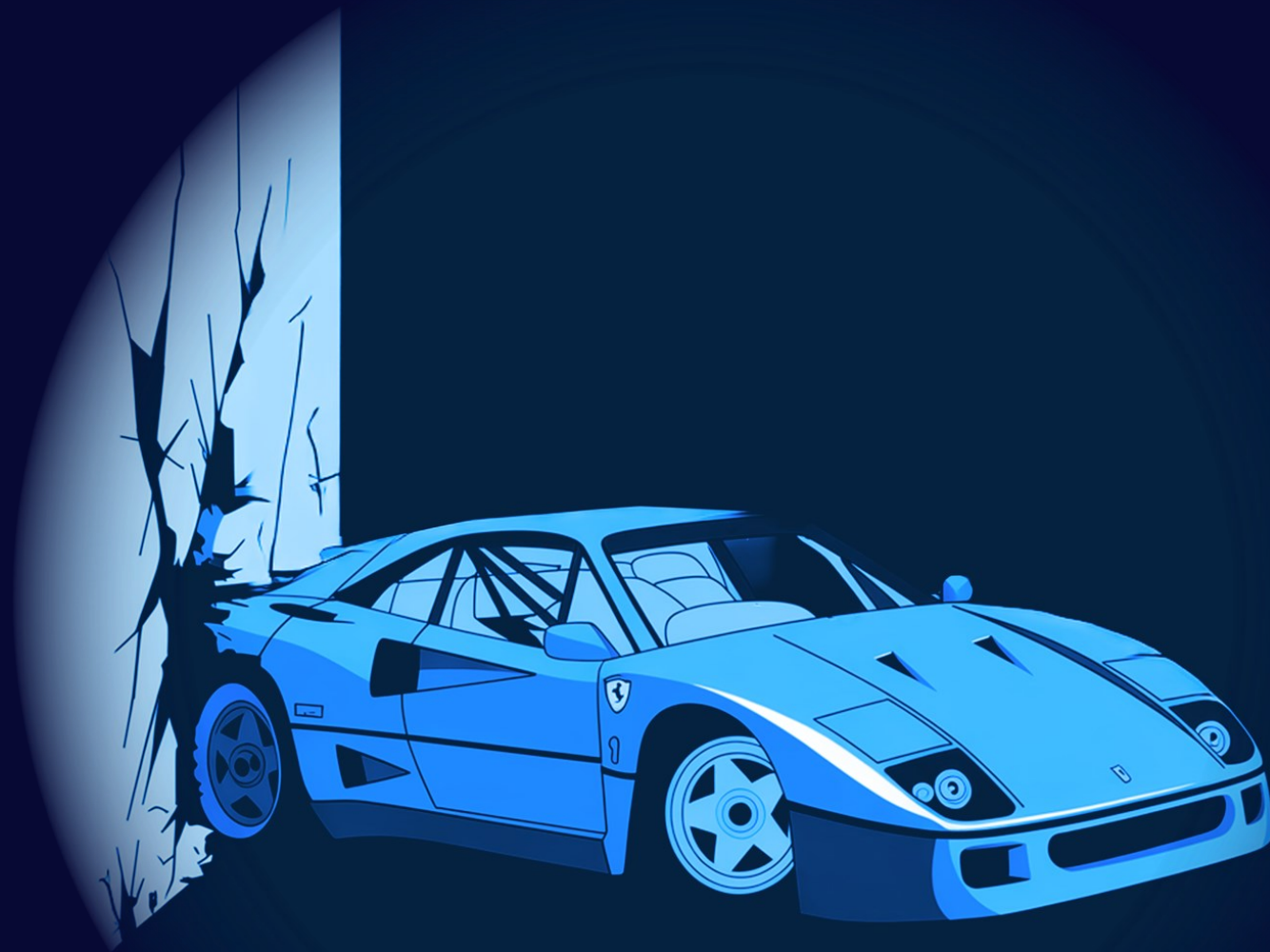


## Chapter 8

# The Navigator

Just because you have a Ferrari doesn't mean you won't get a flat...or crash into a wall.

Here's how to mitigate or eliminate issues to ensure backward compatibility for solutions built with the Module Suite, even if they were developed following bad practices.



# Module Suite Bad Practices

## Core widget override

**Groovy** syntax **bad practices** (attribute vs getter)

Heavy use of **queries** over higher-level functionalities

Heavy use of external **Java libraries**



## Bad Practices Assessment

Extensive Move&Modernize **experience**

**Identification of bad practices**

**Effective solutions** readily available

Cloud-Compliant **alternatives**

The screenshot shows the BWF Widget Editor interface. The top bar includes a 'Developer' tab, 'Save', 'Versions', 'Close', 'Undo', 'Redo', 'Co-Edit', 'RT Validation' (toggle), 'Theme' (dropdown set to 'zenburn'), and icons for 'Local', 'Web', 'Help', and 'Validation'. The main area is a code editor with a dark background and light-colored text. The code is Groovy/HTML mixed, showing conditional logic and HTML tags. Line numbers 26 through 47 are visible on the left side of the editor.

```
26      {{/if}}
27    {{else}}
28    <div class="col-md-12">
29      {{#if id}}
30        {{#if value}}
31          <div style='{{#compare color "==" "#eeeeee;"}}{{else}}color:{{colo
32            <span class="OrangeCssClass mif-insert-template mif-2x padding1
33              Input hidden for:{{id}} with value: {{value}}
34            </div>
35          {{else}}
36            <div style='{{#compare color "==" "#eeeeee;"}}{{else}}color:{{colo
37              <span class="OrangeCssClass mif-insert-template mif-2x padding1
38                Input hidden for:{{id}}
39            </div>
40          {{/if}}
41        {{else}}
42          <div style='{{#compare color "==" "#eeeeee;"}}{{else}}color:{{colo
43            <span class="OrangeCssClass mif-insert-template mif-2x padding1
44              Input hidden name:{{label}} value:{{value}}
45            </div>
46          {{/if}}
47        {{/if}}
```



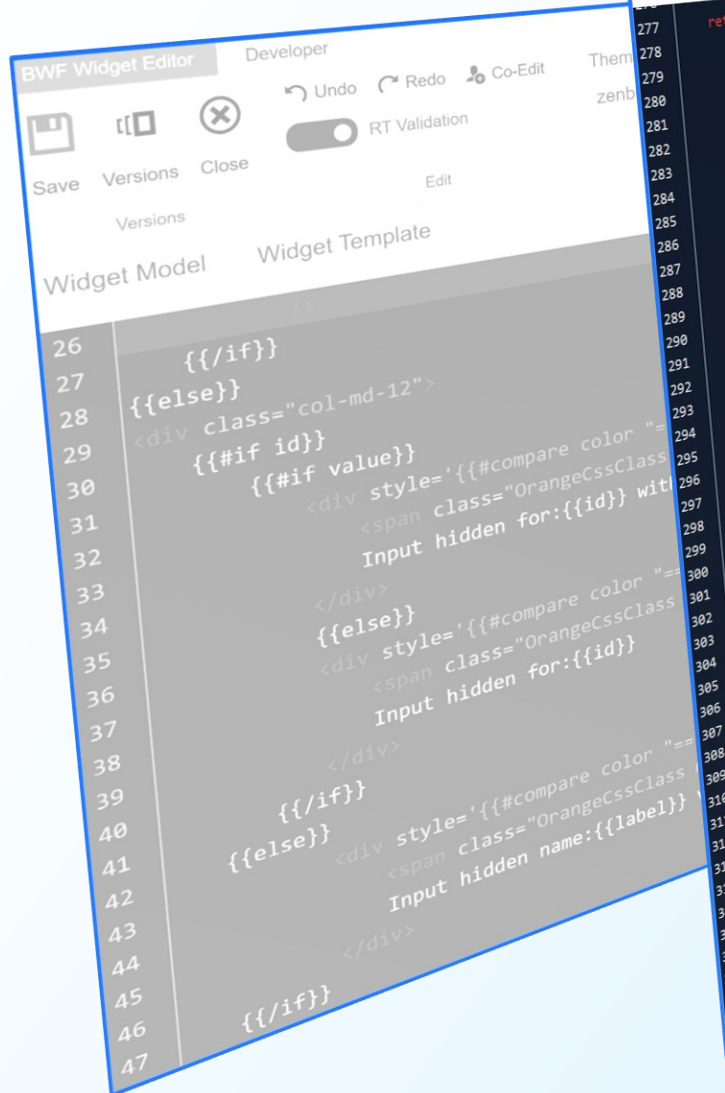
# Module Suite Bad Practices

## Core widget override

**Groovy** syntax **bad practices** (attribute vs getter)

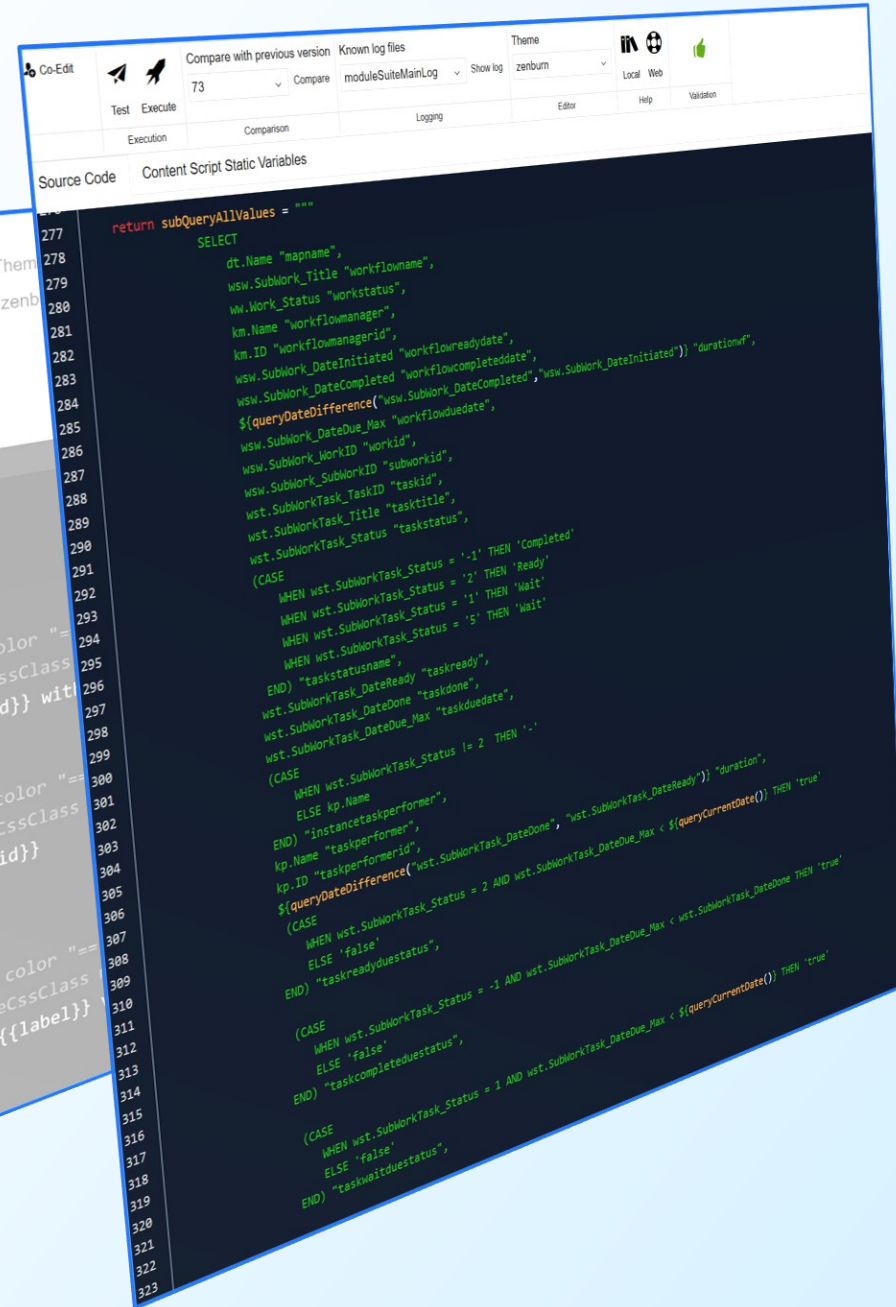
Heavy use of **queries** over higher-level functionalities

Heavy use of external **Java libraries**



The screenshot shows the BWF Widget Editor interface. The top bar includes 'Save', 'Versions', 'Close', 'Undo', 'Redo', 'Co-Edit', and 'RT Validation'. The main area displays Groovy code for a widget override, with line numbers 26 through 47 visible. The code uses Groovy syntax for widget configuration, including conditional rendering and styling.

```
26 //
27 {{/if}}
28 {{else}}
29 <div class="col-md-12">
30   {{#if id}}
31     {{#if value}}
32     <div style="{{#compare color '=' 'true' ? 'OrangeCssClass' : ''}}">
33       <span class="OrangeCssClass" style="display: inline-block; width: 100%; height: 100%; background-color: {{value}}; border: 1px solid black;">
```



The screenshot shows a Source Code editor with a SQL query. The top bar includes 'Co-Edit', 'Test', 'Execute', 'Compare with previous version', 'Known log files', 'Theme', 'Local', 'Web', 'Help', and 'Validation'. The main area displays a SQL query for a subquery, with line numbers 277 through 323 visible. The query uses a complex SELECT statement with multiple joins and conditional logic.

```
277 return subQueryAllValues = ""
278 SELECT
279   dt.Name "mapname",
280   wsw.SubWork_Title "workflowname",
281   ww.Work_Status "workstatus",
282   km.Name "workflowmanager",
283   km.ID "workflowmanagerid",
284   wsw.SubWork_DateInitiated "workflowreadydate",
285   wsw.SubWork_DateCompleted "workflowcompleteddate",
286   wsw.SubWork_DateCompleted "wsw.SubWork_DateInitiated" "duration",
287   wsw.SubWork_WorkID "workid",
288   wsw.SubWork_SubWorkID "subworkid",
289   wst.SubWorkTask_TaskID "taskid",
290   wst.SubWorkTask_Title "tasktitle",
291   wst.SubWorkTask_Status "taskstatus",
292   (CASE
293     WHEN wst.SubWorkTask_Status = '-1' THEN 'Completed'
294     WHEN wst.SubWorkTask_Status = '-2' THEN 'Ready'
295     WHEN wst.SubWorkTask_Status = '1' THEN 'Wait'
296     WHEN wst.SubWorkTask_Status = '5' THEN 'Wait'
297   END) "taskstatusname",
298   wst.SubWorkTask_DateReady "taskready",
299   wst.SubWorkTask_DateDone "taskdone",
300   wst.SubWorkTask_DateDue_Max "taskduedate",
301   (CASE
302     WHEN wst.SubWorkTask_Status = 2 THEN '-1'
303     ELSE kp.Name
304   END) "instancetaskperformer",
305   kp.Name "taskperformer",
306   kp.ID "taskperformerid",
307   kp.ID "taskperformerid",
308   $(queryDateDifference("wst.SubWorkTask_DateDone", "wst.SubWorkTask_DateReady")) "duration",
309   (CASE
310     WHEN wst.SubWorkTask_Status = 2 AND wst.SubWorkTask_DateDue_Max < $(queryCurrentDate()) THEN 'true'
311     ELSE 'false'
312   END) "taskreadyduestatus",
313   (CASE
314     WHEN wst.SubWorkTask_Status = -1 AND wst.SubWorkTask_DateDue_Max < $(queryCurrentDate()) THEN 'true'
315     ELSE 'false'
316   END) "taskcompletedstatus",
317   (CASE
318     WHEN wst.SubWorkTask_Status = 1 AND wst.SubWorkTask_DateDue_Max < $(queryCurrentDate()) THEN 'true'
319     ELSE 'false'
320   END) "taskwaitduestatus",
321   (CASE
322     WHEN wst.SubWorkTask_Status = 5 AND wst.SubWorkTask_DateDue_Max < $(queryCurrentDate()) THEN 'true'
323     ELSE 'false'
324   END) "taskwaitduestatus",
```



# Bad Practices Assessment

Extensive Move&Modernize **experience**

**Identification of bad practices**

**Effective solutions** readily available

Cloud-Compliant **alternatives**

# Module Suite Bad Practices

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Cloud-Compliant **alternatives**

```
26 //>
27 {{/if}}
28 {{else}}
29 <div class="col-md-12">
30   {{#if id}}
31     {{#if value}}
32       <div style="{{#compare color}}">
33         <span class="OrangeCssC"
34           Input hidden for:{{id}}
35       </div>
36     {{else}}
37       <div style="{{#compare color}}"
38         <span class="OrangeCssC"
39           Input hidden name:{{label
40     {{/if}}
41   {{/if}}
42 </div>
43 {{/if}}
44 {{/if}}
45 {{/if}}
46 {{/if}}
47 {{/if}}
```

```
277 return subQueryAllValues = ""
278 SELECT
279   dt.Name "mapname",
280   wsw.SubWork_Title "workflowname",
281   wsw.Work_Status "workstatus",
282   km.Name "workflowmanager",
283   km.ID "workflowmanagerid",
284   wsw.SubWork_DateInitiated "workflowreadydate",
285   wsw.SubWork_DateCompleted "workflowcompleted",
286   ${queryDateDifference("wsw.SubWork_DateCompi",
287     wsw.SubWork_WorkID "workid",
288     wsw.SubWork_SubWorkID "subworkid",
289     wst.SubWorkTask_TaskID "taskid",
290     wst.SubWorkTask_Title "tasktitle",
291     wst.SubWorkTask_Status "taskstatus",
292     (CASE
293       WHEN wst.SubWorkTask_Status = '-1' THEN 'R'
294       WHEN wst.SubWorkTask_Status = '2' THEN 'R'
295       WHEN wst.SubWorkTask_Status = '1' THEN 'M'
296       WHEN wst.SubWorkTask_Status = '5' THEN 'M'
297     END) "taskstatusname",
298     wst.SubWorkTask_DateReady "taskready",
299     wst.SubWorkTask_DateDone "taskdone",
300     wst.SubWorkTask_DateDue_Max "taskduedate",
301     (CASE
302       WHEN wst.SubWorkTask_Status != 2 THEN '-'
303       WHEN wst.SubWorkTask_Status = 2 THEN '1'
304     END) "taskreadyduelstatus",
305     (CASE
306       WHEN wst.SubWorkTask_Status = '-1' AND wst.Sub
307       WHEN wst.SubWorkTask_Status = '1' AND wst.Sub
308       ELSE 'false'
309     END) "taskcompleteduelstatus",
310     (CASE
311       WHEN wst.SubWorkTask_Status = 1 AND wst.Sub
312       WHEN wst.SubWorkTask_Status = 1 AND wst.Sub
313       ELSE 'false'
314     END) "taskwaitduelstatus",
315     (CASE
316       WHEN wst.SubWorkTask_Status = 1 AND wst.Sub
317       WHEN wst.SubWorkTask_Status = 1 AND wst.Sub
318       ELSE 'false'
319     END) "taskwaitduelstatus",
320     (CASE
321       WHEN wst.SubWorkTask_Status = 1 AND wst.Sub
322       WHEN wst.SubWorkTask_Status = 1 AND wst.Sub
323       ELSE 'false'
324     END) "taskwaitduelstatus",
```

```
1 import org.apache.tika.mime.MimeTypes;
2 import org.apache.tika.Tika;
3 import java.io.File;
4 import java.io.IOException;
5
6 node = params.nodeID
7 File file = asCSNode(nodeID as long).content.content
8
9 if (!file.exists()) {
10   System.out.println("File not found: " + filePath);
11   return;
12 }
13
14 Tika tika = new Tika();
15
16 try {
17   String mimeType = tika.detect(file);
18   System.out.println("MIME Type: " + mimeType);
19 } catch (IOException e) {
20   System.out.println("Error detecting MIME type: " + e.getMessage());
21 }
```





## Chapter 9

# The Discovery

How to get the most from one effort, hitting two (or even three) birds with one stone.

Move & Modernize isn't just about addressing technical limitations and incompatibilities;

it offers real opportunities for reengineering and improvements, so the project ends with smiles all around—from those paying for it and those who will use it.







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Visit us at booth #309!



AnswerModules User Group  
November 20 from 1:00–3:15 pm  
Delfino Room 4105

# Q&A

*Feel free to ask any questions in the panel*



**Jacopo Malnati**  
CEO

[j.malnati@answerconsulting.ch](mailto:j.malnati@answerconsulting.ch)

