



What's new in Exstream 16.3

OpenText Customer Communications Management

October 2017

Contents

- [Exstream 16 Structuring and Concepts](#)
- [Exstream 16 Platform](#)
- What's new in 16.3
 - [Exstream Platform - Communications Server](#)
 - [Exstream Platform - Design & Production](#)
 - [Exstream Platform - StoryTeller](#)
 - [Content Authoring](#)
 - [Interactive](#)

Exstream 16 structuring & concepts

Exstream 16 can be conceptualized through three main components:

- **Platform**

- Base platform for batch and on-demand use cases
- Includes Exstream Design & Production
- Includes Communications Server (StreamServe & PowerDocs base technology)

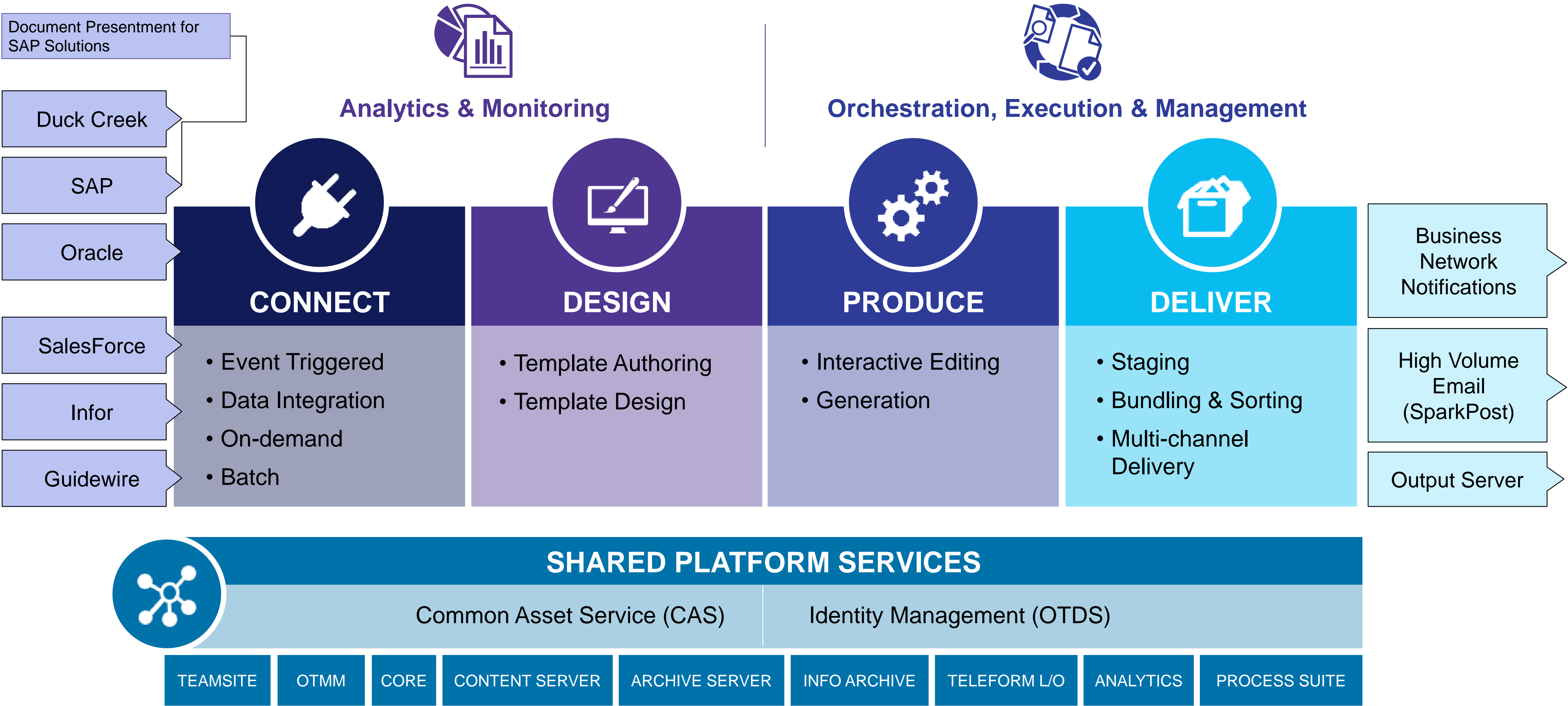
- **Interactive**

- Interactive editing of 1:1 communications
- Empower, ReTouch & PowerDocs Editor

- **Business Authoring**

- Line of Business user targeted template changes and content control
- Exstream Content Authoring (New!)
- StoryBoard (for StoryTeller designs)
- PowerDocs Design (MS Word based)

Exstream 16 Platform

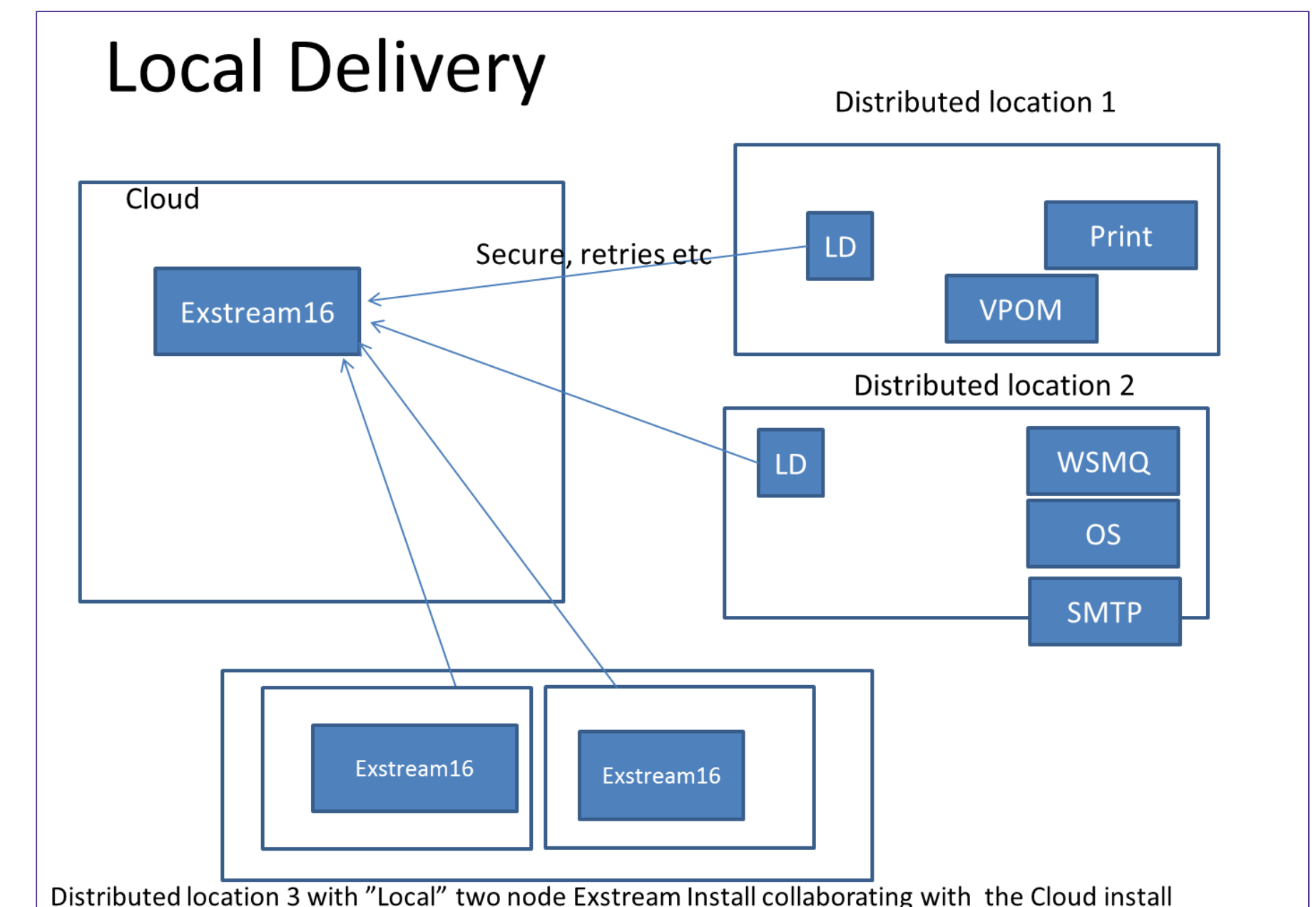
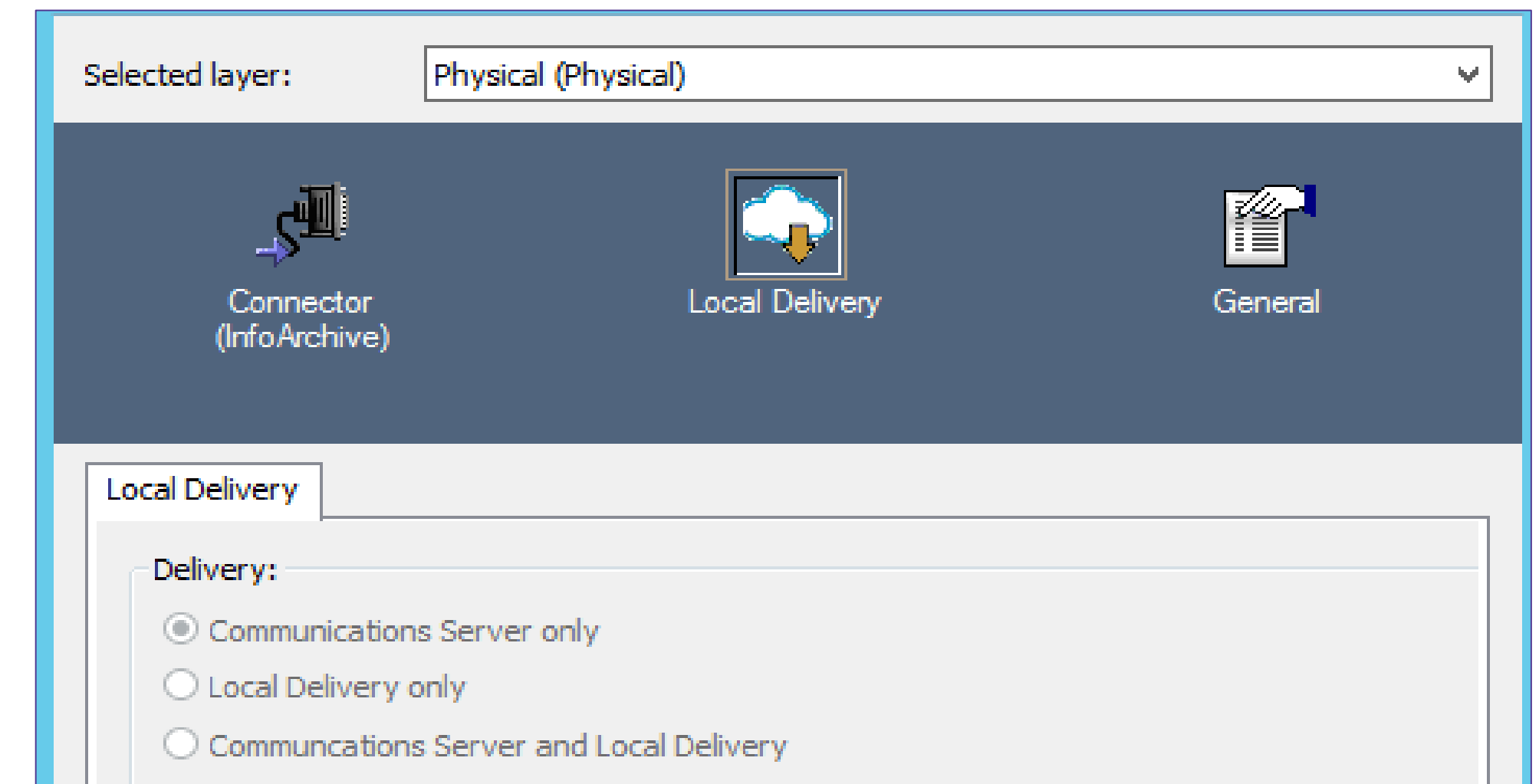


Exstream Platform

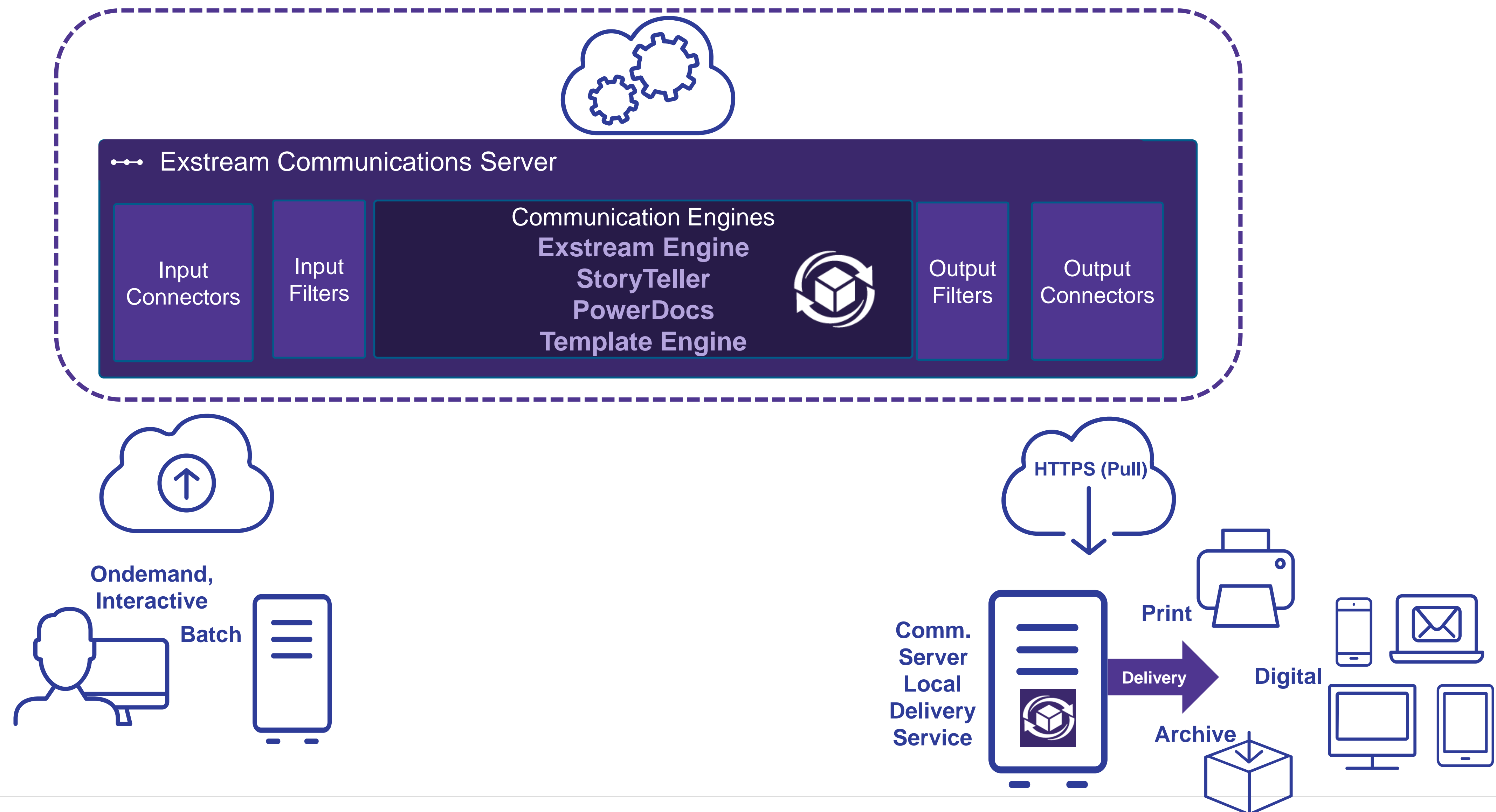
Communications Server

New Local Delivery Service

- A scaled-down version of Communications Server, consisting of essentially input connector and output connector processing only
- Provides the ability to deliver output across network boundaries, for example from the cloud to on-premise for printing, email delivery, and archival.
- Leverages native Communications Server functionality to 'pull' output from a remote location to a local or on-premise server.

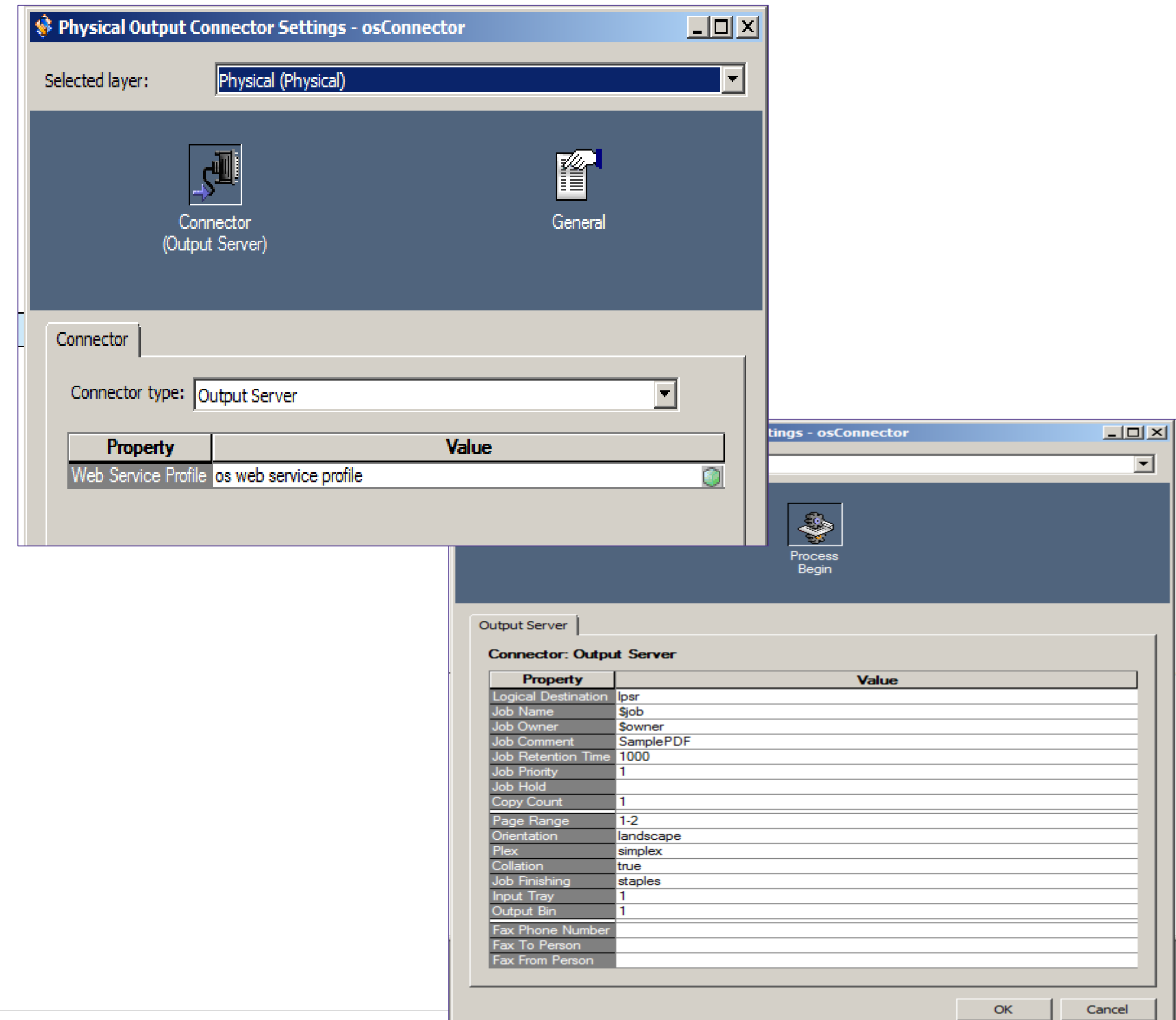


New Local Delivery Service



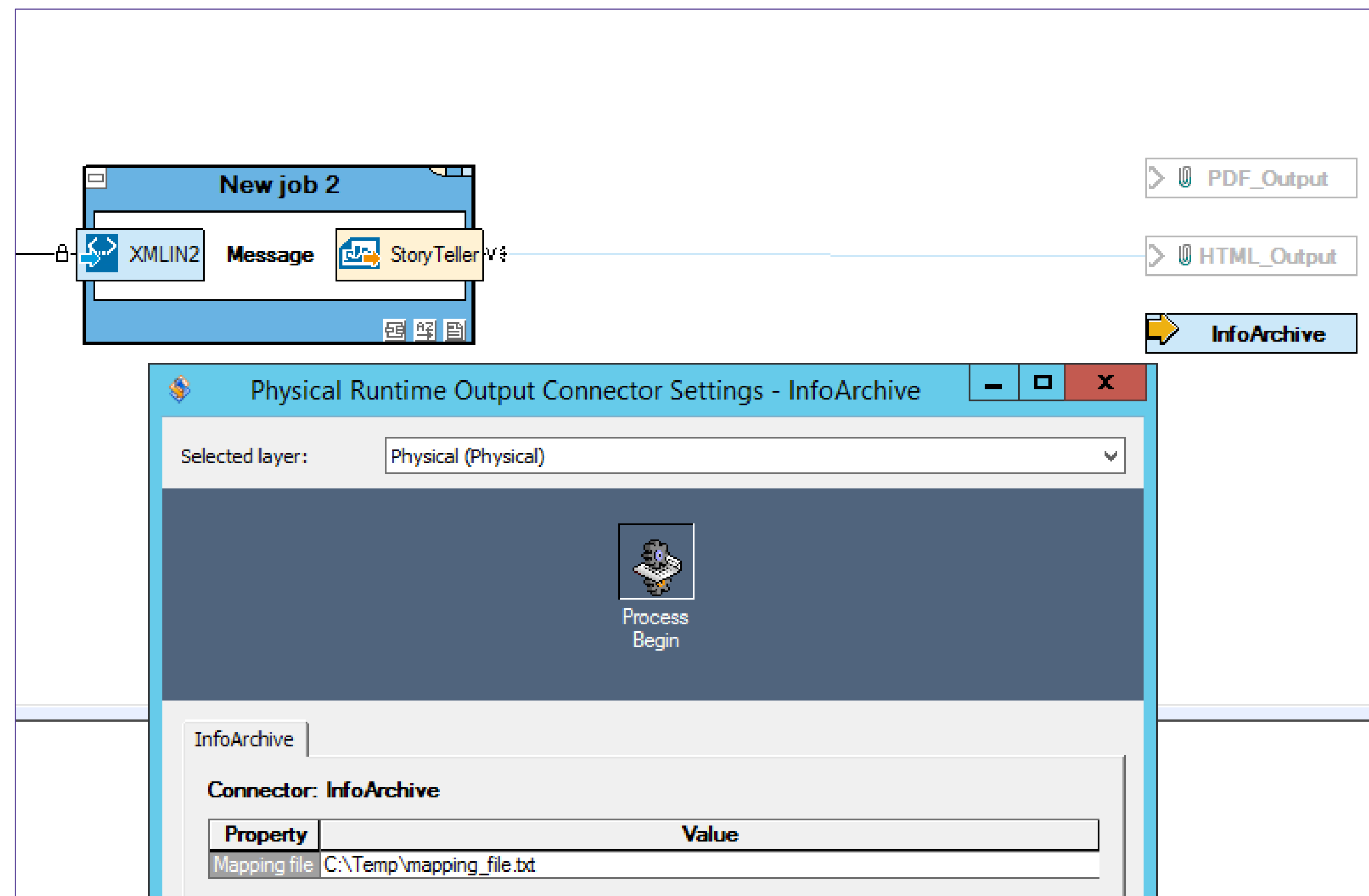
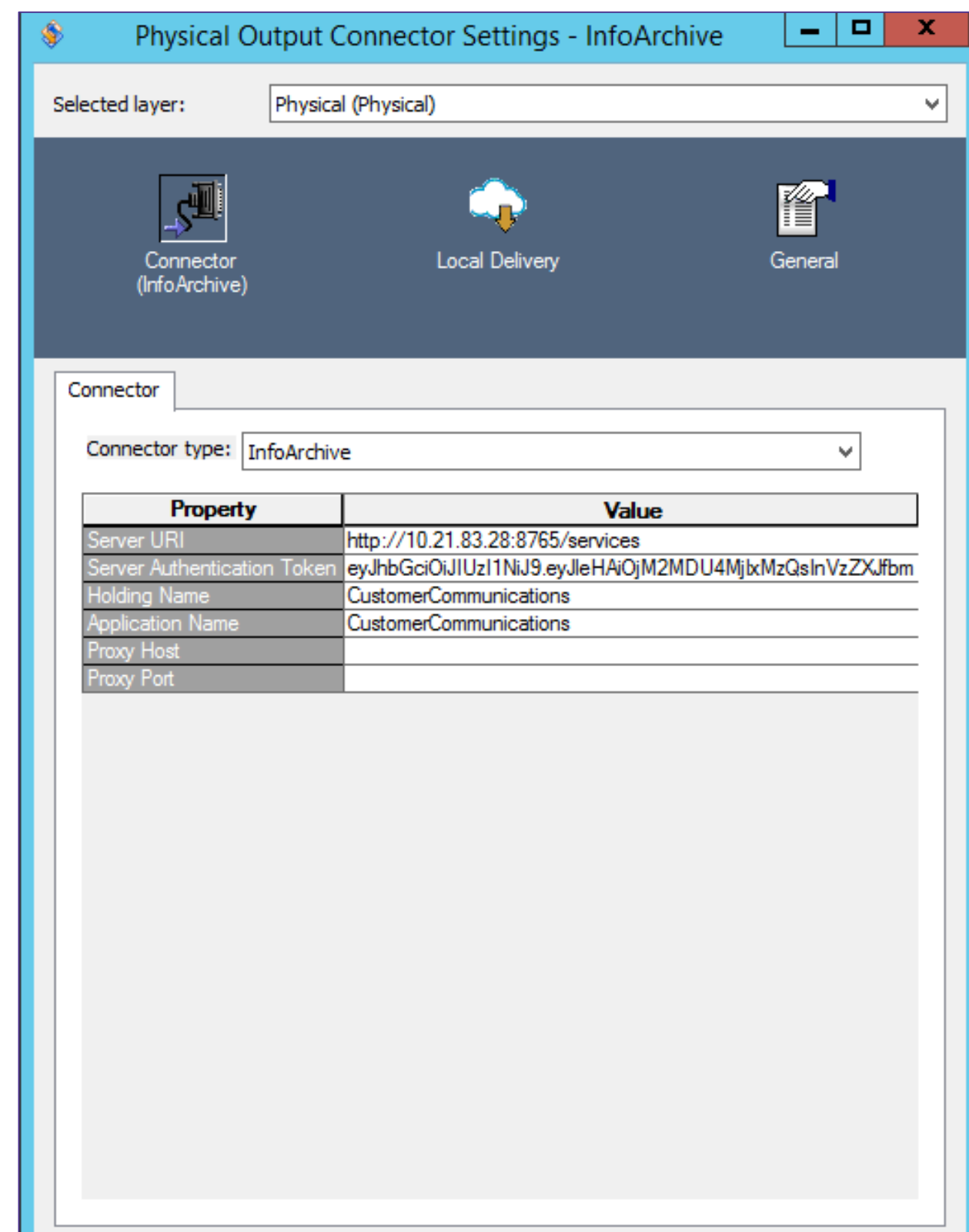
New OpenText Output Server Output Connector

- New 'Output Server' output connector option in Communication Server delivers composed output directly to a logical destination in Output Server
- Output Server settings can be set using variables & static data from Exstream



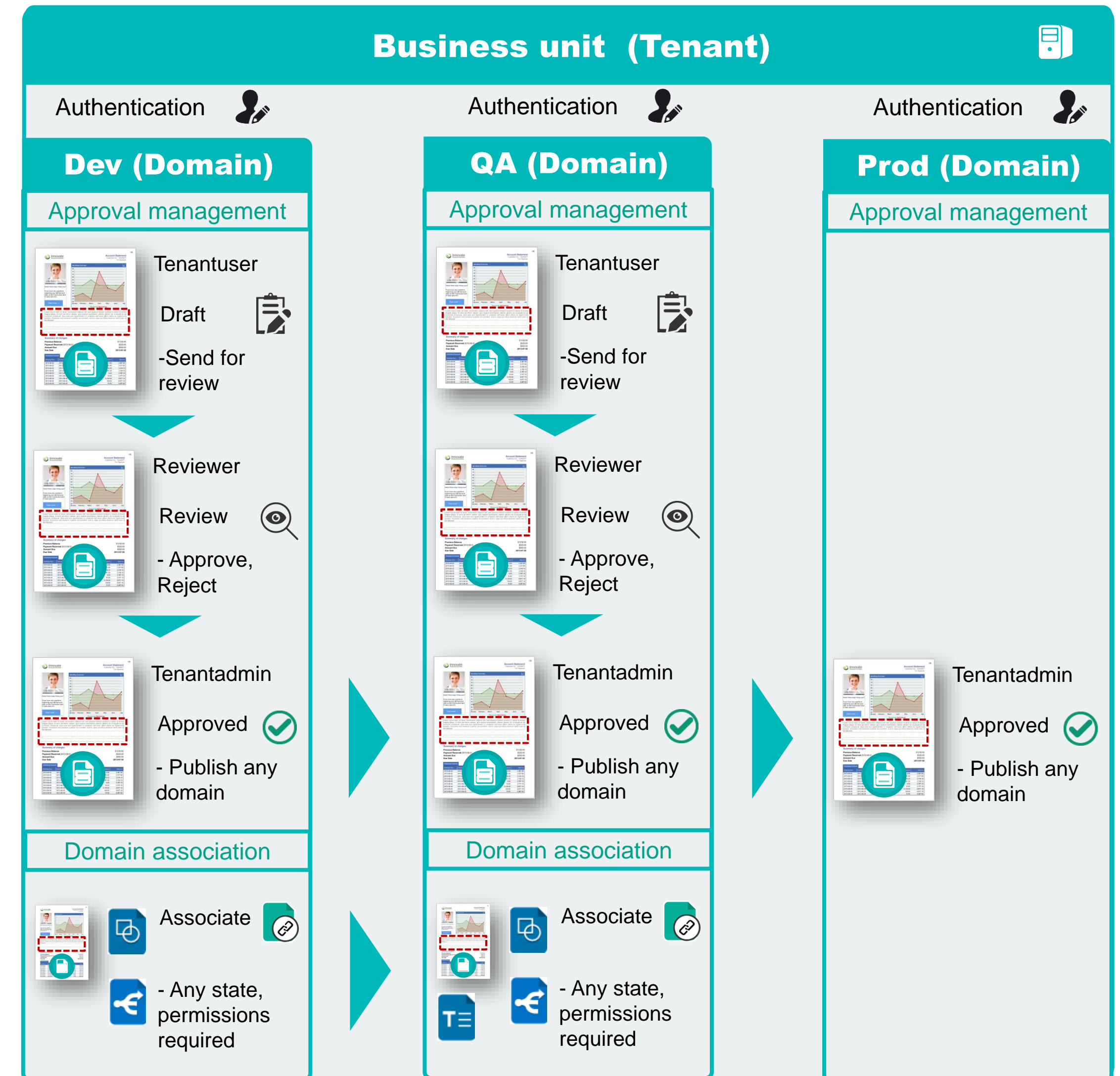
New InfoArchive Output Connector

- New 'InfoArchive' output connector option in Communications Server allows customers to connect and distribute output directly to OpenText InfoArchive



Domain isolation, approval management, access control

- Bring changes from Development to Production with a few clicks
- Role-based access control allows to segment 'reviewers', from other users and admins
- Benefits
 - Business and line of business users can manage content lifecycle
 - With preserved enterprise grade security, control and flexibility



Exstream On demand Engine support in Communication Server

- A new 'Enable engine on demand' check box on the processing engine dialog in Communications Server improves performance
- NodeJS wrapper around a new ProdEngine dll allows the Exstream Engine to run in ondemand (real-time) mode
- Engine does not shutdown between Exstream jobs
- Requires **Exstream Engine 16.3** or higher

The screenshot shows the 'Exstream configuration' window. It contains a table of configuration files, a section for the executable path, and a section for engine switches. The 'Enable engine on demand' checkbox is checked and highlighted with a red box.

Exstream package	Package version	Linked manifest	Manifest version	Linked template	Template version
Exstream Bank Statement	3	Exstream Bank Statement	3		

Executable path:

☒ Use default executable (defined in ControlCenter)

☐ Specify custom executable

C:\DEV\engines\engine16_3_0\ProdEngine_dbcs.exe

☒ Enable engine on demand

Engine switches:

-KEYFILE=C:\Users\guptaa\Desktop\EXSTRM V9 Sales Demo.ekf
-MSGRESOURCE=C:\DEV\engines\engine16_3_0\MsgResource_en-us.dat

Advanced scripting and metadata in Communication Server

Advanced scripting

- Developers can add scripting to input files, output connectors, outputs, and processing engines with timing options.
- Foundational enhancement for more advanced, workflow-based orchestration in future releases.
- Enables use cases related to assured delivery and event notification handling

Advanced metadata

- Developers can assign custom attributes (metadata) to output generated by processing engines orchestrated by Communications Server and that can be used by archival tools to index and retrieve documents, or in job reporting tools like Supervisor to report on custom metadata objects to gather intelligence about Exstream processing events.

Standardized APIs

- Exstream 16.x platform offers REST-based APIs, enabling a wide variety of integration activities.
- APIs are Swagger documented, making it easy for back end implementation and client side consumption.
- The Swagger UI can be accessed via `https://<hostname>:<ServiceGatewayPort>/api/index.html`
 - Example: <https://10.21.86.148:2719//api/index.html>
- OpenText Exstream API Developer guide available <https://developer.opentext.com/>
 - Search for “Exstream”
- Note: all API-based communication requires a valid OpenText Directory Service (OTDS) ticket.
- Example new 16.3 API capabilities include:
 - Application & Application Domain APIs
 - Links & Views APIs
 - API for list of templates
 - Addition APIs for document and theme

Swagger UI for Exstream API

CCE REST API - Swagger

https://localhost:2719/api/index.html

OpenText

Authorize

Exstream API

Authorization required to use the API

application domains : REST API for Application Domains

GET /applicationdomains Get application domains for the tenant

POST /applicationdomains Create application domain

GET /applicationdomains/{id} Get single application domain by id

PUT /applicationdomains/{id} Update application domain

applications : REST API for Domain Applications

GET /v1/applications Retrieve applications for domain

GET /v1/applications/{id} Get single application by id

PUT /v1/applications/{id} Update application

communications : REST API for communications

POST /v1/communications Create communication instance.

documents : REST API for documents

GET /v1/documents Retrieve documents

POST /v1/documents Create document

PUT /v1/documents Release or update multiple documents

PUT /v1/documents/{documentid} Release document, create end point on documents, update document properties

DELETE /v1/documents/{id} Delete document

links : REST API for links

DELETE /v1/links Delete link

GET /v1/links Retrieve links

POST /v1/links Create link

templates : REST API for templates

GET /v1/templates Gets list of templates

themes : REST API for themes

GET /v1/themes Retrieve themes

POST /v1/themes Create a theme

GET /v1/themes/{id} Retrieve specified theme

views : REST API for views

PUT /v1/views/{view_id} Update views

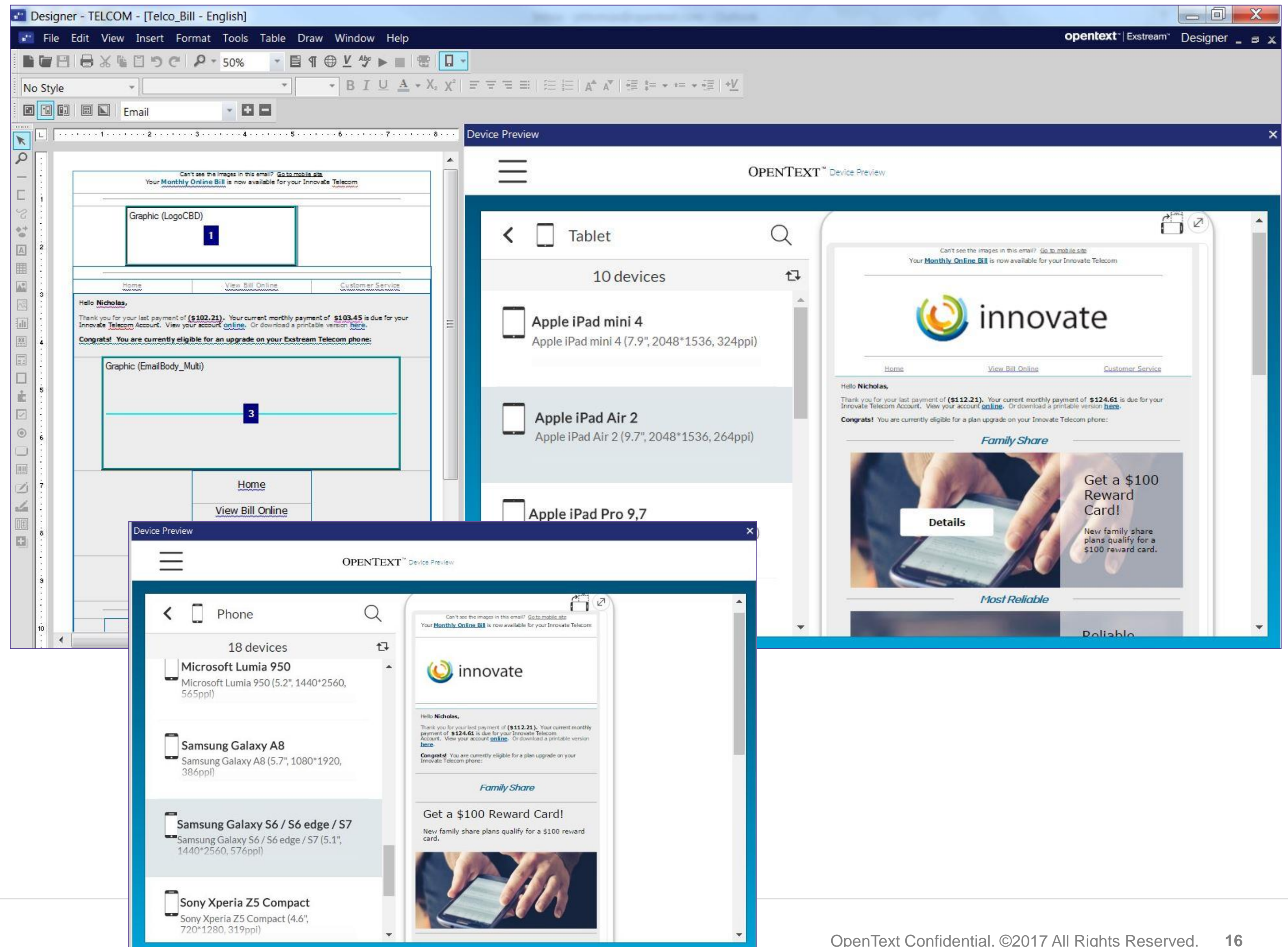
Exstream Platform

Design & Production

Device Preview for Exstream Designer

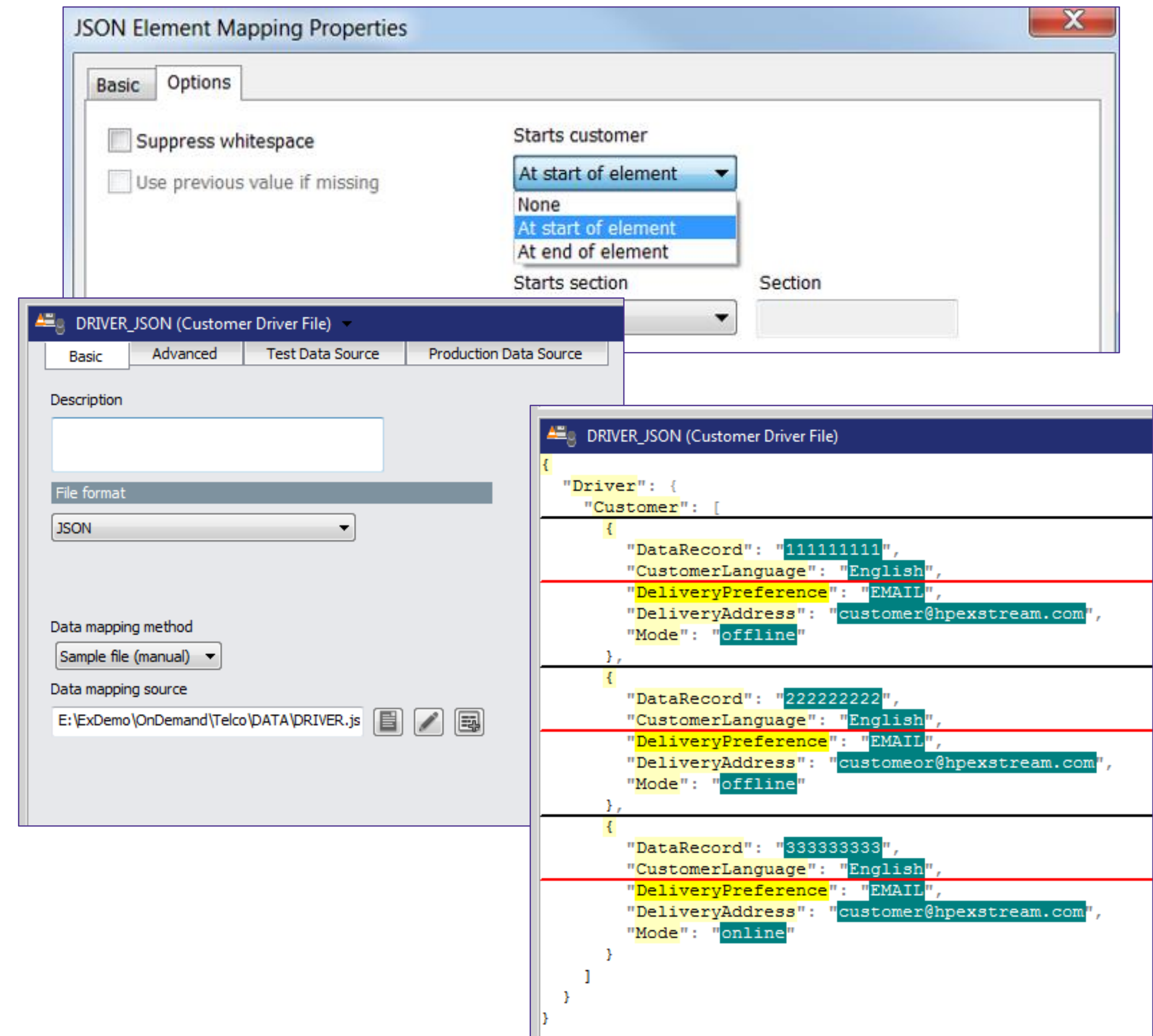
Quickly preview how content will appear on any device

- Available starting with 16.2 Update 1
- **Preview** communication designs for any mobile or tablet device
- **Optimize** your design to work across a variety of devices



JSON data file support

- The Exstream Engine now natively reads and writes JSON-formatted data
- JSON data can be used as input to drive composition and populate variables
 - Input data files types are driver, reference, initialization and auxiliary layout
- JSON can be used to generate report files which can be used with external systems/processes
- JSON formatted data can also be used with Exstream Engine RESTful web service calls
- Licensed as part of the XML module



Dynamic import of Common Asset Service (CAS) resources

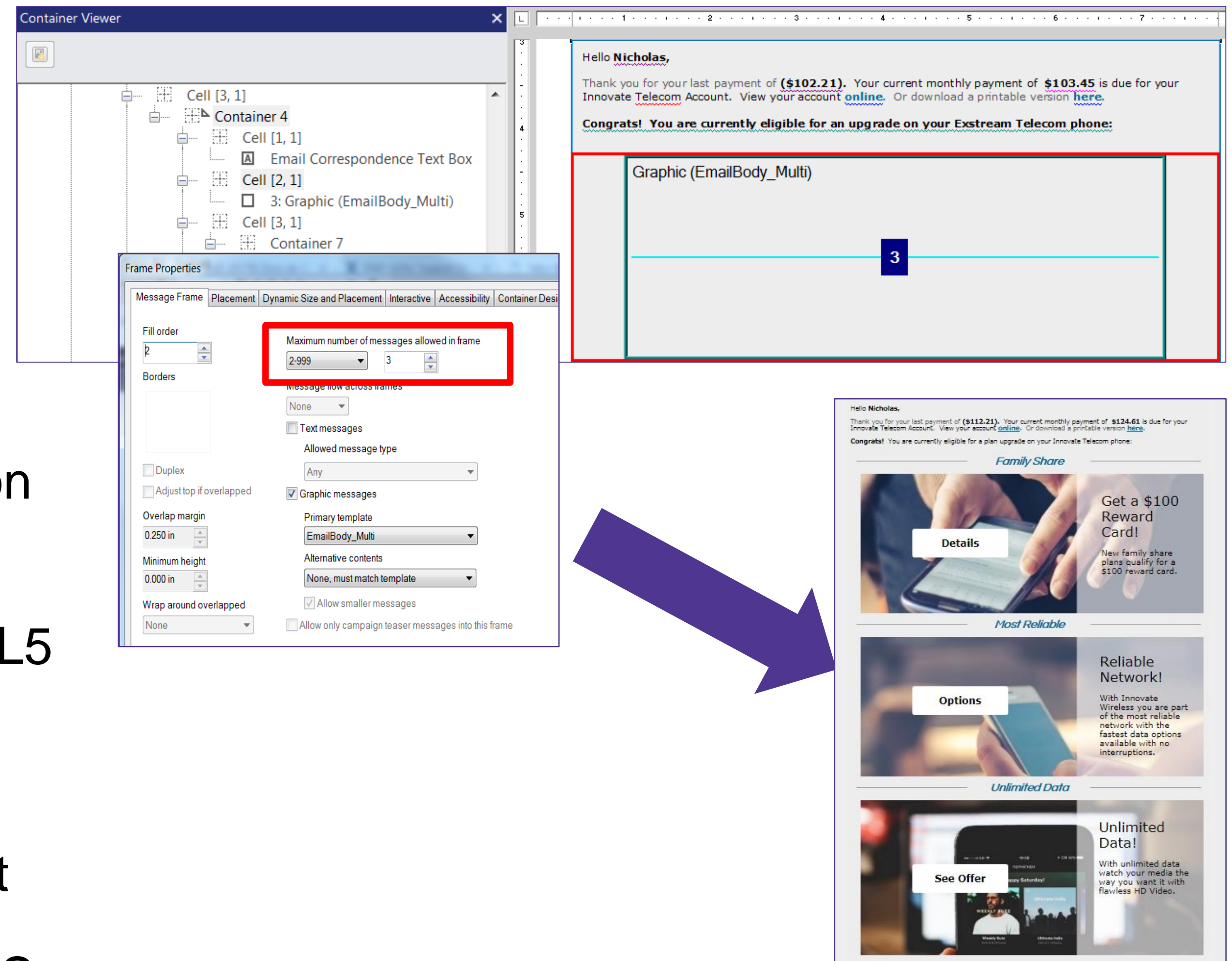
- New option on placeholder variable properties to pull in CAS resources
- Uses the **CAS resource ID** to include the resource at engine run-time
- Supported image and resource formats: JPEG, PDF (Multi-page), PNG, PNG, TIFF, HTML, Docx, Plain text, RTF text, LIVE documents, Empower documents, DXF, and EPS

The screenshot shows the 'PlaceholderVar (Variable)' configuration window with the 'Placeholder' tab selected. The window has a title bar with a variable icon and the text 'PlaceholderVar (Variable)'. Below the title bar are five tabs: 'Basic', 'Values', 'String Lookup', 'Output Format', and 'Placeholder' (which is active), and 'Interactive'. The 'Placeholder' tab contains the following settings:

- Placeholder method:** A dropdown menu set to 'JPEG'.
- Pages to import:** A dropdown menu set to 'All' and an empty text input field.
- Checkboxes:** Two checked checkboxes: 'The file for each customer is unique' and 'CAS resource'.
- Test Import connector:** A dropdown menu set to 'No Connector' with a plug icon and a right arrow button.
- Production Import connector:** A dropdown menu set to 'No Connector' with a plug icon and a right arrow button.
- Maximum number of files to hold in memory:** A text input field containing the number '5'.
- Layout file:** A dropdown menu set to 'No Data File' with a file icon and a right arrow button.
- Auxiliary PDF form layout:** A dropdown menu set to 'No Data File' with a file icon and a right arrow button.
- IO time:** A dropdown menu set to 'After initial customer data'.

Responsive HTML design and output improvements

- Speed digital designs through enabling copy/paste of full CBD design layouts
- Graphic message support in CBD
- More granular control when designing for small screens (phones and tablets)
- Enhanced dynamic show/hide of content on small screens
- Extend responsive HTML features to HTML5 web output (previously limited to HTML email output)
- Vertical scroll bar support in HTML5 output
- New options for designing with custom CSS

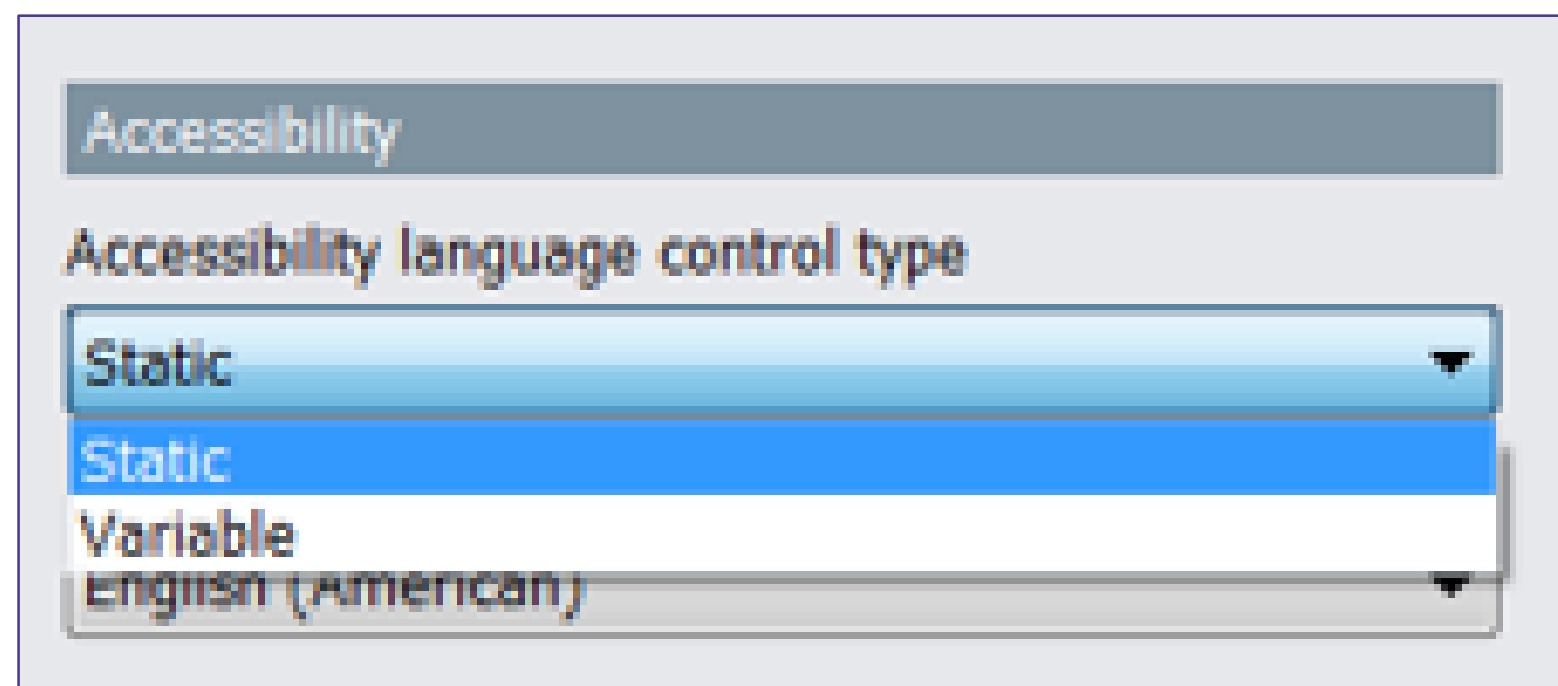


PDF bookmark improvements

- New option on the output driver to 'Include numbering for customers' on the Basic tab under PDF bookmarks
- Must enable Customer bookmarks to enable/disable customer numbering; Unchecking Customer bookmarks does not affect the other bookmark settings
- Available for PDF, PDF/A, and VDX output drivers
- The default value for the setting is "true" for existing output objects; new output objects will default to "false".
- Previous bookmark behavior is retained when upgrading to 16.3

Accessible PDF expanded language support

- Extended Accessibility language control for accessible HTML and PDF outputs
 - New Accessibility language control type – Static or Variable – in the UI (Design Manager and Designer)
 - Static is the default selection which either uses the ‘Default’ accessibility language or a language selected from the Accessibility language drop-down
 - The Variable selection allows an ISO code (ISO 639-1 or ISO 639-2 language code) to be used to specify the accessibility language for a language not available in the Accessibility language static drop-down list. For example, “sq” for Albanian

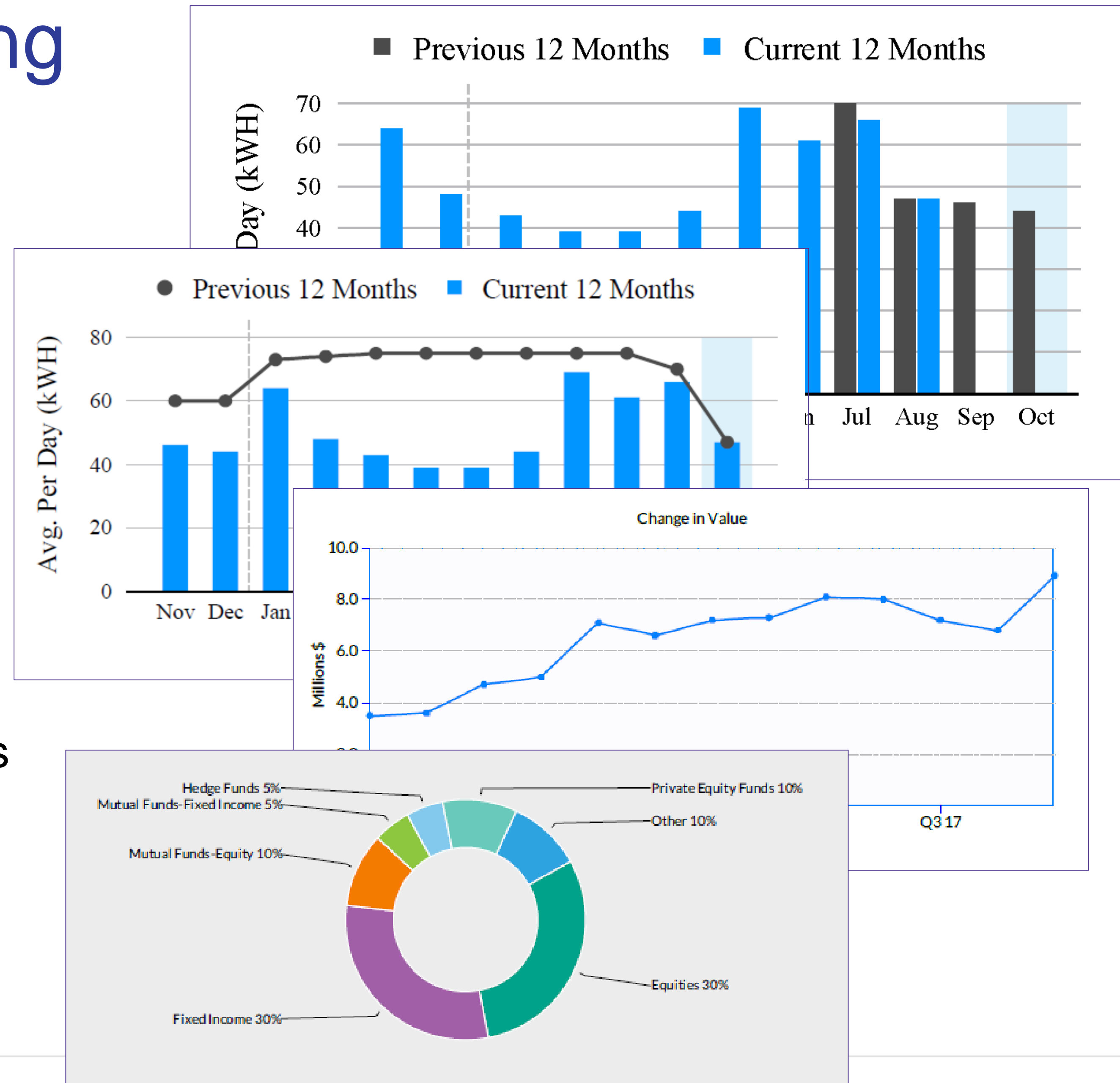


New Accessibility language control in
Design Manager and Designer

Advanced dynamic charting

Expanded charting options

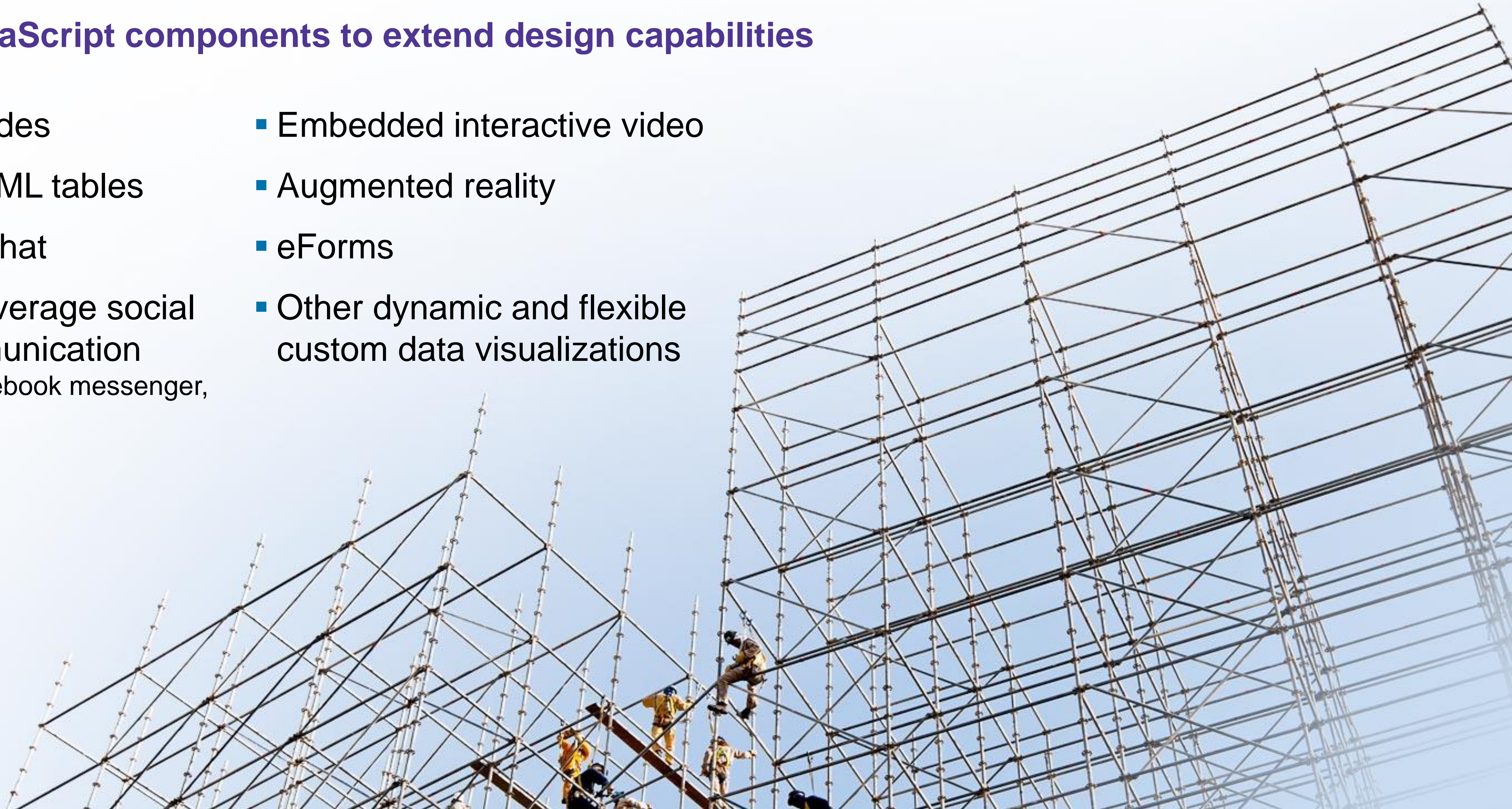
- Advanced web-like **charting** and **visualizations**
 - Support for shadows, transparencies, and arbitrary labeling
 - Improved pie, bar, and line charts,
 - New charting possibilities for stocks, maps, bubbles, donuts, and pyramids
- **Create interactive charts** for HTML outputs, with drill-down on detail, as well as **print renditions** with color management
- **Enable customer interaction** through engaging charts, graphs, and tables



Advanced “Add-ins” architecture

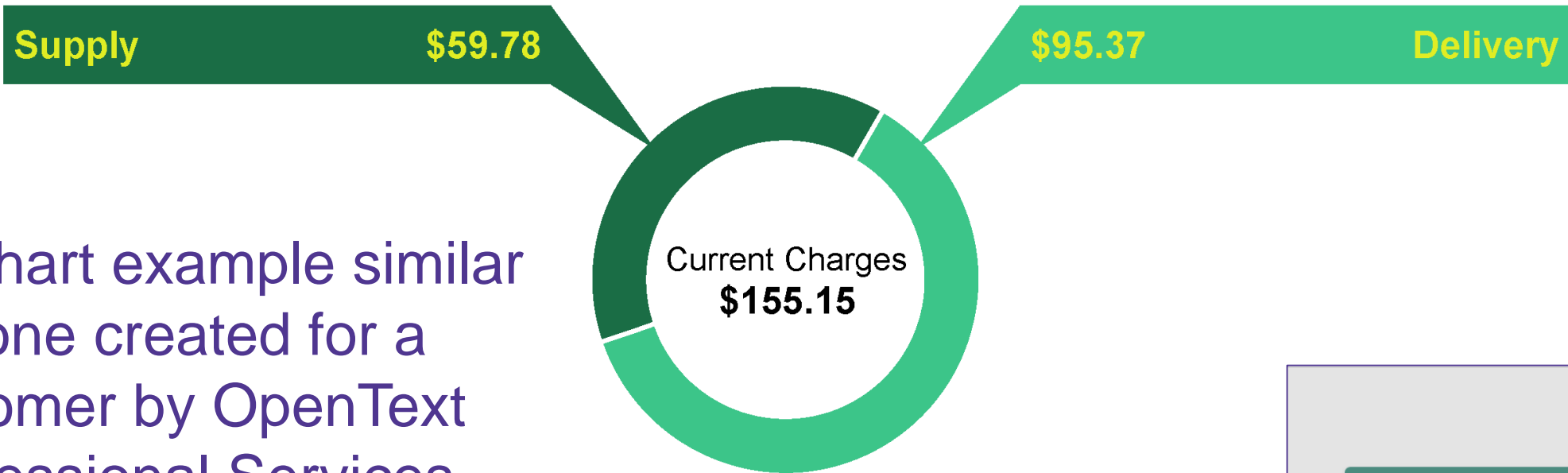
HTML and JavaScript components to extend design capabilities

- Color QR codes
- Dynamic HTML tables
- Embedded chat
- Embed or leverage social media communication (i.e. Tweet, Facebook messenger, WhatsApp, etc.)
- Embedded interactive video
- Augmented reality
- eForms
- Other dynamic and flexible custom data visualizations



Custom add-in examples

A pie chart example similar to one created for a customer by OpenText Professional Services



A stacked cylinder bar chart proof of concept created for a customer in Europe



App ready. Comic Sans 16 B I U Font Color

Table Data
Eye Candy
Pagination

Pagination Properties

Page Numbers ☒

Previous & Next ☒

First & Last ☐

Size 5

Show 10 entries

Search:

Team	Conference	Division	Record
Arizona Cardinals	NFC	West	7-8-1
Atlanta Falcons	NFC	South	11-5
Baltimore Ravens	AFC	North	8-8
Buffalo Bills	AFC	East	7-9
Carolina Panthers	NFC	South	6-10
Chicago Bears	NFC	North	3-13
Cincinnati Bengals	AFC	North	6-9
Cleveland Browns	AFC	North	1-15
Dallas Cowboys	NFC	East	13-3
Denver Broncos	AFC	West	9-7

Showing 1 to 10 of 32 entries

Previous 1 2 3 4 Next

Reset Cancel Save

HTML table add-in

Examples

Hello world

HTML:

```
<svg id="barcode"></svg>
```

Javascript:

```
JsBarcode("#barcode", "Hi world!");
```

Result:

Example with options

HTML:

```
<svg id="barcode"></svg>
```

Javascript:

```
JsBarcode("#barcode", "1234", {  
  format: "pharmacode",  
  lineColor: "#0aa",  
  width: 4,  
  height: 40,  
  displayValue: false  
});
```

Result:

Declare options in HTML

HTML:

```
<svg class="barcode"  
  jsbarcode-format="upa"  
  jsbarcode-values="123456789012"  
  jsbarcode-textmargin="0"  
  jsbarcode-fontoptions="bold">  
</svg>
```

Javascript:

```
JsBarcode("#barcode").init();
```

Result:

Barcode add-in examples

Online documentation and private help server support

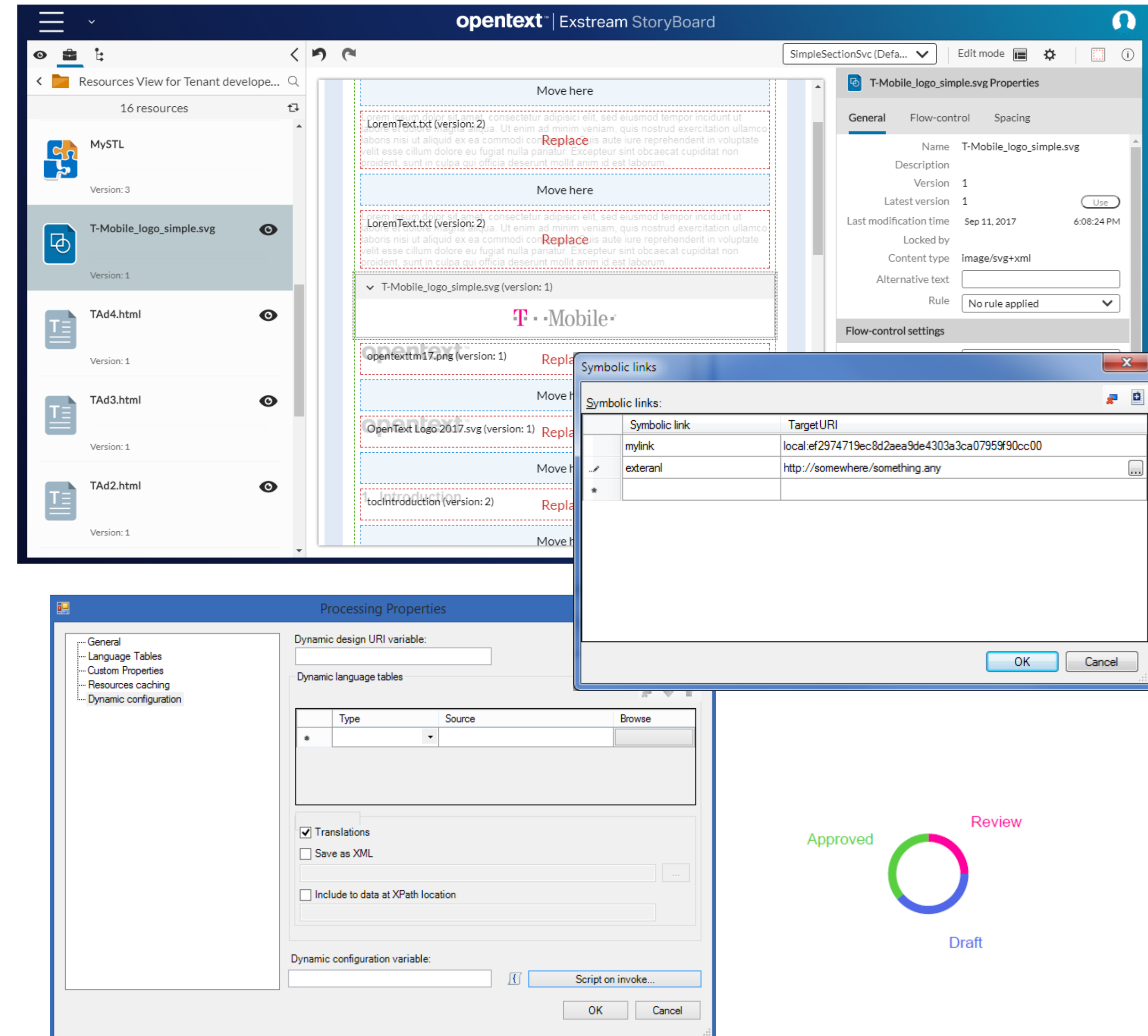
- Improves customer access to Exstream product documentation
- Exstream product documentation is now available on the OpenText Global Help Server
 - MySupport credentials no longer required to view online documentation when accessed from within the Design Manager/ Designer UI (under Help menu)
- Customers can alternatively deploy an OpenText Private Help Server instance for on premise online documentation access
- HTML and PDF versions of Exstream documentation will continue to be available as downloadable zipped archives from the OpenText MySupport portal

Exstream Platform

StoryTeller Designer

StoryTeller improvements

- SVG can also be used as an image in CAS
- 'Script on invoke' allows changes before other events (example: run scripts prior to data transformations)
- Ability to store named resources in SSD
- Multiple supported URL enhancements
- Chart enhancements
 - Donut charts, data label rotations, improvements in line charts, unification of border lines



Web applications

What's new in Exstream 16.3

Extended role-based application control

Web Applications

- Create custom roles in addition to tenantadmin, user, ondemand and reviewer
- Ability to control access to various web applications and actions
- New UI for defining ACL policy for new roles (CAS resources, categories and metadata)

opentext™ | Exstream Supervisor

Track Review Produce Queue Collect Statistics Log Roles

+

System views Properties Permissions Default ACL's

Role name	Role description	Creation date ↓	Group
OnDemandUser	OnDemand User	Sep 24 2017 - 08:19:55	strsondemandusers@strs.role
Reviewer	Reviewer	Sep 24 2017 - 08:19:55	strsreviewers@strs.role
TenantAdmin	Administrator of current tenant.	Sep 24 2017 - 08:19:55	strstenantadmins@strs.role
TenantUser	Standard user of current tenant	Sep 24 2017 - 08:19:55	strstenantusers@strs.role

opentext™ | Exstream Supervisor

Properties System views Permissions Default ACL's

Resource types

CAS resources

Documents

States

Web applications

System views

Role

Inherit selected resource type permissions from role

Resource name	Associate	Create	Delete	Edit	Publish	Read	Upload
Application assets	✓	✓	✓	✗	—	✓	✓
Categories	—	✓	✓	✗	—	✓	—
Common cas resource	✓	✓	✓	✗	—	✓	✓
Images	✓	—	✓	✗	—	✓	✓
Rule resource	✓	✓	✓	✗	—	✓	✓
Sample files	✓	—	✓	✗	—	✓	✓
Simulations	✓	✓	✓	✗	—	✓	✓
Stylesheets	✓	—	✓	✗	—	✓	✓
Text resource	✓	✓	✓	✗	—	✓	✓
Theme	✓	✓	✓	✗	✓	✓	✓

opentext™

CAS resource workflows and approvals

Web Applications

- Corporate control over resource approval and usage on critical communications
- States on CAS resources: draft, review, approve, reject
- Role based state change workflow
- All resources in a Theme must be approved to publish theme
- Theme level cascading approval

☰

opentext™ | Exstream Workshop

👤

Resources

Templates

Services

+

Resources View for Tenant d...

⚙️

<input type="checkbox"/>	Type	Name 🔍	Categories	Version ⚙️	State	Locked by	Creation time
<input type="checkbox"/>		lorem.html	None	1		tenantuser@strs.role	Sep 08 2017 - 10:13:13
<input type="checkbox"/>		InteractiveStatement1	None	1			Sep 08 2017 - 12:19:36
<input type="checkbox"/>		InteractiveStatement	None	2			Sep 08 2017 - 10:12:56
<input type="checkbox"/>		lorem.txt	None	1			Sep 08 2017 - 10:13:13
<input type="checkbox"/>		SampleData01_statement_male.xml	None	1			Sep 08 2017 - 10:13:13
<input type="checkbox"/>		SampleData02_statement_female.xml	None	1			Sep 08 2017 - 10:13:14
<input type="checkbox"/>		SampleData04_insurance_female.xml	None	1			Sep 08 2017 - 10:13:40
<input type="checkbox"/>		SampleData05_statement_batch.xml	None	1			Sep 08 2017 - 10:13:40

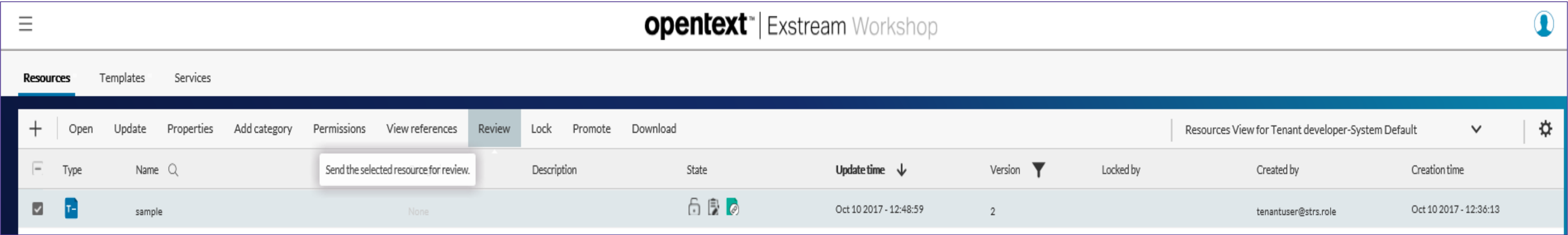
58 items

50 per page ⌵

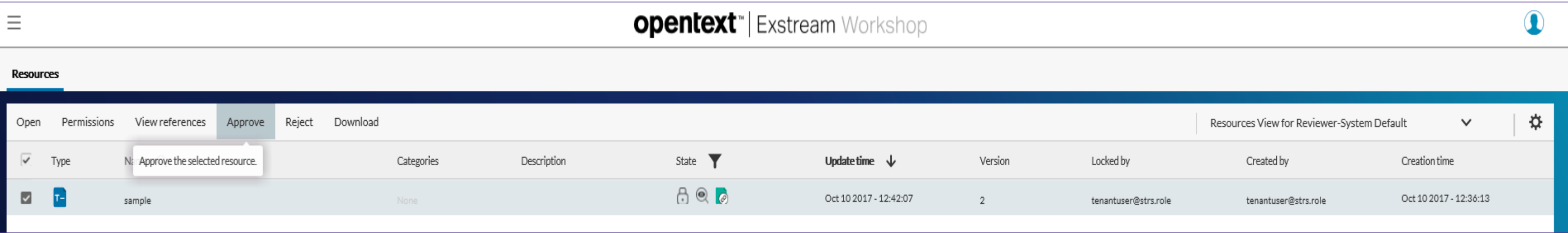
1 - 50

51 - 58

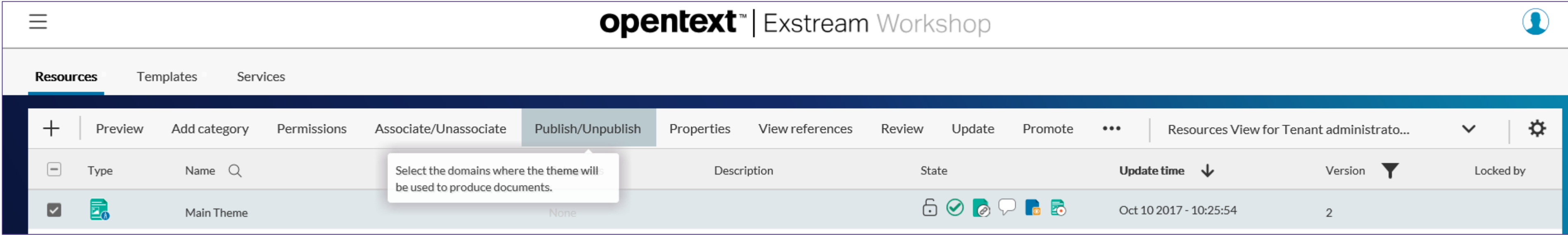
CAS resource workflows and approvals



Tenant user submitting a resource for review



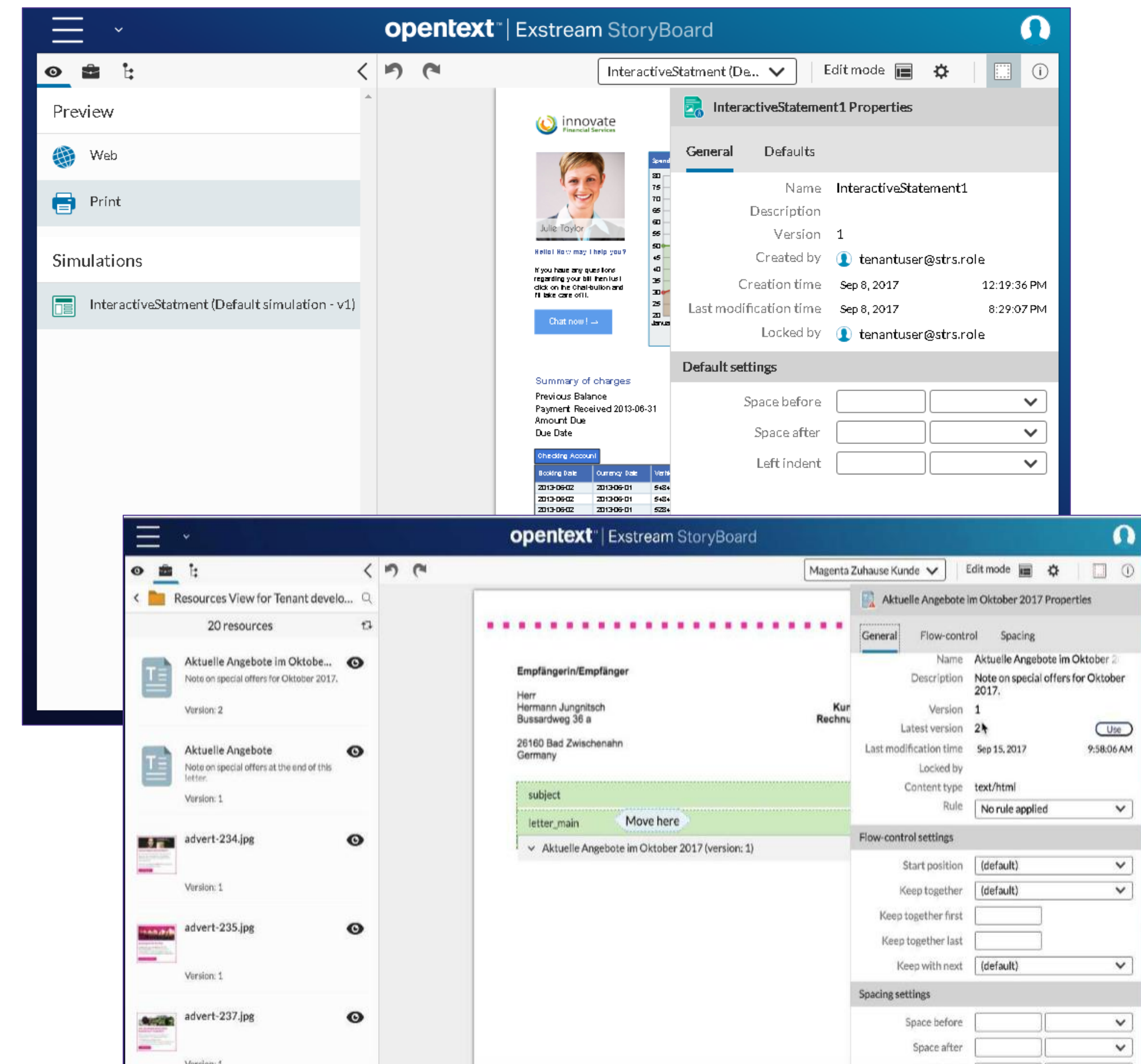
Tenant reviewer can approve or reject



Tenant admin can publish / unpublish the theme

New properties panel in StoryBoard, ReTouch

- Gives business users authoring/editing content in StoryBoard and ReTouch the ability to more efficiently display and edit properties associated with the active resource
- New property panel in StoryBoard and ReTouch is available for theme, section, group and object level
- Different properties options displayed, depending on object type
- Enables multiple new business user activities, including:
 - Update a resource to its latest version in property panel
 - Edit a copy of an existing text resource
 - Create groups and define rules for a whole group

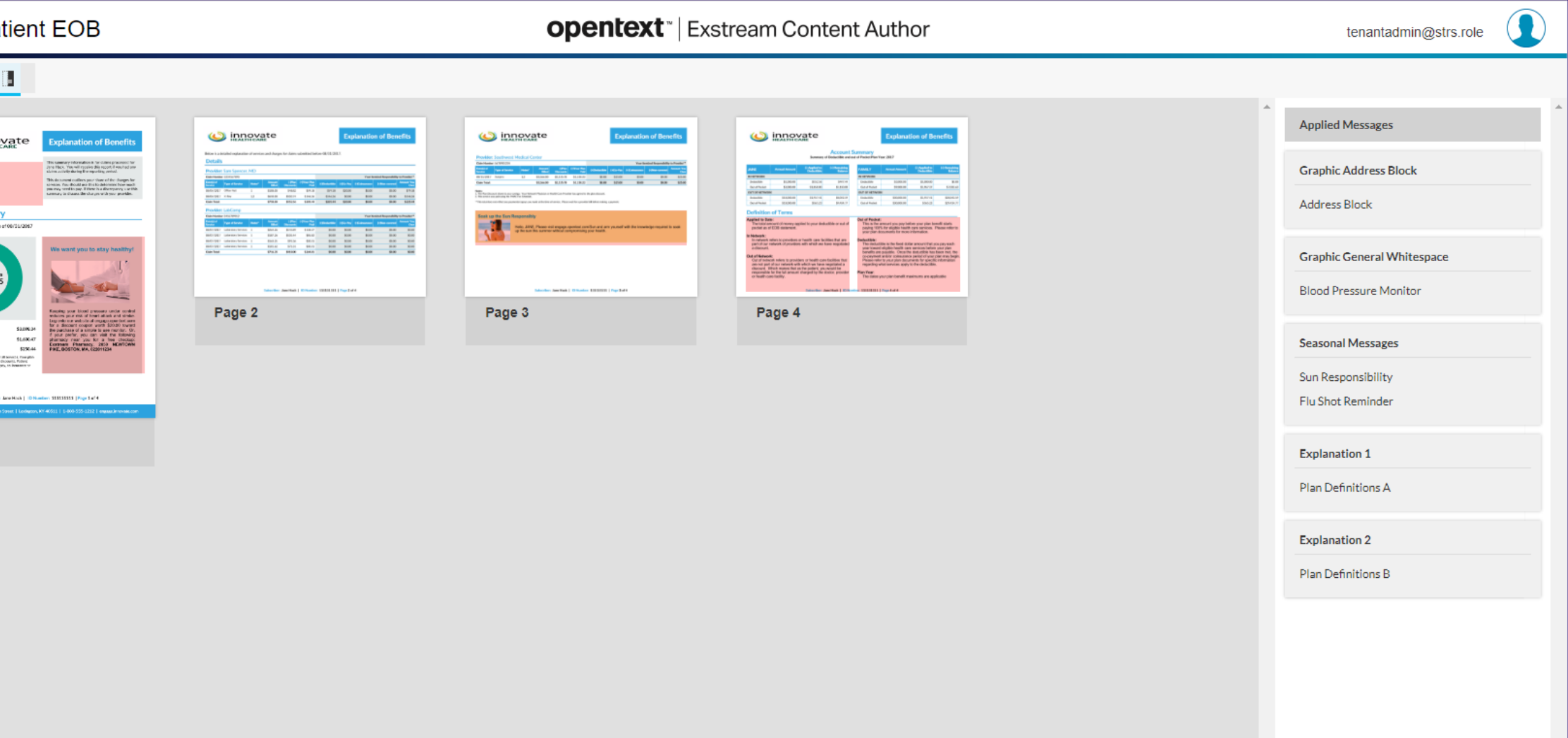


Content Authoring

What's new in Exstream 16.3

Exstream Content Author

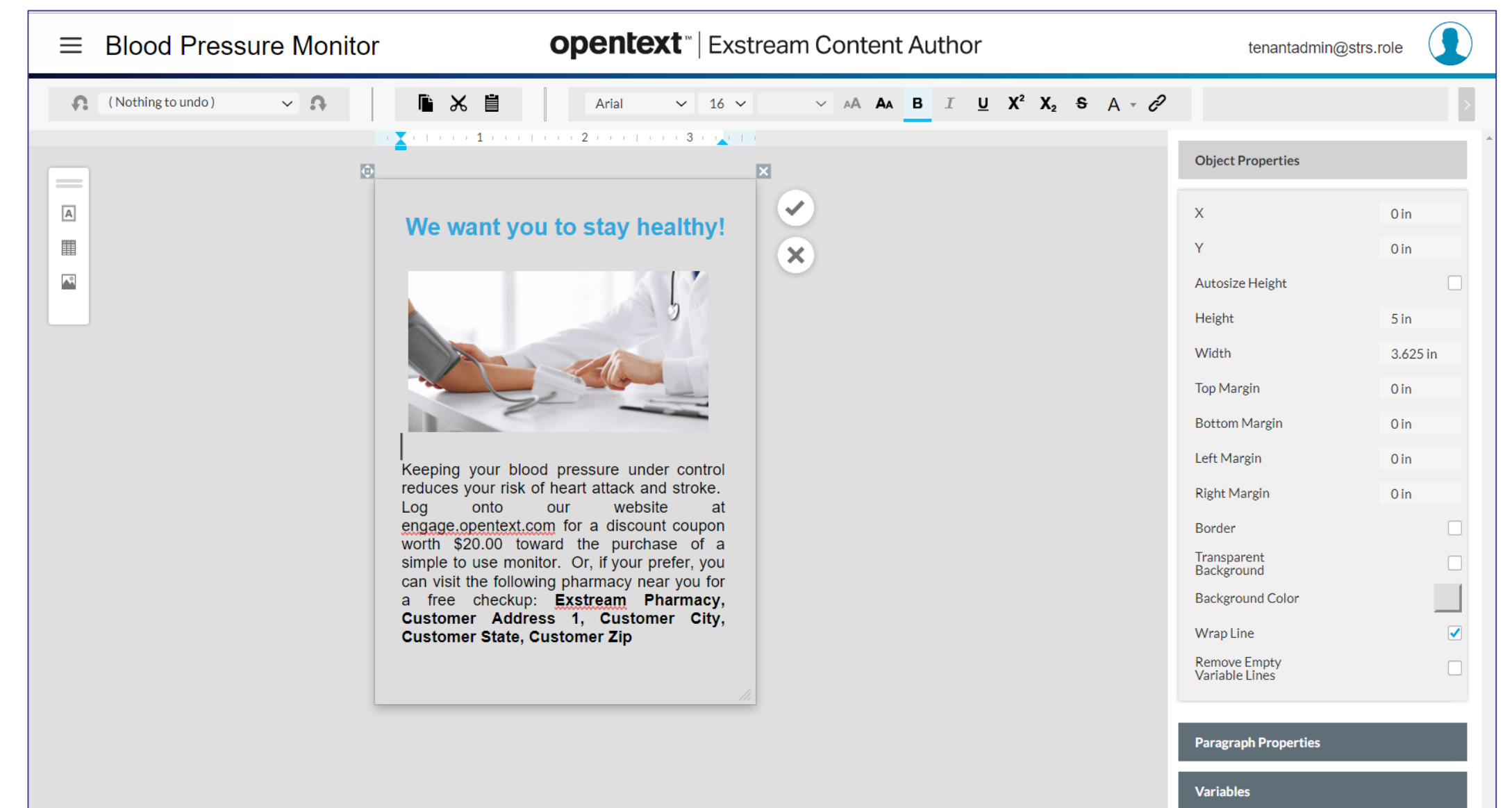
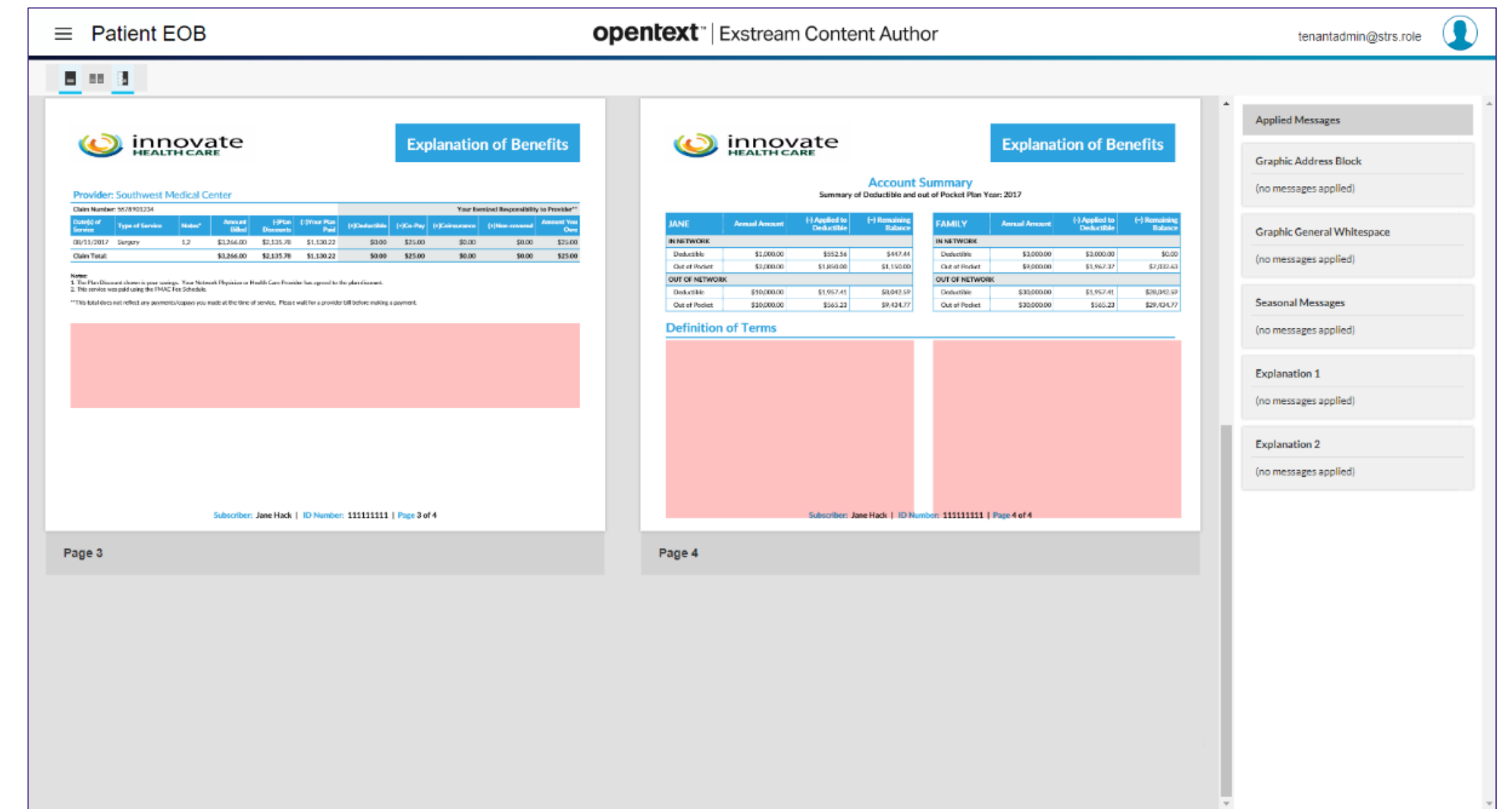
- **Intuitive, browser-based thin-client environment** to enables business users to control communications content
- Business users can easily...
 - create/update message content (text or graphical)
 - allocate messages to template layout in predefined areas
 - author messages in context of communication
 - work with business rules and variables to drive personalization of content



Exstream Content Author

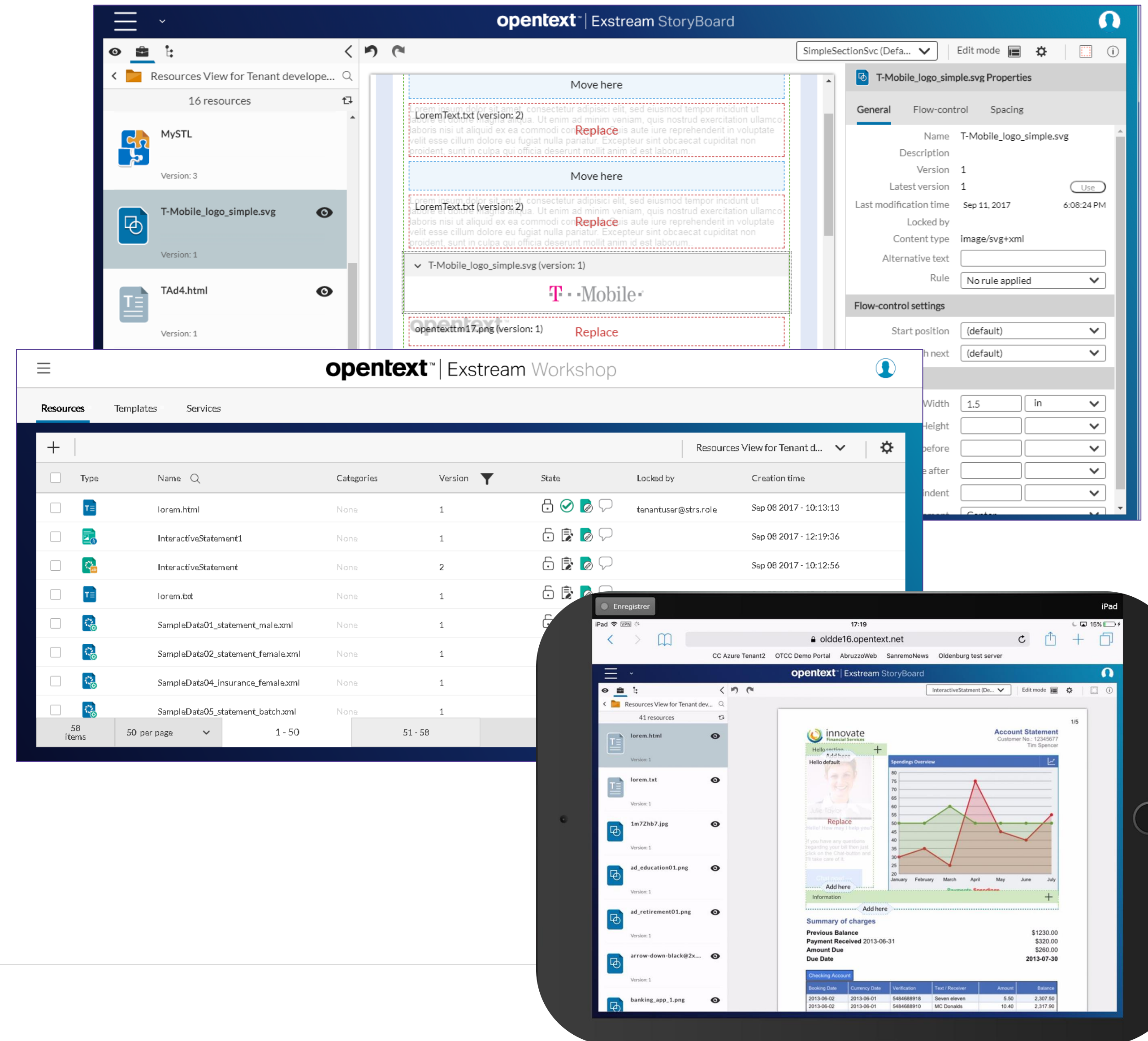


- Designers build applications in Exstream Designer/Design Manager, deploy into Common Asset Service (CAS) repository
- Use message frames in design to identify authoring areas for content creators
- Message content stored in CAS, leveraging common data model with Templates and Themes
- Batch or ondemand fulfillment provided through Communications Server using the Exstream Engine
- **No repackaging required** – content read and include natively from CAS at run time



Storyboard and Workshop improvements

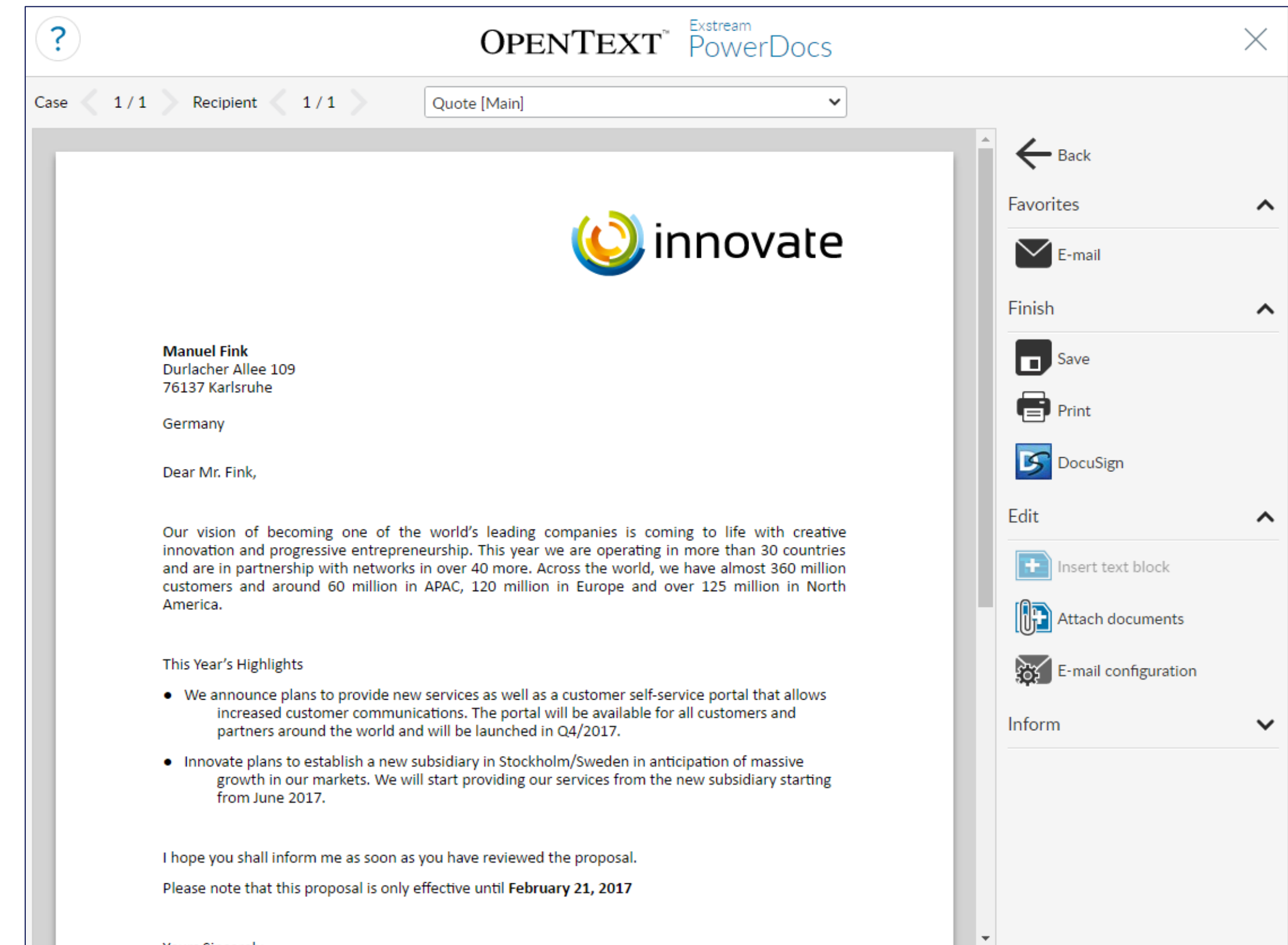
- Enhanced **mobile device preview** with StoryBoard
- Digital **content authoring** and simulation **for any device**
- Bring changes to production in Workshop for any Theme/Template
- Enhanced content control with layout properties
 - Feature parity for StreamServe 5.6.2 customer upgrades



Exstream for Salesforce

- Easy to use interactive or on-demand document generation based on MS Word + plugin templates
- **Business content authoring** with familiar tools like MS Word combined with web technologies
- Web based, **interactive** editing, integrates to DocuSign and central delivery and archiving
- Standard integrations to CRM systems like Salesforce.com, MS Dynamics, Siebel CRM etc.
- SaaS based deployment option for Salesforce

16.3 focus on simplifications, architectural and security improvements



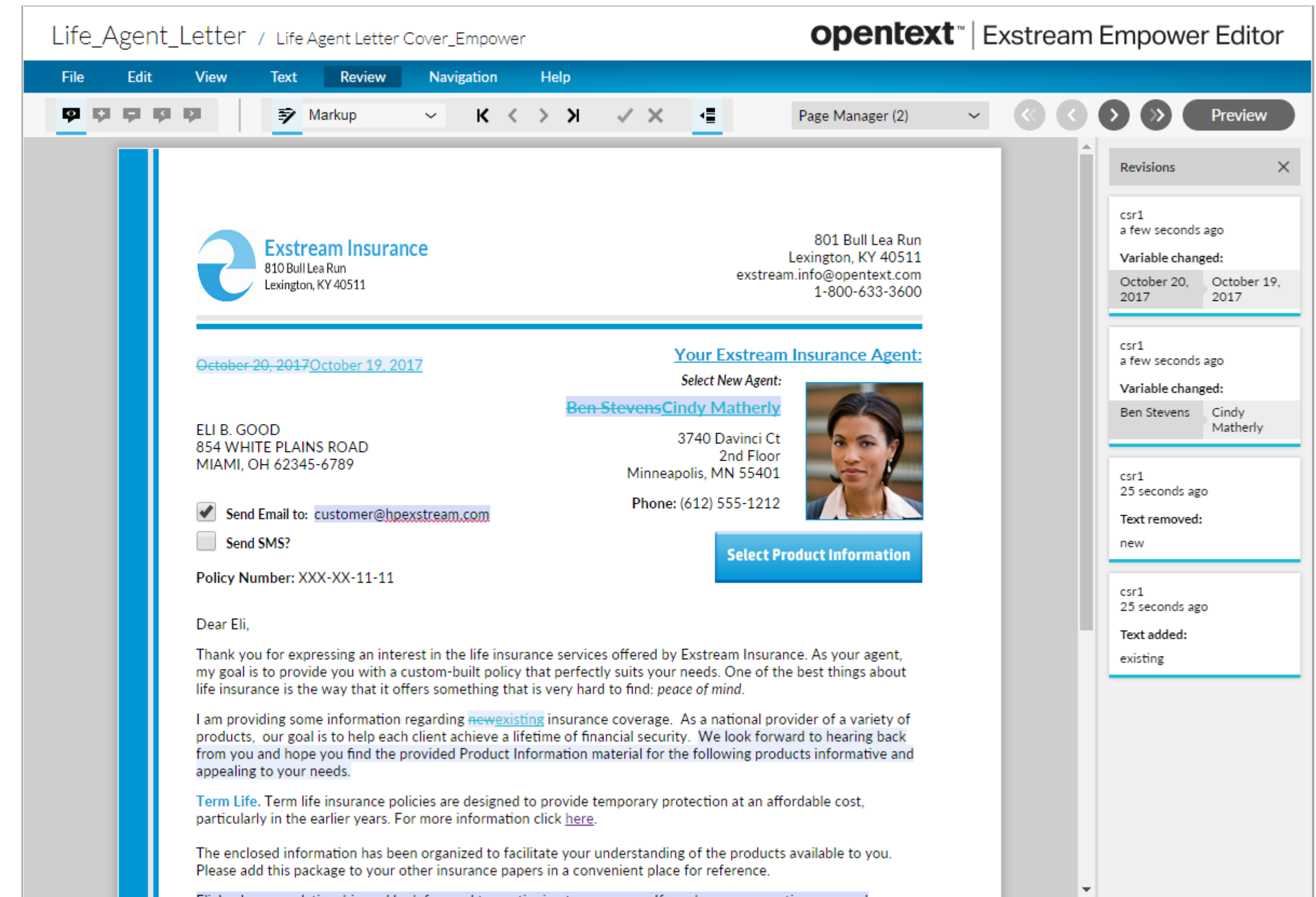
Interactive

What's new in 16.3

Interactive: Empower Editor advancements

Zero-install, controlled editing for users to quickly and easily personalize communications

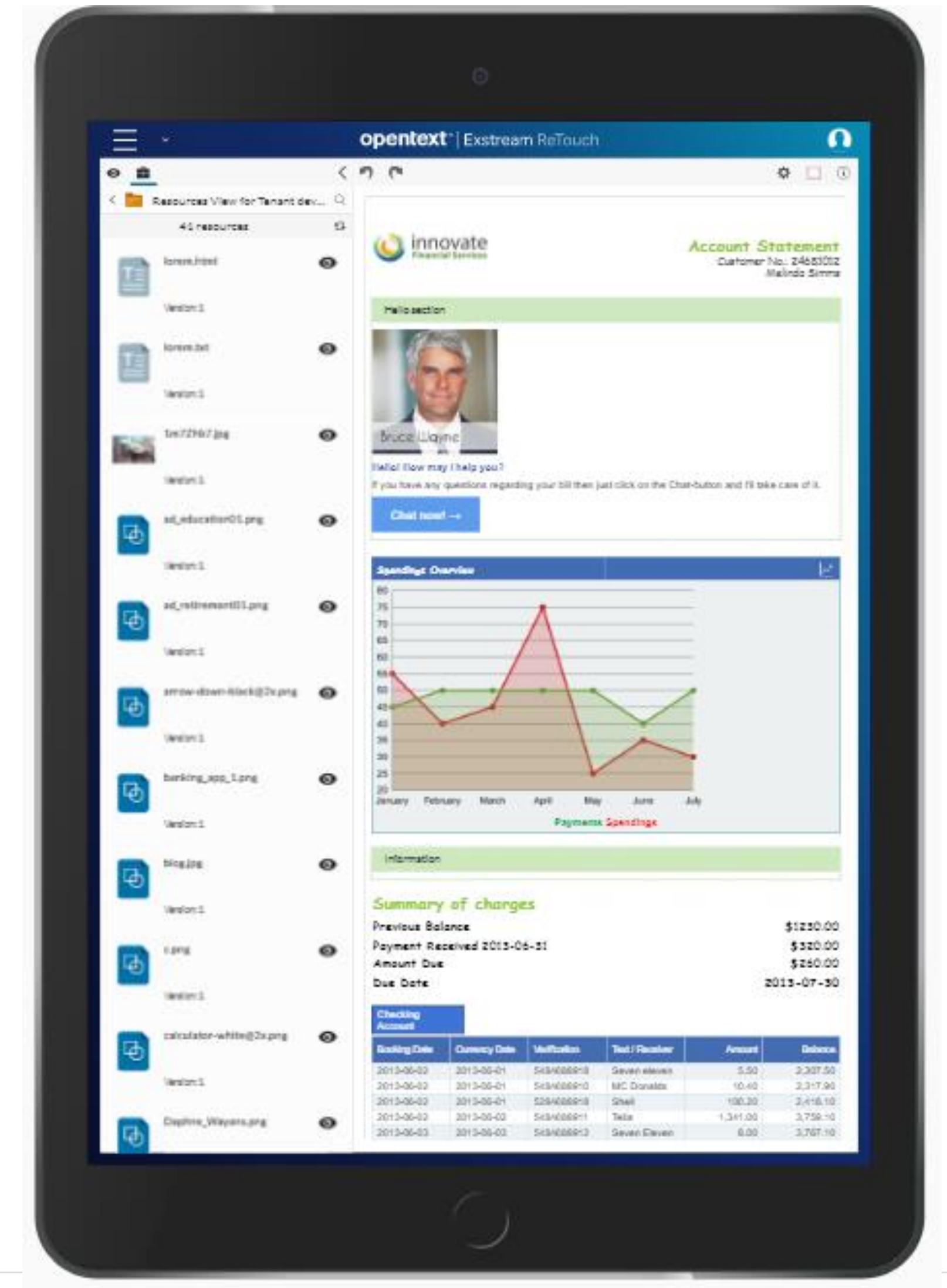
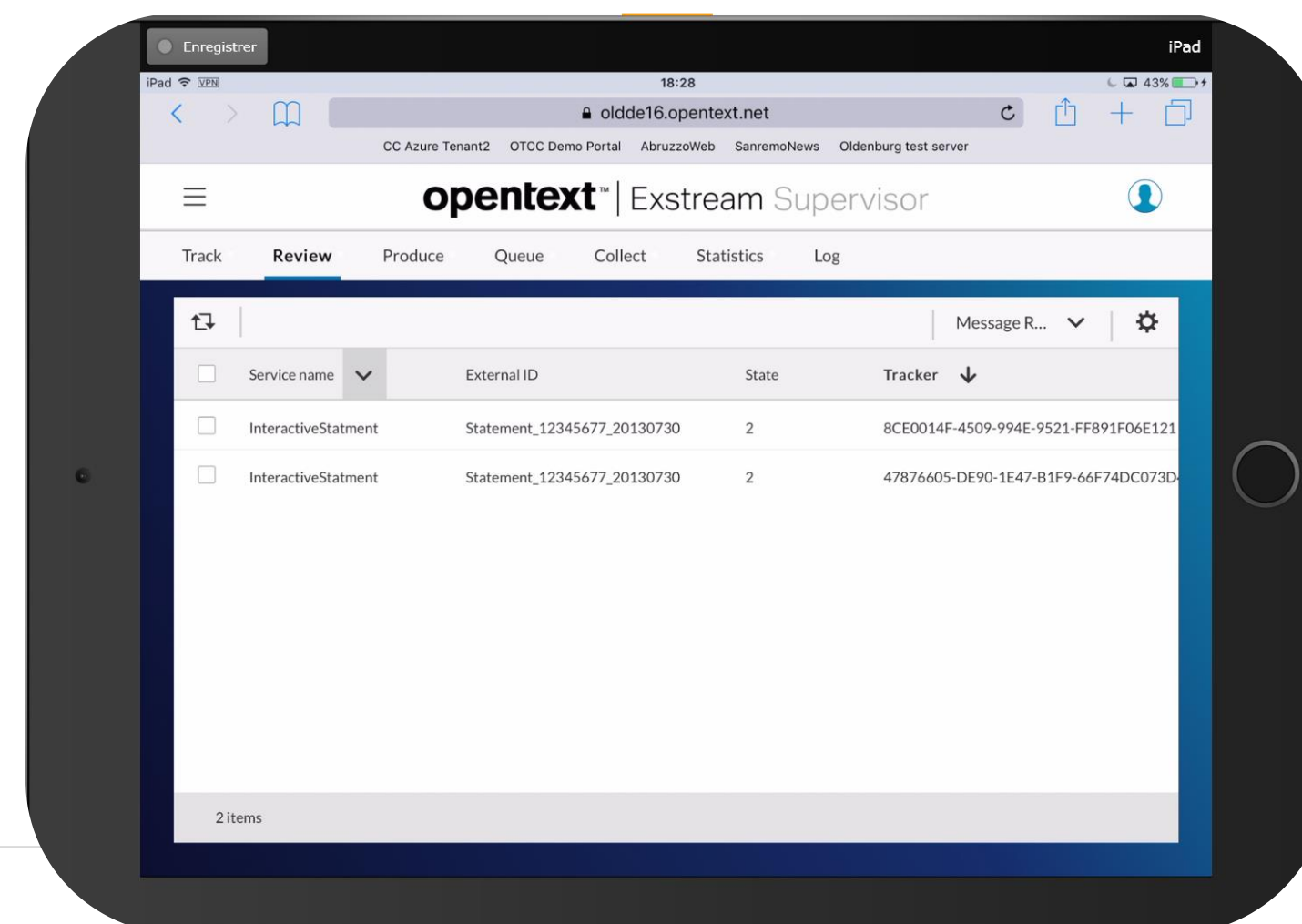
- Edit in the appropriate channel view for email/digital communications
- Use a template and data file for ad hoc, one-to-many personalized communications
- **NEW in 16.2**
 - Required area navigation
 - Revision tracking
- **NEW in 16.3**
 - UI/usability improvements
 - Role-based editing
 - Enhanced cut and paste into editable areas – images, simple tables, hyperlinks



Interactive: ReTouch advancements (StoryTeller designs)

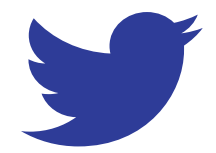
Zero-install, review and editing of communications on touch devices

- Edit in channel views for email/digital communications or paginated output
- Improved page navigation
- Editing productivity and usability improvements
- Performance improvements



opentext™

Thank you



twitter.com/opentext



facebook.com/opentext



linkedin.com/company/opentext

opentext.com