opentext™

OpenText Content Server

Release Notes

20.1.0

Product Released: December 2021

Release Notes Revised: December 2021

Contents

1   Introduction

These Release Notes provide an overview of Content Server 16.2.11, including new features, delivery information, and supported platforms. OpenText recommends that you read these Release Notes in conjunction with the documentation included with the software package. If any conflicts exist, the Release Notes supersede the other documentation.

We also recommend that you check OpenText My Support (https://support.opentext.com) for any patches or documentation updates that may have been posted after the initial release of this product.

2   About Content Server

This section provides an overview of Content Server 20.1.0.

OpenText Content Server forms the document management cornerstone of the OpenText Content Suite and provides secure, enterprise-wide control over any type of content - from contracts to engineering drawings, system reports, email messages, images rich media and much more.

OpenText Content Server is designed with user productivity in mind, offering a simple, responsive UI, with role-based views to enterprise, project-oriented, and personal workspaces. Users access the information they need fast, with powerful content navigation through full text and metadata search filters.

Social interaction is directly in-line with content to improve collaboration and enrich search through activity feeds, in-line commenting, and user profile management.

OpenText Content Server features fundamental tools such as workflow, offline editing, version control, taxonomy, multilingual metadata categorization, and reporting, and is easily customized and extended with REST API and a Widget Framework that can be used to expose Content Server.

OpenText Content Server is the central content management foundation for the OpenText Content Suite Platform, as well as a broad range of OpenText products including the OpenText™ Extended ECM for Microsoft® SharePoint®, OpenText Extended ECM for SAP® Solutions, OpenText Extended ECM for Oracle® E-Business Suite, OpenText™ Extended ECM for Salesforce®, and other OpenText offerings.

2.1   About Version Numbers

OpenText issues cumulative updates to Content Server on a quarterly basis. These updates incorporate new features, security fixes and enhancements, performance optimizations and defect corrections. Every 6 months, there is an opportunity to designate the components of Content Suite Platform as a new version or "Enhancement Pack" (EP).   Note that Content Suite Platform may be comprised of components with various version numbers. Numbering of 16.x releases is summarized in the table below.

Scheduled Date	CS 16.0	CS 16.2	Content Suite
2016 March	16.0		16
2016 June	16.0.1		16
2016 September	16.0.2		16
2016 December	16.0.3		16
2017 March	16.0.4	16.2.0	16 EP2
2017 June	16.0.5	16.2.1	16 EP2
2017 September	16.0.6	16.2.2	16 EP2
2017 December	16.0.7	16.2.3	16 EP2
2018 March	16.0.8	16.2.4	16 EP4
2018 June	16.0.9	16.2.5	16 EP4
2018 September	16.0.10	16.2.6	16 EP5
2018 December	16.0.11	16.2.7	16 EP5
2019 March	16.0.12	16.2.8	16 EP6
2019 June	16.0.13	16.2.9	16 EP6
2019 September	16.0.14	16.2.10	16 EP7
2019 December	16.0.15	16.2.11	16 EP7

2.2 Changes – 20.1.0 (December 2019)

2.2.1 Workflow

Extended functionality for Create Workspace Workflow Step:
- The Create Workspace step now allows saving the Workspace ID of the generated Workspace into an Item Reference Attribute of the Workflow. This enables easier modification or processing of the Workspace in subsequent Workflow Steps. Item Handler steps can reference the Attribute in their configuration to use the generated Workspace.
- The Create Workspace step configuration now allows mapping of roles defined in a Workspace template to user or group field attributes of the workflow.

Workflow Proxy setting available in Smart View: The My Profile widget in Smart View now includes a Proxies tab allowing users to select a proxy for their Workflow Tasks. This setting corresponds to the setting in Classic UI.

Note to customers of Extended ECM for Government: The Workflow Proxy setting is replaced on installation of the Extended ECM for Government module. This module implements a different set of configurations for Proxy Users.

2.2.2 DocuSign Integration

Extended functionality for DocuSign Workflow Step

- The DocuSign step now redirects to the DocuSign Login page to authenticate the sender before transferring the document and generating the envelope. This allows using the 2-Factor Authentication methods configured on DocuSign side.
- The DocuSign step can now handle the transfer of several documents within a single envelope.
- It is now possible to transfer document formats other than PDF. Other formats get converted into PDF by the DocuSign platform automatically during the transfer. Checks have been added to inform users of document formats that cannot be converted by DocuSign prior to the transfer.
- DocuSign applies a size limit for envelopes of 25 MB. The step now includes a check to stay within these limits and informs the user if the attached documents exceed it prior to the transfer.
- The progress information of the DocuSign Workflow Agent is now provided in the subsequent Workflow Steps within the Workflow. A new tab including the Agent Progress Logs is available as soon as the DocuSign package is activated for a Workflow.

2.2.3 Content Sharing with OpenText Core Share

Email support: Added support to share and synchronize emails between Content Server and Core Share.

Share Coordinators: Added support for adding coordinators to Content Server shares. Share coordinators are Content Server users or groups that can manage, resynchronize, and stop any shares for which they have been assigned.

Sharing and Records Management: Introduced settings to allow the administrator to specify which RM Managed Objects can be shared based on Security Clearance Level and Supplemental Markings that have been defined in Records Management.

Sharing and Official Records: Lock the document in Core Share when a shared document in Content Server is converted into an official record.

Maximum Items in a single share: Introduced a setting to control the maximum number of items that can be included in a single share.

2.2.4   Administration

Configuration Scripting: Additional administration pages have been converted to enable export, import and scripting of configuration settings. The new pages are: Manage Category Data Source Configuration, Manage Destination Media Types, Manage Web Reports Conversion, Configure Rated Items Report, Configure Pulse Administration, Question and Answer Settings, Configure Email Settings for Questions and Answers, Included Node Types & Configure Workflow Agent Parameters, Configure Search Filters.

Business Administration: A Workflow Administration privilege has been added to the Administer Usage Privilege page. The enablement of the Workflow Administration privilege by the System Administrator provides assigned users/groups to perform tasks independently as it relates to the Configure Workflow Parameters page.

System Monitoring: A new system has been implemented as an experimental feature intended to help capture and monitor system events of potential interest to an Administrator. System Monitoring is based on a rolling event log stored in the database that can capture up to 100,000 events. Some initial events captured include: trying to save too much data in Memcached; server startup; Admin Server not responding; slow thread responses; and trace files generated.

Trusted Referrer: The Security Configuration page allows trusted referrers to be defined. A new feature on the trusted referrer allows the URL for OTDS to be automatically included. Access to OTDS must be trusted to allow successful authentication.

Perspective Administration: The Perspectives Volume is now easily accessible from the Enterprise menu in Classic UI to those with the privilege to create Perspectives.

Transport Overview: The Transport Overview page for a Transport item now offers an Update link to refresh the object in the Workbench on source systems.

Page Debugging: The HTML Framework used to render Administration pages will now output debugging comments into the page source if the "Include WebLingo filename and debugging comments" administration setting is enabled.

Mobile Security: The Smart View Administration page offers a new setting to prevent users of the Content Server Mobile app from downloading content to their mobile device.

Distributed Agent Monitoring: If a Distributed Agent task runs for longer than 30 minutes, the Distributed Agent dashboard will now show a status of Running for the Distributed Agent worker executing the task and a status description of Long Running Task.

Recommender: A setting in the opentext.ini file that controls the presentation of the Recommender Personal menu is no longer relevant and now ignored.

```
[Recommender]
wantPersonalMenu=false
```

2.2.5   Search

Default Dataflow Control Rules: The default control rules for dataflow management have been adjusted to reflect modern system sizes and best practices for new installations. The severity of control rule notifications in the dataflow management has been increased from Information to Warning, ensuring that administrators will get email notification when errors occur. This affects Too Many IPool Messages and Stalled Dataflow Rule 1. The default size for Dataflow Disk Space has been increased from 100 Mb to 10 Gb. The Partition Space rule is no longer defined by default.

Search Agents: Search Agents are used by Prospectors and Intelligent Classifications. In previous updates, the search engine executed Search Agents after every batch / transaction (typically 500 indexing operations on a busy system). As of this release, the search engine executes the agents after N minutes have elapsed. Agents can have a high fixed overhead cost, so the result is much higher indexing throughput when Search Agents are used. Configuration of the time between agent executions is now controlled on the Advanced Settings tab of the Update Distributor Configuration page.

Search Forms and Templates: Maximum configurable limit for user Search Forms has been increased to 250. Separate configuration is now available for the Admin user with an upper limit of 1000 Search Forms and 1000 Search Templates.

Search Filter Administration: A new Business Administration Privilege Search Configuration has been created, which allows users access to the Configure Search Filters administration page. The Maximum number of active Filter Regions control is hidden from Business Administrators. Adjusting this limit affects memory requirements in the search engine.

Intelligent Classifications: A new control allows the relevance threshold on Intelligent Classification search queries to be ignored. This new default approach allows users to confidently predict which items will match a query. Note that this new method works well with the termset / stemset operator.

DCS Pattern Matching: The pattern matching that Document Conversion Server can perform during indexing preprocessing has been extended with two new capabilities.

- Substitution: replacing the matched string with the normalized value (as an alternative to the existing feature of supplementing the matched string by adding a normalized value).
- Allow null values for the prefix and/or postfix identifiers of the normalized form.

For example: these features combined would allow a matched pattern such as "1 (519) 888-4567" in the full text to be replaced with a single token indexed as "5198884567".

2.2.6   Reminders

A new Smart email format is conveying meaningful information about Reminder related tasks to end users. This format exists in parallel to the existing text and HTML formats. It is used for new systems and new Reminder client configurations; existing configurations remain unchanged. Default email templates are available for notification and escalation emails, the additional email configuration is no longer necessary. Links from Reminder emails back to Content Server are using either Smart View or Classic UI, based on the user's configured preferences.

2.2.7   eLink

Inline attachments: Email-enabled Discussions and Forums will now display inline images when viewing Topics and Replies that arrived via email in the browser. Displaying images requires enabling the administration setting Presentation > Configure Document Functions > Enable Document Open, as images are stored as document attachments to a Topic/Reply.

2.2.8   WebReports and ActiveView

Template List: WebReports and ActiveViews now list available views and templates using easy to read, translated names on their Add Item pages. Any custom templates added by administrators will continue to appear in the list based on their filename. Additionally, module developers needing to extend the list of available templates can now do so programmatically through a new Application Template Oscript subsystem, allowing for name translation and custom template location.

ActiveView General Tab Template: The default ActiveView template for overriding the General Properties page has been updated to include multilingual metadata editing capability.

2.2.9   REST API

Additional support has been added to the Content Server REST API:

- Generations
  - A Generation can now be created, moved, updated, copied or deleted using the REST API.
  - For the create action, it is required to input the following parameters: type, parent_id, name, original_id and version_number. Creation will fail if the referenced item (original_id) is not of type Document (144).
  - All other actions require the minimal parameters of a standard node.

- Favorites
  - The /api/v2/members/favorites, /api/v2/members/favorites/tabs/<tab id>/nodes, and /api/v2/members/favorites/tabs/unsorted/nodes resources have been enhanced to support sorting, pagination and filtering.
  - To filter use where_name=<value>
  - To sort, use sort=<value>, where value can be one of the following (name, asc_name, desc_name, tab_id, asc_tab_id, desc_tab_id, order, asc_order and desc_order). If asc_ or desc_ is not included, asc is implied.
    Up to two sort parameters can be specified for secondary sorting.
  - To paginate, use page=<page number>
  - Use limit to specify the items per page.

- Categories
  - In order to determine if a category applied to a node is upgradeable (i.e., not current), the boolean flag "upgradeable" has been added to the response for GET api/v2/nodes/{node_id}?fields=categories&metadata.
  - The upgradeable flag has also been added to the call GET api/v1/forms/nodes/update?id={node_id}.

- Audit
  - Audit resources have been updated to add improved pagination support.
  - The v2 audit call has also been updated to allow sorting by date and filtering by Event Type, User and date range.

- Hidden nodes
  - Hidden nodes can now be optionally retrieved in /v*/nodes/{id}/nodes listings by passing the parameter show_hidden=true.

2.2.10 Classic UI

Text Editing: To improve security, the Text Document create and edit pages now use the Ace Editor control instead of the CKEditor control for editing text and HTML files. The new editor does not provide WYSIWYG editing for HTML files, however, the user experience for editing HTML source has greatly improved with the addition of line numbers, syntax highlighting, autocomplete, and full-screen editing.

Categories Volume: Pagination controls are now available when browsing the Categories Volume in the Classic UI.

Version Descriptions: Version descriptions are now displayed when viewing the Versions properties tab in Classic UI and Smart View

Template Folders: Folders that contain templates (such as Search Templates) now have pagination controls. Basic features such as delete, copy and move are exposed in the folder toolbar.

2.2.11 Smart View

Audit Page: A new page was introduced which displays the audit events of an item and replaces the existing Activity page. For example, for a document you can see on the audit page who uploaded the document, added versions and who opened or downloaded it. The displayed information can be filtered by event type or the user who triggered an event.

Search result page: Each user can configure the information displayed on the search result page:

- **Displayed metadata**: which metadata/columns are displayed in the search result view.
- **Column order**: the order of the columns displayed in the tabular search result view. The only fixed columns are the type and the name column.
- **Summary/description**: is the summary (extracted from the full-text index) and/or the description of a search result displayed.

User specific configurations are stored in the personal search template. If a user doesn't have a personal search template, a new one is created.

Favorites: Accessing favorites from an arbitrary page using the favorite star on the page header was improved:

- For each favorite item a menu with commands like opening the properties page, copying a link or going to the location of an item is available.

- Favorite items can be filtered by name.
- The favorite page where a user can organize their favorites can be opened.

Browse view settings: The following browse view settings are preserved when a user changes them and opens the same page later again:

- Page size
- Selected view: list or grid view
- Displaying descriptions
- Sort order

The selected page size is the same for all containers that a user opens, the other settings are container specific. For example, if a user selects the grid view for a specific folder, this view is enabled the next time the user opens the folder.

2.2.1 Records Management and Classifications

Classification Inheritance on Copy or Move
There is a new Classifications system setting for inheritance of Classification on copy or move. The item will either keep its original Classification(s), which is the default behavior, or the destination parent container's Classification(s) will be applied, or the Classifications will be combined.

Records Management Smart View multi-select actions
The multi-select Update record metadata action is available from the Smart View's Browse View, Search Results, Collections and Favorites if the system settings Configure RM Multi-select Actions for Update Record Metadata is enabled.

The multi-select Assign cross-reference action is available from the Smart View's Browse View, Search Results, Collections and Favorites if the system settings Configure RM Multi-select Actions for Assign Cross-Reference is enabled.

View Details of Record Series Identifier (RSI) in Smart View
Users can View Details of each RSI stage: action to perform, when to perform, comments and stage rule, from an item's Records Management Properties in the Smart View.

Record Series Identifier (RSI) schedule event conditions supports the attribute checkbox type
RSI schedules now support the Flag:Checkbox attribute type to define event conditions.

Smart View Disposition Search Results Custom Columns
Custom columns are now supported in the Smart View Disposition Search Results.

Accession Search Review Assignments

Accession search review assignments are now supported in the Smart View with options to apply accessions, change review decision, change actions, perform actions, collect and apply hold on the accessioned items in the review.

2.2.2　Physical Objects

Physical Object Smart View multi-select actions

The following Physical Object multi-select actions are now available from the Smart View's Browse View, Search Results, Collections and Favorites if the related system settings for Configure PO Multi-select Actions are enabled:

- Update physical items metadata action
- Circulate\Return action where Return, Cancel, Borrow and Pass options are available

Physical Object email templates include borrowed comment

The Overdue Borrowed Items, Escalation: Items not acknowledged and Escalation: Overdue Borrowed Items email notification templates now include borrow comment information.

2.2.3　Security Clearance

Security Clearance and Document Property Synchronization

Read bindings can be setup to apply a Security Clearance Level or one or more Supplemental Markings to an MS Office or PDF document using Document Property Synchronization. The following read file events are supported:

- Create
- Add Major Version
- Add Minor Version
- Add Linear Version

📄 **Important notes:**

Should a user not have the same or higher Security Clearance Level or Supplemental Markings on their profile as on the document to be added, they will not have access to the document once they are applied.

📄 In the event the Security Clearance Level or Supplemental Markings do not exist in Content Server, a log file will indicate an error but the document will be created or version added in Content Server.

📄 In the event the fields used to populate Security Clearance Level or Supplemental Markings are not populated in the document, no changes will be made to these field values in Content Server.

📄 In the event the fields used to populate Security Clearance Level and Security Clearance Name are conflicting in the document, for example there is a discrepancy

between the Security Clearance Level and Security Clearance Level description in the document fields, the last value passed will be applied.

📄 **Important cautionary note:**
Document Property Synchronization is an asynchronous operation that occurs after the node and version are created. The document may inherit the Security Clearance Level and Supplemental Markings from the parent before DPS can apply the Security Clearance Level and Supplemental Markings from the document properties or there may be a period between the document being created or modified and when the Security Clearance Level and Supplemental Markings are applied.

Security Clearance Smart View multi-select actions
The following Security Clearance multi-select actions are now available from the Smart View's Browse View, Search Results, Collections and Favorites if the related system settings for Security Clearance Multi-select Actions are enabled:

- Security clearance\Update security clearance level action
- Security clearance\Assign supplemental markings action
- Security clearance\Remove supplemental markings action

2.2.4   Connected Workspaces

Import and Export Business Workspaces via Object Importer: Importing and exporting Business Workspace templates and instances including existing content using the Object Importer is now supported.

2.2.5   Connected Workspaces

Updated log4j version to 2.8.2

- From ecmlink-spi.log4j.properties to ecmlink-spi.log4j2.xml

2.2.6   DCS.INI Filetype Mapping

Improvements have been made to the dcs.ini filetype mapping.

- config\dsc.ini
- config.Reference\dcs.ini

2.3   Changes – 16.2.10 (September 2019)

2.3.1   Smart View

Browse performance: The implementation of the browse operation was reworked to significantly improve the browse performance. If you work with Connected Workspaces, please migrate workspace perspectives that were created using Content Server 16.2.9 or earlier to use the new 16.2.10 Workspace component type. For details see the Connected Workspace Help in the Classic View.

Browse View density: The density of the Browse View was increased to display more rows and columns on a browse page. As a result, users are able to see more information without having to expand single table rows.

Drag & Drop of folders: Local folders can be uploaded with Drag & Drop. The implementation is based on the built-in browser support for uploading folders. Client installation/plugin is not needed. Uploading folders is supported by the following browsers:

- Chrome
- Firefox
- Edge
- Safari

When a local folder is uploaded, a new folder with identical subfolders is created in Content Server. Documents in the local folder are uploaded to the Content Server folder and its subfolders accordingly. If the parent folder in Content Server has required attributes, a form is displayed where a user can enter the attribute values. The values are then applied to all items which are created when a local folder is uploaded.

Smart View pages for Favorites, Recently Accessed items and Assignments: When the small tile for Favorites, Recently Accessed items or Assignments is expanded, the content is displayed on a new page view and no longer in a popup window. Each of these pages has a unique URL, which can be used to open the page directly.

Personalized Accessibility Mode: The User Profile dialog includes a Settings tab where users can enable an accessible compliant mode. In this mode the browse table is optimized for screen reader support, native scroll bars are used to ensure HTML validity and header messages are no longer removed after a few seconds.

Single Shortcut widget deprecated: The "Single Shortcut" widget is deprecated and replaced by the "Shortcut Group" widget. When you edit a perspective using the "Edit Page" command, existing "Single Shortcut" widgets are replaced automatically by "Shortcut Group" widgets.

Business Administration: There is now a new Business Administration privilege for Smart View, allowing users with the respective privilege to manage the Smart View Configuration Administration page.

2.3.2   Records Management

Smart View Disposition Review additional new features

The RM Disposition Review for Smart View has the following additional actions available to reviewers, providing the reviewer has adequate permissions/functional access:

- Perform multi-select "Move" action from the Disposition Search Review
- Perform multi-select "Collect" action from the Disposition Search Review
- Perform multi-select "Apply accession" action from the Disposition Search Review
- Reviewers can filter Disposition Search results by Name, Review Decision and Action column values.

📄 **Note:** The RM Disposition Advanced Review, which uses Content Server Workflow, is not supported in the CS 16.2.10 release.

Smart View RM multi-select actions

- Apply and remove multi-select Hold actions are available from the Smart View's Browse View, search results, Collections and Favorites if the system settings "Configure RM Multi-select Actions" for "Apply Hold" and "Remove Hold" are enabled.
- Apply and remove multi-select Classification actions are available from the Smart View's Browse View, search results, Collections and Favorites if the system setting "Configure RM Multi-select Actions" for "Apply Classification" and "Remove Classification" are enabled.

Prevent marking official or finalizing items in a reserved state

- When items are in a reserved state, marking official and finalizing items can be prevented based on system settings.

Records Management metadata auto-populated with email metadata

- Records Management metadata is auto-populated with email specific metadata when an RM Classification is applied to the email. Previously, auto-population of email metadata was supported only on upload when the email was initially added to Content Server and had an RM Classification applied to it.

New Records Management REST APIs

- Return detailed information about the Records Series Identifier (RSI)
- Return a list of Records Series Identifiers (RSIs) with detailed information
- Return detailed information about the Holds
- Return a list of Holds with detailed information

New Physical Objects Label Control Installer

- Latest version of Physical Objects label control file (.msi) is now available for download on My Support.

2.3.3   Workflow

Create Workspace step added: A new Workflow Step has been added to allow the creation of Workspaces based on existing Workspace Templates. This new step includes a Configuration tab allowing basic attribute mapping between workspace attributes and Workflow attributes. The selected templates are required to fulfill certain conditions regarding manual creation of the Workspace without a leading application and the configuration of the target location for the Workspace Type. Refer to the manual for a detailed description.

Start Workflow action available in more places:

The Workflow functionality in Content Server has been extended so that the Start Workflow action is now available in additional places in Smart View:

- The Recently Accessed widget in expanded view
- Within the Header menu in workspaces

Compound Documents have now been enabled as an additional item type for initiating Workflows. This functionality is available in Classic View and Smart View.

Tracking Widget to display Workflows on specific objects: The Workflow Tracking widget configuration has been extended to filter for Workflow's specific to an object in Content Server. With this functionality the Workflow Tracking widget can be used to only display Workflows that have been initiated from specific nodes in Content Server. A possible scenario could be a Workflow Tracking widget embedded in a Workspace that would display only the Workflows initiated for this specific Workspace.

2.3.4 DocuSign Integration

Content Server Workflow integration with DocuSign as a 3rd-party cloud-based signing service:

A new DocuSign step allows Content Server users with access to DocuSign to send signing requests for documents. This new step can be added into any Content Server Workflow and can be started by any Content Server user. Once the DocuSign step is assigned to a user, email addresses of the signees are provided in the form of the Workflow step.

An integrated DocuSign Agent periodically checks for the signing status of the document in DocuSign, then retrieves the signed document, automatically adding it to the Workflow as a new version of the existing document. DocuSign provides an additional audit document that is also added as an attachment to the Workflow.

2.3.5 Reminders

Personal Reminders: This new Reminder type allows tasks that are assigned to the current user to be quickly created. The tasks are due and activated immediately. Users can remind themselves of important tasks with fewer clicks and will appear in My Assignments. Administrators must enable this Reminder type for their end users.

Group assignments: Reminders in Smart View can be created using groups as assignees.

2.3.6 Connected Workspaces

Add and remove relationships between Workspaces manually in Smart View: To build up a network of Workspaces and have the complete view on the business process, users can now manually manage relationships between Workspaces in Smart View. In the expanded view of the related Workspace widget, end users can add and remove relationships.

Add and remove business relationships automatically: To build up a network of Workspaces, have the complete view on the business process and to reduce manual work, Content Server can build relationships between Workspaces using a WebReports sub-tag.

Roles and Permissions in Smart View: Managing Workspace Templates and setting up Roles and Permissions is an essential task for key users. This can now be done without leaving the Smart View interface.

Discussion widget: End users can now edit their questions or replies. They can also delete them if necessary.

2.3.7 Renditions

New [Rendition Agent] system user: A new system user, [Rendition Agent], as well as a new group, Rendition Group, are now present in Content Server. All Rendition actions will be performed by [Rendition Agent] instead of the Admin system user. With the addition of [Rendition Agent], renditioning of documents reserved by other users is now possible.

Manual addition of Compound Document Renditions: Users now have an option to manually add any document as a Rendition to any Release or Revision of a Compound Document. The Add Rendition option in the Content Server Functions menu will only be displayed for Releases or Revisions.

New administration feature: "Create missing rendition on copy" Admin option to globally control whether Rendition will dynamically create missing rendition artifacts when documents (and respective versions) are created during a Content Server copy action. The option is globally defined in the Administer Renditions page, with the option enabled by default.

2.3.8 Content Sharing with OpenText Core Share

Manage Share Widget: Created a new widget to be used by Content Server administrators to show all shared content and specifically show shared content that is in an error state.

Better Tooltips: Enhanced the tooltips displayed when hovering over the Shared icon to show share initiator, share state and other share related information.

OpenText Core Links: OpenText Core link is now available for a shared document or folder, when sending the Content Server link in an email.

Retry Synchronization: Created a method to retry the synchronization of documents or folder that are in a share error state.

> ⚠ **Important**
>
> The synchronization between Content Server and OpenText Core will not perform as expected on a clean install of Content Server 16.2.10. Please install patch number **162001685** to correct this. This issue does not exist on an upgrade install.

2.3.9 Transport

Usability: Multiple objects can now be selected and added to a Transport Workbench. A new feature allows a single item in a Workbench or all items in a Workbench to be refreshed,

which updates any objects that have changed. Items that are candidates for refresh are marked with the "new" symbol when displayed in the Workbench.

Collections: It is now possible to Transport a Collection that is empty (Collections containing objects are not transportable). The "searchable" feature of the Collection will be ignored during transport if the target system does not permit searchable Collections.

Columns on containers: Containers will now retain their local custom column configuration when transported.

WebReports: WR Triggers and constant mappings are now retained when updating an item using Transport.

ActiveViews: ActiveViews are now listed as a dependency for containers with an ActiveView override. ActiveView overrides are also retained when updating an item using Transport.

2.3.10 Content Server Administration

Configuration Scripting: Additional administration pages have been converted to enable export, import and scripting of configuration settings. The new pages are: Multi-File Output Administration, Configure Smart View, Document Template Configuration, Configure User Session Parameter Codes, Classification – Manage Objects / Configure Intelligent Classification, Security Clearance - Configure Supported Object Types, Best Bets Configuration.

Business Administration: The Business Administration group is now included by default for new deployments in many key areas, ensuring these features are available to Business Administrators:

- Object Privileges: Virtual Folder, Category, Category Folder, URL, Classification Tree, Classification, Support Asset Folder, Support Asset
- Usage Privileges: Facet Administration, Warehouse Administration, Support Asset Volume
- Volumes ACL with full permissions: Transport Warehouse, Transport Packages, Categories, Support Asset, Facets, Classifications, Physical Objects, Records Management, Connected Workspaces, Document Templates, Perspective Assets, Perspective, Appearance, Community Template

Service restart: Removed the service restart requirement for the following administration settings: eLink - Global Workflow Settings and Configure Container Options.

Credential checks: Content Server will now check to determine if default credentials are configured for the Admin account password or the Admin Server, and warn Admin users by presenting a banner on Classic View pages when this situation exists.

Restricting uploads: A new feature allows files with certain properties to be blocked from storage in Content Server. A new Storage Provider named "Blocked" exists, and objects meeting Storage Provider rules based on size, file name patterns or MIME Types are directed to the Blocked Storage Provider to be discarded.

Workspace Perspective type: A new Perspective type has been introduced for Workspaces to help optimize system performance. Existing Workspace Perspectives need to be upgraded to use this new type to realize the performance benefits.

Configuration settings: Several settings that were previously stored in the opentext.ini file are now stored in the database, and migrated during upgrade. Settings no longer editable in the opentext.ini file include:

```
[ActiveView]
EnableAV
EnabledObjects

[WebReports]
MaintainTriggerDataOnCopy
```

LiveReports configuration: The Configure LiveReports Security administration page is removed, with appropriate settings available on the Manage Database Connections administration page. The exception: This administration page remains for existing systems that had the "Disable database modification" feature for LiveReports selected.

Search Index Backup and Restore: Support for restoring incremental search index backups has been removed. A new feature for making a restored partition current by replaying portions of the Search Index Transaction Logs is available on the "Recover" tab of the Enterprise Partition Map properties page. The Data Source Maintenance administration page has been updated to reflect these changes and to meet WCAG guidelines.

Best Bets Life Cycle: A new feature of Best Bets allows the administrator to set the maximum duration for a Best Bets value, with a default of 24 months. This feature prevents unmanaged Best Bets values from polluting a system over time. The administration page for Best Bets has been updated to meet WCAG guidelines and allow import/export of the configuration settings.

View as Web Page Limit: A new configuration setting in the dcs.ini file limits the number of pages in a document that will be displayed with a request to "View as Web Page". This setting prevents timeouts when handling large documents. The default value is 50 pages.

```
[DCSIm]
Viewpagerange=1-50
```

Rights List: The database schema and logic used to determine user and group access rights has been reworked for performance optimization. The schema no longer contains user information, it only contains group relationships. The function calls for using the Rights List are unchanged, but any custom applications that directly accessed the Rights List tables (not a recommended practice) will need to be modified.

Admin Server Cache: The Admin Server file cache used to interact with processes on remote instances has been moved to the <OTHOME>appdata/adminserver_filecache directory from the previous <OTHOME>remotecache location. This change will allow any future updates or container redeployments to preserve the contents of the file cache. The upgrade steps DO NOT preserve the existing contents of the remotecache folder. Standard modules do not use this cache for persistent data. If you have custom solutions that persist data in this location, you will need to take steps to preserve this data when applying the update.

Unreserving upon user deletion: When a user or group is deleted, a Distributed Agent task is created to unreserve all items that were reserved by that user or group. This task is named "Deleted User or Group Unreserve", and audit records will show the unreserve being performed by user [__system__].

Collection: A new feature of Collections allows the collected items to be deleted from Content Server. This feature has an associated Usage Privilege, which is restricted by default. While the Collection may contain a specific version of an item, all versions will be deleted. The Delete process will skip items that the user does not have permission to delete.

2.3.11 Search

Email Normalization: Full text content is now scanned to identify email addresses and represent them in a normalized form, which can be used in a query using the pattern operator. This feature is of value since email addresses contain characters viewed as whitespace in full text, which can lead to ambiguous or slow matches. The pattern operator accepts leading or trailing wildcards.

```
pattern(email someone@company.com)
pattern(email someone*)
pattern(email *company.com)
```

The feature can also be configured to count the instances of email addresses, or extract a normalized form of the email addresses, and store these as searchable metadata in the index. Configuration settings are in the dcs.ini file:

```
[DCSmetadata]
```

```
CountEmail=true
EmailNormalization=true
AddEmailMetadata=false
```

Hashtags and Mentions: Full text content is now scanned to identify hashtags (ie. #opentext) and mentions (ie. @username), represent them uniquely in the Search Index, and allow them to be queried using the pattern operator.

```
pattern(hashtag opentext)
pattern(mention username)
```

These features are configured in the dcs.ini file using the standard pattern matching settings.

2.3.12 Content Suite Viewer

Email format support: Email file formats (MSG and EML) are now supported in Content Suite Viewer. MSG and EML support is provided with the Otf2dl loader, which has limited rendering capabilities. Images (BMP, GIF, PNG, EMF, WMF, TIFF, and JPEG) embedded in emails will render, but attachments will not be included.

To add MSG and EML support, System Administrators can choose their preferred implementation method:
1. Install the latest Brava! Server Components 16.6 release, available on My Support, to a system that never had a previous version of Brava! Server Components installed (a clean install).
2. Manually adjust the server configuration by referring to Section 1.3, Upgrading Content Suite Viewer, in the documentation *OpenText Brava!: Content Suite Viewer Admin Guide*.

2.3.13 Classic View

Pagination controls: Controls for pagination are now available at the top of the browse table to assist with navigating through large volumes. These controls can be disabled on the Configure Features>Configure Container Options administration page.

Zip file changes: The manifest file included in multifile zip operations completed through the Classic View has changed from CSV format to HTML format to ensure correct rendering of accented and foreign characters. Additionally, items within a Compound Document are now prefixed by their order number when exported in order to retain sort order on destination systems.

2.3.14 WebReports

WebReports Row Section: The Advanced Editor now offers a Go to Row Section button to easily jump to the LL_WEBREPORT_STARTROW section of a report.

New WebReports Tags:

- Data tag [LL_REPTAG_OTCSTICKET /] is now available to generate an OTCSTicket authentication token value for the current user for use with the Content Server REST API.
- [LL_WEBREPORT_RESTCLIENT /] tag now supports tunneling through a proxy server. PROXYHOST and PROXYPORT parameters allowing for providing proxy connection details.

2.3.15 REST API

Additional support has been added to the Content Server REST API:

- Notifications
    - Specific notification interests on an item can now be retrieved and set
    - GET /api/v2/notifications/interests/nodes/{id} will list the available interests for a node
    - PUT /api/v2/notifications/interests/nodes/{id} will update the interests for a node
        - Parameters: body = {"interests"=[{"interest":<interest_id>, "report":<report_number>}]}
- Member search sorting:
    - Sorting is now possible for both /v1/ and /v2/ members output
    - Sort options are on Login ID (name), First Name, Last Name, Email Address, ID, or Group ID
    - GET /api/v*/members to perform the search
        - sort=<sorting value> (e.g., name)
        - Prefixes asc_ or desc_ can be added to the value to sort in ascending or descending order, respectively (e.g., asc_name)
        - Results are by default sorted by ascending IDs
- Member search by exact values
    - Member search now supports exact matching on specific field values
    - Multiple "where" clauses are ANDed together
    - GET /api/v2/members to perform the search
    - where_name searches by the login ID
    - where_first_name searches by the First Name
    - where_last_name searches by the Last Name
    - where_business_email searches by the Email Address

- Versions
  - Locking and unlocking Versions
  - POST /api/v2/nodes/{id}/versions/{version_number}/lock to lock a Version
  - POST /api/v2/nodes/{id}/versions/{version_number}/unlock to unlock a Version
- Facets
  - Facets retrieval now offers the ability to limit the information returned for a given location
  - GET /api/v2/facets/{id} retrieves Facets
    - top_values_limit={integer} limits the number of values returned for all Facets to the specified amount
    - top_values_limit=<no value> applies the "Maximum values to display" setting for the Facet (5 by default) in the Facets Volume
    - facet_id limits the response to specific available Facet(s)
    - Each /facets/{id} response includes a total_displayable property for each Facet indicating how many values are available for the Facet

2.3.16 Brava! Server Components

Brava! Server Components update: An updated version of Brava! Server Components 16.6 is available with the Content Server 16.2.10 release. This version includes a few minor fixes.

2.3.17 EmailAddressTokenizer.txt

The EmailAddressTokenizer.txt can now be found in the config directory of Content Server. Only the .txt file has been added. This tokenizer file can be used to optimize query for email addresses.

Change effects both Windows and Linux operating systems.

2.3.18 "wantWeb" Setting

The legacy "wantWeb" setting has been removed from the opentext.ini. It is no longer used and has been cleaned up from the opentext.ini and any associated logic has been removed as well.

2.3.19 Enable or Disable Active View Override Types

The Enable or Disable ActiveView Override Types admin page manages the following opentext.ini file settings:

    [activeview]
    EnableAV
    EnabledObjects

These have been migrated to use KINI instead.

2.3.20 DocuSign

Integrated DocuSign int the Content Server Workflow. DocuSign is now referenced in the following locations:

- config\opentext.ini and the opentext.ini.orig
- config_reference\opentext.ini and opentext.ini.orig

2.3.21 DCS.INI Filetype Mapping

Improvements have been made to the dcs.ini filetype mapping.

- config\dsc.ini
- config.Reference\dcs.ini

2.4   Changes – 16.2.9 (June 2019)

2.4.1   Brava! for Content Suite

Content Server is now compatible with Brava! for Content Suite 16.6. Earlier versions of Brava! for Content Suite are not compatible.

> ⚠️ **Important**
> Brava! for Content Suite follows a different release schedule. Please confirm availability before initiating a Content Suite upgrade.

2.4.2   Blazon for Content Suite

Content Server is now compatible with Blazon for Content Suite 16.6. Earlier versions of Blazon for Content Suite are not compatible.

> ⚠️ **Important**
> Blazon for Content Suite follows a different release schedule. Please confirm availability before initiating a Content Suite upgrade.

2.4.3   Brava! Server Components

Brava! Server Components version dependency: Content Suite Viewer now requires the installation of Brava! Server Components 16.6. Earlier versions of Brava! Server Components are not compatible.

Accessibility mode: Users can enable a new Content Server user option "Enable accessibility mode" to launch Content Suite Viewer in a mode compatible with accessibility requirements. This mode has the following qualifications:

- Thumbnail panel is removed to ease keyboard navigation.
- Search is removed since the search results panel does not support keyboard navigation.
- Fit all/width buttons are not available; zoom in/out functionality should be used instead.
- Document title is removed to prevent conflicts with screen readers.

2.4.4   Rendition

Rendition creation for all document versions: Users have a new check box "Include all versions" in the Make Rendition action to create Renditions of all versions of the document within one Rendition step.

2.4.5   Smart View

Tabular search results: On the Search Results page you can switch to a tabular display style, which displays search metadata in columns.

Search results metadata: The Search Results page now displays the metadata that was configured in the search template. This allows the display of custom metadata on Search Results pages.

Custom View Search form as side panel: When you open a Saved Query for which a Custom View Search is configured (in Classic View), the search form is displayed as a side panel which uses the complete vertical space of the browser window. This helps to avoid vertical scrolling in Custom View Search forms.

Best Bet search results: Smart View search results containing Best Bet values are displayed at the top of the search results when they are sorted by relevance.

View state support: Smart View URLs were extended to better reflect the state of the page displayed. For example, if the user navigates to a item's Properties page or changes a browse view's sorting or filtering, this is reflected in the Smart View URL. This helps to avoid unexpected content changes when a user refreshes a page.

Multi-page select: For browse views with many items, you can now select items on multiple pages. For example, if you select two items on page one, then navigate to page two and select another two items, your selection will contain four items. This helps users to execute operations on multiple items which are distributed over different pages.

Multi-select in Target Browse: When you open a Collection to add items, you can now select items in different containers while navigating in the Target Browse dialog.

2.4.6   Browse configuration

Configurable defaults for sorting: Column configuration for a container now allows defaults for the sorting column and sort direction. As with column inheritance, sort defaults will be inherited by descendants of the container unless locally overridden. Defaults apply to both Classic and Smart browse views.

Optional Column inheritance: Column inheritance can now be configured to be optional for descendants of a given container. If the "Cascade" setting is disabled for a Column on a container, the immediate container will display the Column, but sub-containers will not. Sub-containers may still override inheritance with a local Column configuration.

2.4.7   Multi-file Operations

Collection exclusion: Collections are no longer included in Zip & Download, Zip & Email, and Print multi-file operations. The ability to perform multi-file actions on items within a Collection is still available.

Default Zip names: Default names for Zip files are now contextual:

- Zipping a single item: <item_name>.zip
- Zipping multiple items: <parent_container_name>.zip
- Zipping search results: "Search Results.zip"
- Zipping items within a Collection: <collection_name>.zip

2.4.8   Workflows

Stop & Delete action in Smart View: Workflow initiators or owners can now stop and delete Workflows from within the Progress View Widget in Smart View. The new status of "Stopped" Workflows is reflected in the Workflow Tracking Widget.

Open Workflow Map Editor in Smart View: The "Edit" action to open the Workflow Map Editor was added to the action items in Smart View and is available on Map objects in Smart View.

Copying or Moving Workflow Attachments in Smart View: Workflow Attachments can now be moved or copied from within the Workflow Attachment panel with newly added action items. Users can place attachments anywhere in Content Server.

2.4.9   Notifications

Emails: Notification emails will now contain links using the generic /link/ URL pattern. This will allow users to follow the links to their preferred UI (Classic View or Smart View).

2.4.10 Records Management Smart View Disposition Review—Perform Actions

The RM Disposition Review for Smart View now has the option to perform actions. Disposition reviewers will receive an Assignment in the Smart View My Assignments widget. Clicking on the Assignment will display their Smart View Disposition Review. Disposition reviewers can:

- Select one or more items and change the Disposition action
- Select one or more items and perform Disposition actions
- Select one or more items and apply hold
- Access the properties and actions for individual items from the Disposition review

📄 **Note:** The RM Disposition Advanced Review, which uses Content Server Workflow, is not supported in the CS 16.2.9 release.

2.4.11 RM Classifications and Business Administrator

The Classifications Workspace default permissions will be modified for new Content Server installations as follows:

- The Business Administrator group will be added to Classifications and Classification Tree object privileges.
- The Business Administrator group has usage privileges for Classifications and is added to the Classifications workspace ACL with full permissions for new Content Server installations. review

📄 **Note:** Public Access permissions have been modified to See and See Contents for new Content Server installations only.

2.4.12 Records Management Hold Audit

The RM-Update Hold audit log now displays immediate before and after values for the metadata of holds when the hold is renamed.

2.4.13 Records Management WebReports

The OTRMReports, OTPOReports and OTRMSecReports can be configured to display within the Smart View as tiles using Perspective Manager. There is a new release of RM WebReports for:

- Records Management WebReports release, OTRMReports package version 1.7.
- Physical Objects WebReports release, OTPOReports package version 1.7.
- Security Clearance WebReports release, OTRMSecReports package version 1.7.

2.4.14 Content Server Administration

Granting Privileges: A new Admin page "Usage Privileges by User or Group" allows a user to be assigned multiple Usage Privileges. This page simplifies creating various Business Administration roles.

Configuration Scripting: Additional administration pages have been converted to enable export, import and scripting of configuration settings. The new pages are: Warehouse Settings, Configure Storage Rules, Disk Image Creation Settings, Configure Domain, Configure Email Notifications Format, Settings & Default (Reminder).

Business Administration of Multilingual Metadata: Business Administrators with the Business Administration: Data Policies Usage Privilege are now able to access the Multilingual Metadata Admin page.

Notification SMTP authentication: Notification SMTP authentication previously required user names to be fully-formed email addresses. The Default From Address value is now used when email is sent. This will succeed if the SMTP user name is associated with the Default From Address on the mail server, or the SMTP user name is permitted to send email on behalf of the Default From Address email account.

API requests in Summary Timings: Summary Timings logs will now uniquely identify REST API calls, including parameters passed to these calls. This will allow consumers of summary timings to group and analyze REST API requests more accurately.

Java Command Parameters: The implementation of the new Garbage Collection methods in OpenJDK result in a search query performance degradation relative to the Java 8. New installations now include command line parameters for Java to force use of Parallel Garbage Collection as a performance optimization. For in-place updates, administrators can add this parameter on the Configure Search JVM administration page.

Search Index Backup: A new implementation of Index Backups is available, accessible from the "Backup" tab of the Update Distributor Properties page. The new implementation creates complete index backups, coordinated by the Update Distributor. The old Backup process

remains and will be removed in the next update. If creating a backup of the Search Index prior to updating incremental backups should not be used.

Dataflow Control Rules: The interpretation of counts for "entire dataflow" has been changed to mean the sum of iPools in all steps. Previously, the rule required the count to be satisfied in every iPool area.

Query Suspension: This new configuration setting for the Search Federator will ensure that brief pauses in search queries occur from time to time. Without a break in search query execution, systems running continuous searches will eventually block indexing updates from being applied.

SAP HANA Trust: Now conforms to the HANA Trust program, adding application ID VBR_OpenText-CS_HRA to the database connection string.

eLink Administration Pages: The eLink Configuration and eLink Advanced Settings Admin pages have been upgraded to enhance security and meet WCAG 2.0 AA / BITV accessibility requirements.

Provider Blob Deletion Failure Retry Agent: The Provider Blob Deletion Failure Retry Agent is now limited to the removal of 1000 items per run. If more than 1000 items exist for processing the remainder will be deferred to the next scheduled agent run.

2.4.15 Installation and Updates

WebReports Workflow Extensions: This module is now delivered as part of the basic installation package to make installation and system management easier. Licensing is unchanged.

Data Isolation: To simplify in-place upgrades and facilitate container deployments, custom report views, subtags, and templates used by ActiveViews and WebReports are now located in the <OTHOME>\appData directory. Content Server Applications (CSAPPS) will now deploy subtags to the \appData\webreports\subtags directory. Application of this update will automatically migrate existing custom files to the new \appData location. This new location will be preserved when applying future updates.

2.4.16 Transport

Multilingual Metadata language mapping: Transport Packages can now have their multilingual metadata languages mapped to alternative languages in the destination system. This will allow language discrepancies between the source and destination systems to be resolved prior to deployment.

Improved support: Column "Availability: Locations" and "Workspace: Used for Sorting and Filtering" settings, and WebReports "Run As" user definitions are now retained during transport. Handling of Categories with differing version numbers and Categories containing sets has been improved.

2.4.17 Search

Similar Text Blocks: The full text query component now provides a "Similar Text" option. This feature allows arbitrary blocks of text to be entered which is transformed to a query using the TEXT operator in the query language.

Filter Display Controls: The Display Options for Search Templates now allows the Search Filters to be specified for the associated searches. This allows optimal presentation of Search Filters versus the default global settings.

Enhanced Proximity: A new query operator ("span") is available for full text search of the body text which provides the ability to search for multiple terms within a defined range of search tokens. This operator is useful for discovery, classification and investigation applications. For example:

span (10, (tom or Thomas) and (cook or cooke) and pattern (phone 5198887111))

The above would locate documents containing variations of tom, cooke and a phone number within a distance of 10 search tokens.

2.4.18 REST API

Additional support has been added to the Content Server REST API:

- Versions
    - Promote to major: POST /api/v2/nodes/{id}/versions/{version_num}/promote
    - Purge: DELETE /api/v2/nodes/{id}/versions, with the number_to_keep parameter
    - The /api/v*/nodes/{id} responses now include a "versionable" attribute indicating if the node is a versionable object

- Member search:
    - Pagination is now available for v1 member search
    - GET /api/v1/members?page={page_number} returns a page of 10 items
    - GET /api/v1/members?page={page_number}&limit={page_size} allows for custom page sizes
- Compound Document Releases and Revisions

- - o Lock: PUT /api/v2/nodes/{id}?reserved_user_id={userid}
    - o Unlock: PUT /api/v2/nodes/{id}?reserved_user_id=null
  - Node filtering
    - o New filter available for non-container nodes
    - o GET /api/v*/nodes/{id}/nodes?where_type=-3 returns only items that are not containers
  - Node actions
    - o POST verb additionally supported for use with /api/v2/nodes/actions
    - o Behaves the same as GET
    - o POST allows clients to avoid excessively long URIs
  - Node (update/move/copy)
    - o Server responses now include information about the new node state
  - Recently accessed
    - o List of items can now be restricted to activity beneath a given container
    - o GET /api/v2/members/accessed?where_parent_id={parent_folder_id}

User passwords: Password changes can now only be completed by users with User Administration Privileges.

2.4.19 WebReports

Smart View Nodes List WebReport widget: The expanded view of the Nodes List WebReport widget now offers a Rename action for each item in the node list.

Add Major Version permission: Support has been extended to the PERMCHECK and PERMACTION subtags for ADDMAJORVERSION.

Secure REST client connections: The LL_WEBREPORT_RESTCLIENT tag now offers a SECURE directive for establishing HTTPS connections.

Support Asset directory: A new [LL_REPTAG_SUPPORTASSETDIR /] tag has been added to reference the Support Asset virtual directory, as configured by an administrator. By default, the value is /appimg/.

2.4.20 Content Sharing with OpenText Core

Enhanced Usability: Added the Share Initiator whenever a user hovers over the Shared icon. In addition, added the Share Indicator at the folder level.

OpenText Core Groups: Added the ability to share from Content Server to OpenText Core Groups.

Content Sharing Auditing: Added audit entries in Content Server whenever shared documents are downloaded or viewed in OpenText Core.

Content Sharing Administration: Created a Content Sharing Administration privilege. Users who have that privilege can stop the share, add share participants and change user roles.

2.5   Changes – 16.2.8 (March 2019)

2.5.1   Java – OpenJDK 11.0.1

Content Server now uses OpenJDK 11 instead of Java 8. There are no changes in customer licensing or our support of products with this switch. OpenJDK and selected Java classes are included in the install and upgrade packages.

Java 8 includes a number of Java classes that are not part of the standard OpenJDK distribution. If you have custom or 3rd party extensions to Content Server written in Java, you should review the use of Java classes by your application, and you may need to separately install any that are missing.

> ⚠️ **Important**
>
> Content Suite Viewer, available using the additional Brava! Server Components install, does not support OpenJDK 11. Administrators cannot install Brava! Server Components 16.4 onto a Content Server system running OpenJDK 11.
>
> If Tomcat is used, it must also be set up using OpenJDK.

2.5.2   Simplified Installation and Updates

2.5.2.1   Directory structure and installation packaging

- The <OTHome> directory structure has been changed to better separate application and configuration data. There is a new "\core" folder where key components are now located.
- Module numbering dependencies have been simplified for standard modules. They are now located at \core\module folder and the new directory structure no longer includes the module version. Also, the version information is no longer included in the opentext.ini file for standard modules.
- A pre-defined set of directories (core, bin, cgi, jre, lib, licenses, ojlib, res) will now be deleted and replaced when updates are applied by System Center, making sure that old files or libraries are removed from system.

- The update package now includes a complete set of application files. Historically, only files that had changed since initial product release were included.
- The technology to build the installer for Windows platform was replaced. If you are running the installer silently, you no longer have to extract the MSI from the EXE before you can pass the command line arguments.

2.5.2.2   *Template Workspaces and Connected Workspaces are part of Content Server setup*

The modules which comprise Template Workspaces and Connected Workspaces are now incorporated as part of the base product installation. These modules no longer need to be installed and patched separately and will be maintained as part of the regular Content Server updates: Barcode, Calendar Attribute, Case Management, Case Management Base, Case Management Enterprise Connect Plug-in, Case Management Base Roles Wizard, Partner Database, Document Templates, Interview, Connected Workspaces. Note that not all customers are licensed to use these modules, so they are disabled by default in new installations until activated by an administrator.

CustomizationsRT has been discontinued. The portions of CustomizationsRT which are required by Template Workspaces have been incorporated into the Content Server baseline product.

2.5.3   Support Asset Volume

A new volume is available from the Enterprise menu, the Support Asset volume. The purpose of this volume is to help you manage files that historically would be placed in the Support directory, allowing them to be accessible by the Web Server. These assets are typically images, HTML, CSS and JavaScript that are used to present information to users often in conjunction with Appearances, Custom Views, WebReports, and add-on modules.

In operation the files added to the Support Asset Volume will be replicated to an appropriate location on disk for every front-end server. This feature ensures that Support Asset files will survive upgrades. In hosted environments the Support Asset volume allows customers to deploy and manage these assets without having direct access to the disk/server. Other benefits include audit trails, consistent configuration on every front-end server, and the ability to roll back changes by deleting a version of a support asset.

Applications using Support Assets may need to change their link addresses to leverage the value of this feature. Configuration of directories and web server mappings are exposed on administration pages in the Support Assets Volume section.

2.5.4   Administration

Several administration pages have been converted to support import, export and scripting of configuration settings. These include:

- eLink Global Workflow Settings
- Configure Department Selection
- Configure Versions Folder
- Configure Group Settings
- Administer Renditions

Changes to the eLink Global Workflow settings page no longer require a Content Server restart.

Configuration settings previously stored in the [Configure Promoted Functions] section of the opentext.ini file are now stored in the database.

To optimize performance there are changes in how the admin user may be used. A new group with ID 999 called "Content Server Administration" has been created, with "admin" as the only user in the group. The admin user can no longer be added to regular groups (the "bypass" privileges still allow the admin user to access everything). A database upgrade step will adjust existing groups during the update.

The terminology "Licensed Users" in the sysreport and related locations has been changed to "Product Key Count". This is intended to reduce confusion about licensing since the value in question is used in different ways depending on the type of license.

2.5.5   Short Link Redirect

To help customers adopt the Smart View a new feature allows Short Links created in the Classic View to be redirected to their equivalent Smart View page. Short Links are historically those generated for sharing, and can be identified by the presence of one of these patterns in the URL:

```
/open/
/properties/
/overview/
/link/
```

A Configure Links admin page sets the global defaults, and a Preference setting allows a user to personalize whether they should be redirected to the Smart View when selecting one of these links.

2.5.6   Maximum Reserve Time

A new feature allows administrators to specify the maximum number of days that an object may be reserved. When this time is exceeded, the object will be unreserved and the event recorded in the audit records. This feature addresses challenges that customers experience when users forget to unreserve objects or go on leave.

2.5.7   Gender Options

The User Profile page includes the ability for a user to set gender as male or female. A new capability allows administrators to create additional gender values that are exposed on this page.

2.5.8   Transport – Categories

Support for Transport of Categories has been improved. Accuracy of dependency detection has been improved by adding version, number of attributes, attribute internal IDs and types of attributes into the matching criteria. User Picker attributes can now automatically match user/group names. When manual intervention is necessary a new comparison tool helps with understanding variations between source and destination categories.

2.5.9   Asynchronous Container Updates

Concurrent add or delete operations on a container can potentially block one another due to contention on database resources when updating the Child Count, Modified By and Modified Date fields on the container. This update mitigates the problem by making these updates Distributed Agent tasks for operations involving more than 1000 items. Use of this feature is configurable by the administrator.

2.5.10 Workflow

Performance improvements: To improve the performance of Workflows and the Workflow widgets a new table has been introduced to store regularly queried information. To initially populate this new table, the database requires updating first. This process needs to be performed only once. All subsequent workflow information is then automatically populated into the summary table. To learn more about the initialization refer to the "Workflow Administration" manual or the Online help chapter. 1.4

Workflow Tracking / Monitoring at workflow level: The Workflow Tracking and Monitoring Widgets have been reworked to show workflows on workflow level instead of the step level. This means that all steps belonging to a workflow will now be shown grouped together under the workflow, which will only show as a single line in the widgets from now on.

Smart View Form instructions: Smart View forms can now include instructional texts for users filling out forms. This functionality can be activated on every attribute field in the Smart View form editor.

2.5.11 Smart View

Edit Page: editing a perspective with the Edit Page command now uses Smart View technology and no longer the existing Perspective Manager which is based on WebReports technology. This provides a seamless editing experience for users who have the needed

privileges and permissions to edit a page. Editing the following widgets is not supported by the Edit Page functionality available in 16.2.8:

- Connected Workspaces widgets
- Content Intelligence: widget carousel
- Custom widgets that use custom property types to edit widget options.

Zip & Download: a Download command is now also available when a folder or multiple items are selected. With this command the content of multiple documents can be downloaded in one zip file. You can also download documents in subfolders of a selected folder. The structure of the subfolders is reflected in the downloaded zip file.

Drag & Drop to subfolders and documents: By dragging one or more files on a subfolder you can upload the files directly into the subfolder without having to open it. When you drag a single file over an existing document, the file can be uploaded as a new document version.

Collecting Items: A new Collect command was introduced that allows you to add selected items to a collection. The command is available for both browse views and search results.

2.5.12 Email Services – Smart View

Display of email specific metadata properties when browsing an email folder using the Smart View.

2.5.13 Zip and Download (Multi-file Output)

The Multi-file output features have been upgraded, with emphasis on the Zip and Download capabilities. Changes include:

- Including sub-folders
- Increased size limits
- Support for Zip and Download in the Smart View
- Manifest in the Zip file output, including skipped item information

In the Smart View Download will automatically Zip contents when Containers or multiple files are selected.

2.5.14 Permissions Explorer – Smart View

This new feature of the Smart View allows a user with appropriate privileges to browse Content Server with a view optimized for the display and editing of permissions. Capabilities include:

- User and group permission display
- Permission filters to display to objects with a specified permission.

- Browse filters to refine objects of interest
- A visual indicator to highlight objects with permissions that differ from the parent object
- Graphical presentation for quick review and display of permissions
- Detailed view with checkboxes for applying advanced permission changes
- Navigation within the Enterprise Workspace
- New usage privilege "Permissions Explorer" for access control

2.5.15 Records Management Smart View Disposition Review

The RM Disposition standard review is now available in the Smart View. Disposition reviewers will receive an assignment in the Smart View My Assignments widget. Clicking on the assignment will display their Smart View Disposition Review. Disposition reviewers can:

- Select one or more items and add comments
- Select one or more items and change the review decision and add comments
- Sort columns, for example to sort by review decisions or actions
- Perform the Finish Review action once they have completed their review
- The Standard Review process type of two sets of disposition reviewers are supported

📄 **Note:** The RM Disposition Advanced Review, which uses Content Server workflow is not supported in the Content Server Records Management 16.2.8 release.

2.5.16 Connected Workspace Smart View Discussion Widget

Discussions can be used inside Connected Workspaces to foster collaboration between subject matter experts. They can collaborate with their peers directly in Smart View, using a new widget that is being introduced with this release. This widget is exposing a new interface to Forum objects in Content Server. Note that this widget is limited to the usage within Connected Workspaces now.

The widget shows the latest questions in an overview, allows searching discussions, asking questions, following discussions and responding to questions. Searching supports a new autotype search bar showing suggested answers in place. Diving deep into the responses and refining the search while comparing with other questions is part of the integrated user experience. Users can follow an entire discussion or individual questions and will get notified via email in case of updates.

2.5.17 Content Sharing with OpenText Core

Introduced full bi-directional synchronization of folders and documents between Content Server and OpenText Core. In Content Server 16.2.8 the Content Sharing user features have been updated as follows:

- Share a single document to OpenText Core participants and ensure new versions of documents in Content Server are automatically synchronized to OpenText Core. In addition, synchronize new versions added in OpenText Core back to Content Server
- Share a Content Server folder to OpenText Core participants and ensure all subfolders and documents are shared
    - Continuously monitor the shared folder in Content Server and synchronize any newly added folders/documents to OpenText Core.
    - Continuously monitor the shared folder in OpenText Core and synchronize any newly added folders/documents back to Content Server

In addition to bi-directional synchronization of shared documents and folders the following operations are also synchronized on shared content:

- Rename of a folder or a document in Content Server is synchronized to OpenText Core
    - Subsequently, rename of a folder or a document in OpenText Core is synchronized back to Content Server
- Delete of a folder or a document in Content Server deletes the file in OpenText Core
    - Subsequently, delete of a folder or a document in OpenText Core deletes the folder or document in Content Server
- Reserve of a document in Content Server locks the file in OpenText Core
    - Subsequently, a lock of a document in OpenText Core reserves the file Content Server

Administrators should read the Content Sharing Administration Guide, which is available on My Support

2.5.18 Content Server and Microsoft Office Online Server

Added support for document web editing and co-authoring directly from Content Server using Microsoft Office Online Server.   Microsoft Office Online Server is downloaded and installed on a customer's premises and is not to be confused with Office Online Service which is hosted by Microsoft. Integrating with the Office Online Server requires downloading and installing the Office Online Broker from OpenText. For more information on the Content Server Integration with Office Online Service go to section 2.13.21 in this document.

2.5.19 Content Server Syndication

The Content Server Syndication is now available and the feature can be enabled by applying the respective license in the primary and remote site(s).

Note: Although Content Server Syndication is packaged with Content Server a valid license must be purchased to use Content Server Syndication in production environments. Also, the Content Server Syndication feature is not currently supported by xECM Platform.

2.5.20 REST API

Additional support has been added to the Content Server REST API:

- Additional Node Attributes (get/set)
  - Accessible via the **systemattributes** field group of a nodes response
- Compound Document Releases and Revisions (create/list/get/delete)
  - List: GET /api/v2/nodes/{id}/releases
  - List contents: GET /api/v2/nodes/{release_id}/nodes
  - Create revision: POST /api/v2/nodes/{id}/revisions
  - Create release: POST /api/v2/nodes/{id}/releases
- Nickname (get by nickname/update)
  - Retrieval: GET /api/v2/nicknames/{nickname}/nodes
  - Update: PUT /api/v2/nodes/{id}/nicknames with **nickname : newNickname** (or {id} to reset)
- Email-specific fields within Email Folders
  - GET /api/v2/nodes/{email_folder_id} provides email_subject, email_to, email_from, email_sent_date, and email_received_date as columns
  - GET /api/v2/nodes/{email_folder_id}/nodes provides values for each child Email
- Creating user with eDiscovery rights
  - PUT /api/v*/members with **privilege_grant_discovery : TRUE/FALSE**
- Edit Permissions action (**editpermission**) to determine if a user is allowed to edit permissions for a given node
- Version Control information for nodes
  - Node properties includes an **advanced_versioning** flag to indicate if the node is configured to use major/minor versioning

2.6   Changes – 16.2.7 (December 2018)

2.6.1 License Files

In version 16.2.0 OpenText introduced a new license key technology. Existing older license keys were supported for backwards compatibility. However, starting in this release (16.2.7) the old format is no longer supported.

> ⚠️ **Important**
>
> If you do not already have license keys that were generated after the introduction of Content Server 16.2 (March 2017), you must obtain new license keys that are compatible with update 16.2.7 or later.

2.6.2 Administration

A new configuration page has been added to allow administrators to control settings that are used by the Apache Runtime library to connect with Memcached.

The controls managing the behavior of delete operations on the "Configure Operations for Copy, Delete and Move" admin page are no longer relevant. The controls are removed, and the page renamed to eliminate the Delete reference.

Logging configuration for Summary Timing logs has been improved. The existing Summary Timing logs are renamed to "Web Server Client Timing Logs". A new section for "Thread Summary Timing Logs" has been added.

The logging configuration page now includes options for controlling the presence of SOAP API parameters and responses in thread logs. The wantLAPILogs entry in the opentext.ini file which previously controlled this behavior is now ignored.

Connect logs are now always enabled at minimum debug level 2 during startup.

2.6.3 Internals

The compilers for C / C++ code have been updated, and corresponding distributions of runtime libraries are now included. If you are updating your environment using System Center, it will install the required runtime libraries as part of the update process.

The secure communications libraries have been upgraded to OpenSSL 1.1 to address potential security vulnerabilities.

The POCO libraries have been upgraded to 1.4.6g to allow secure email connections and improve security.

2.6.4 Bootstrap

Bootstrap is a one-time configuration process that runs on first startup to perform basic configuration tasks. Bootstrap facilitates containerized automated deployment and has been extended to provide better control over the creation of an Admin Server. Alternatively, the Hostname and Port of an existing Admin Server can be modified.

When generating a sample bootstrap.xml file, a new option has been included to provide descriptions of each element in the file.

2.6.5   Concurrent Metadata Changes

Warning users when they are concurrently editing metadata was added in the previous update for the Classic View properties pages. This update extends the protection to editing metadata in the Smart View properties of an object and renaming objects in the browse widget.

Changes to Records management metadata in the Smart View are now protected to ensure an awareness of editing conflicts for users.

2.6.6   SAP HANA 2

With this update, support for SAP HANA 1.x is deprecated, and support for SAP HANA 2 is added. In addition a number of improvements to HANA support have be implemented, including:

- Removing the schema creation option, since with HANA the creation of the DB User is sufficient.
- Optimizations of WebNodes view for HANA.

2.6.7   Smart View

A new thumbnail Grid View for browse is available. It allows users to easily find items which are best identified visually, like images. All standard features of the List View, like creating new items, uploading documents or single/multiple item operations are supported in the Grid View. An administrative setting in the Smart View administration page allows the Grid View feature to be disabled.

An action menu with basic actions like opening item properties or navigating to the parent container of an item was added to the small Favorite and Recently Accessed tiles.

When the Browse View is maximized as the sole widget on a page, the presentation has been adjusted to make use of more screen area.

If a website is imported into Content Server, relative links within HTML pages to other pages and images stored in Content Server now work with the Smart View.

2.6.8   Columns

A Reserved By fixed system column is now available for display in the Browse View. When displayed, each reserved item will display the user or group holding the reservation, with a link to the profile of the user or group.

2.6.9 REST API

Category Inheritance rules for a container can now be programmatically retrieved and set. Rules are surfaced as a *categories_inheritance* field in /nodes via GET. Inheritance can be disabled via DELETE or enabled via PUT against */nodes/{id}/categories/{catid}/inheritance*.

2.6.10 Start Workflow from Business Workspaces

In Smart View, the Start Workflow action has been extended to be available for Business Workspaces. The configuration now includes a corresponding item to allow similar settings as for other objects like documents or emails.

2.6.11 Authenticate for Workflow tasks

Workflow steps can be configured to require authentication before the action is finally executed (like Start Step, Send On or Forward). This functionality is now available for Workflows in Smart View.

2.6.12 Records Management

There is a new Records Management WebReports release, OTRMReports package version 1.6. The OTRMReports can be configured to display within the Smart View as tiles using Perspective Manager. See Install and Upgrade section for important OTRMReports upgrade note.

2.6.13 Physical Objects

There is a new Physical Objects WebReports release, OTPOReports package version 1.6. The OTPOReports can be configured to display within the Smart View as tiles using Perspective Manager. See Install and Upgrade section for important OTPOReports upgrade information.

2.6.14 Security Clearance

There is a new Security Clearance WebReports release, OTRMSecReports package version 1.6. The OTRMSecReports can be configured to display within the Smart View as tiles using Perspective Manager. See Install and Upgrade section for important OTRMSecReports upgrade note.

2.6.15 Content Server Syndication

The Syndication feature is still included in this release as a trial feature, giving customers (especially Remote Cache users) the opportunity to try the feature and discover its benefits.

Note: Although Content Server Syndication is packaged with Content Server, a valid license must be purchased to use Content Server Syndication on production environments.

2.6.16 Configuration Scripting

The coverage for importing and exporting administration settings was extended in this release. Notable additions are Storage Providers and Archive Storage Provider settings.

The export settings page was enhanced with the following features:

- Lean file format: only attribute names and values are included in the exported file
- Comments: ability to include comments in the exported file

2.7 Changes – 16.2.6 (September 2018)

2.7.1 Cluster Management

OpenText System Center is the next generation solution for Content Server patching and updates. Some of the featured capabilities are:

- Management of multiple environments
- Better online/offline support
- Proper proxy support
- Enhanced user experience
- Self-updating
- Not reliant on browser to remain running when executing tasks
- Content Server no longer needs internet access to download patches

Starting in this release, the Cluster Management tool is replaced by System Center, which must be installed to apply Content Server patches and updates.

> ⚠️ **Important**
>
> If you are running a previous Content Server version where Cluster Management is still available, the 16.2.6 (September 2018) and future updates will not be available in Cluster Management.
>
> Please install System Center to continue applying Content Server updates (including 16.2.6) and experience the benefits offered by the new solution.

For more information about System Center, please access the product page on OpenText My Support.

2.7.2 Search Pattern Matching

A new search query operator is introduced for use with pattern matching of full text content. Intended for eDiscovery and personal privacy applications, the feature is configured for phone numbers, credit cards and social insurance numbers. Use requires corresponding configuration of the Document Conversion Server pattern normalization feature. The search operator is available in "complex query" mode of advanced search. Example uses include:

```
… and ( pattern(phone, *8887111) or … )…
pattern(ssn 876789767)
pattern(cc 45061234*)
```

2.7.3 Auditing

The display of permission changes in audit records has been extended to show human readable before and after values. Previously, numbers were displayed which were correct, but not meaningful to a user.

A new option is available to allow performing audit queries for operations performed by deleted users. The feature is protected by a Business Administration privilege. When permitted, a checkbox in the "Select Performer" dialog will display deleted users.

2.7.4 Configuration Scripting

A new feature supports importing and exporting of selected administration settings, by means of a REST API or an admin page. Exported configuration settings are represented in an XML file. This capability is designed to help automate deployment and configuration of Content Server. The feature is accessible from the administration home page as "Import and Export Configuration Settings". Over 300 configuration settings are initially supported.

2.7.5 Bootstrap

The recently introduced "autoconfig" feature has been renamed to bootstrap, to reduce potential confusion with configuration scripting. The sample bootstrap.xml generator has been extended to include all the optional settings.

2.7.6 Accessibility

Market demand and government requirements for compliance with the WCAG 2.0 AA accessibility guidelines has resulted in several changes in this update.

Most notably, the Smart View has been updated to meet the WCAG accessibility requirements.

There is also a new framework for developing administration pages that makes compliance with WCAG easy to achieve. The first set of administration pages has been converted to use these tools, resulting in minor refresh of their look and feel. Over time, more admin pages will be converted.

At the same time, minor changes to the classic interface for Content Server have been made to provide better accessibility compliance, ensure valid HTML generation, and improve consistency for the user. For example, gradients have been removed to ensure color contrast, and standard colors and button style are being promoted. Classifications, Records Management, Physical Objects and Security Clearance multi-select action icons have been upgraded to the high contrast theme.

This has necessitated several changes in the CSS used to build the pages. If you have customizations or modules that leveraged the CSS provided by OpenText, there may be minor visual anomalies and you may need to make small adjustments to compensate for these changes.

2.7.7   Wiki Smart View

The toolbar in edit mode was changed to a floating toolbar, providing a smooth transition between viewing and editing. For wikis containing sidebars an additional step to select either the content area or the sidebar area for editing is included. The toolbar actions change dynamically when a table is selected. A default style for tables was introduced, as well as a responsive mode for large tables on small screens. A new "Insert Content Server link" action allows for inserting references without copying and pasting URLs.

2.7.8   Smart View

Editing permissions is now also available in Smart View. You can grant users/groups access to items, remove access, change the ownership, edit public access and apply permissions to sub-items when you edit the permissions of a folder.

Editing perspectives can now be triggered directly from the Smart View user menu. Users who have the appropriate permissions no longer need to navigate to the Content Server Administration to edit a perspective. They can now use the "Edit Page" command which opens the Perspective of the current page for editing.

Dark page header: The Smart View page header now shows a dark background color, which integrates it better with the blue page background. If needed, the existing light header can be enabled in the Smart View administration page.

Date/Time format: in the Smart View administration page you can now specify that Smart View uses the date/time format settings that are defined in the Content Server administration.

Accessibility support according to the WCAG 2.0 AA standard has been extended. For this purpose, HTML markup and CSS changes were made that might impact some CSS styling overrides. Please test your styling overrides carefully as there might be places where adaptations are needed.

Perspectives now support multilingual options in widget configuration strings, as well as multilingual tab names when using tabbed perspectives.

2.7.9 Concurrent Metadata Changes

When multiple users concurrently attempt to edit properties of an item, the last user to submit their changes may unknowingly overwrite the changes submitted by the other users. To protect against edit conflicts, users are now informed when metadata has been changed since the page was first loaded. This allows the user to review the current metadata and modify their values before resubmitting. This warning is presented when submitting changes via the General, Category, and Records Detail properties tabs in the Classic view.

2.7.10 Classification Workspace

Within the Classifications workspace classified or associated items can now display as listed items or as search results using the Advanced Search interface. To configure the way items display go to Classifications > System Settings page and select Browse [default] or Advanced Search. Items will no longer automatically display for standard classifications, RM classifications and provenances. Select View Content Server Objects from the functions menu to display items in the browse view or an advanced search page will display prepopulated with the appropriate search criteria. Bulk actions can be performed on listed item, i.e. apply Hold.

> **Note:** Items will no longer automatically display for standard classifications, RM classifications and provenances. Select View Content Server Objects from the functions menu to display classified or associated items.

2.7.11 Records Management Metadata Export

The following metadata fields can be selected for inclusion when exporting disposition results:
Physical Objects: From and To Dates, Offsite Storage ID
Email: To [email address], From [email address], Email Received Date, BCC, CC, Email Subject, Sent Date
Security Clearance: Security Clearance Level with Name and Supplemental Markings with Description

> **Note:** All date fields export in the Content Server specified date format.

2.7.12 RM Business Administration

The Business Administrators role (and other users and groups granted usage privileges) can now edit the Classification, RM, PO and SC system administration pages, performing all actions excluding settings that require a server restart or can only be modified by the Admin user.

2.7.13 Audit Interests

The following new audit interests were added to accommodate Business Administrators or other users who may now be granted usage privileges to these interests:
Classification - System Settings Changed
Classification - Manage Pending Objects
Classification - Purge Rejected Classifications
Classification - Taxonomy Export
Classification - Taxonomy Import

Security Clearance - Security Clearance Level Code Edited
Security Clearance - Supplemental Marking Code Edited
Security Clearance - System Settings Changed
Security Clearance - User Session Parameter Added
Security Clearance - User Session Parameter Deleted
Security Clearance - User Session Parameter Edited

2.7.14 Security Clearance Metadata

When not configured, the Security Clearance module metadata fields will be hidden from use in the Smart and Classic views. Users with no assigned security levels and supplemental marking will not see the Security Clearance tab in the Smart view. In the Classic view, they will not see the Security Clearance function menu option on the item or actions in a collection or search.

A new Security Level Name data source can be used to display the Security Clearance Level name in a custom column to help clarify the Security Clearance Level's numerical value.

2.7.15 APIs for Classification and Records Management

Using web services, the "Inherit" option can be disabled (unchecked) for a container type item that has a standard classification assigned.

New REST API to return an item's RSI schedule information is now available.

2.7.16 Creating Project Templates

Project Templates failing to populate Records Management, Security Clearance and cross-reference metadata is now fixed.

2.7.17 Content Server Syndication

Content Server Syndication is designed for customers who have offices in multiple locations. It allows content to be *syndicated* (pushed out) from the primary site to remote sites.

Content Server Syndication is built to be the next generation of OpenText Remote Cache. It overcomes many of Remote Cache's limitations and improves the performance of browse operations.

Syndication is included in this release as a "trial" feature, giving customers (especially Remote Cache users) the opportunity to try the feature and discover its benefits.

Note: Although Content Server Syndication is packaged with Content Server, a valid license must be purchased to use Content Server Syndication on production environments.

2.7.18 Workflow Status Monitoring

A new Smart View widget for "Workflow Monitoring" has been introduced. It is available through Perspective Manager for the use on landing pages to display workflows defined by filters. This allows the creation of monitoring pages to show all workflows of a certain type or from/for specific users.

2.7.19 Distributed Agent Task Prioritization

Busy systems may have high-priority tasks delayed by long-running low-priority tasks. To solve this, distributed agent workers can now be configured to only run specific task types, allowing for dedicated resources for important tasks.

2.8 Changes – 16.2.5 (June 2018)

2.8.1 OTHOME directory

Changes are being made to the directory structure to align with "Container" deployment requirements. In this update we are introducing:

- Application Data: directory for persistent data and will not be touched on upgrades.

    - Each module can define a "namespace" inside the folder

    - $FileUtils.GetAppDataDirWithName ("namespace")

- Temporary Data: directory for temporary data

    - Similar to what we have today, but modules can now define a "namespace"

    - $FileUtils.GetTempDirWithName ("namespace")

The base "temp" and "appdata" directories are by default inside of OTHOME, but they can be changed by editing the opentext.ini settings "appDataDir" / "tempDir". A proper administration page will be available soon.

2.8.2   Search pattern injection

The Document Conversion Server features for identifying patterns in content has been enriched. In addition to some bug fixes, a new capability that allows adding normalized numbers into full text simplifies searching for Personal Information such as phone numbers, credit cards. For example, if patterns are defined to identify phone numbers

Tel: +1-519-888-7111 Toll Free Canada/USA: 1-800-499-6544

Would be indexed as:

Tel: +1-519-888-7111 p15198887111p Toll Free Canada/USA: 1-800-499-6544 p18004996544p

This facilitates searching for phone numbers in a standard form, such as *8887111p.

2.8.3   Search TEXT Operator

A new search operator is now exposed which can be used in the LQL search query language of Advanced Search. The TEXT operator is given a large block of text, and uses heuristics to develop a query with high matching probability. The TEXT operator is optimized for similarity searches including Classification and eDiscovery.

2.8.4   Search Configuration

There are new configuration settings for managing recent enhancements to the search engine. A Reverse Dictionary can be configured to optimize the performance of left-truncation search terms (e.g. *ington). There are also logging settings for the new "Index Transaction Logs", which are designed to help minimize time and operations for repairing an index should there be disk corruption.

2.8.5   Parallel DB Upgrade Operations

Content Server can now suggest that the database server use parallelism during upgrade steps. Depending upon the step and the characteristics of the database, this can potentially

reduce time to run the database upgrade significantly. There is a checkbox on the upgrade page that allows you to opt out of parallelism.

2.8.6   Node Caching

A new optimization will cache DAPI nodes for the duration of a request. Operations that make frequent references to a node should see performance improvements. A new control is available to disable this feature on the Performance Settings administration page.

2.8.7   Edit Workflow Attachments

Attachments to Workflows can now be edited using Office Editor.

2.8.8   Smart View

A simplified version of the user profile is available for customers who do not use Content Server Pulse. It displays user information on a single page and uploading profile pictures can be disabled. For users without a profile picture initials are displayed on the user profile page.

Browse and search performance was improved. The concept of promoted actions was introduced to reduce the server load generated by retrieving the available actions in browse view. Only promoted actions are retrieved by default for all items in the list, non-promoted actions are only retrieved for items a user is working with. On search result pages the available actions are now also retrieved asynchronously, to reduce the time before a search result page is rendered.

A topic of focus was accessibility support according to the WCAG 2.0 AA standard. For this purpose, HTML markup and CSS changes had to be done which might impact some CSS styling overrides. Please test your styling overrides carefully as there might be some places were adaptations are needed. Support for WCAG 2.0 AA is expected to be complete with the September 2018 update, but most of the needed changes are delivered with the June 2018 update.

2.8.9   External File Sharing

- Retrieve the OpenText Core audit log and store it in Content Server when revoking the document share.
- Renamed the external file sharing audit events.
- Improved OpenText Core user look while adding participants to a share.

2.8.10 LiveReports

There is now an Admin Page to control the use of LiveReport database connections. Customers are encouraged to restrict access using database permissions on the secure DB connections, and switch LiveReports to use these alternative connections. No keyword

checking will be done on these connections as the DBA can apply fine-grained permissions to control whether users have the right access. The default Content Server connection will still have keyword checking applied. For new reports there will be no way to switch this off, and for reports that already have the check box ticked to allow DB updates, the setting will be maintained and respected for backwards compatibility. Customers are encouraged to migrate these reports to use secure connections.

2.8.11 Perspective Manager

Perspective Manager is now usable without a mouse. Actions are performable with the keyboard only, for accessibility.

2.9 Changes – 16.2.4 (March 2018)

2.9.1 Custom Columns

Custom columns can now be transported between systems using the Transport feature of Content Server. Columns have a Data Source dependency and are only supported for new item creation. The dependent data source (e.g., a Category Attribute) must already exist in the destination system prior to deploying the custom column.

2.9.2 Facet Trees

Facet Trees can now be transported between systems using the Transport feature of Content Server. Facet Trees have dependencies on Facets and are supported for both new item creation and updates to existing Facet Trees.

2.9.3 Browsing

Browsing into a container with a large number of direct child items can have an adverse effect on the performance of the system. To address this possibility, administrators have now been provided with a control on the Configure Features > Configure Container Options administration page to limit the browsing of large containers. If enabled, the control will present users with a warning message in place of a container listing, with the option to display only sub-containers. Items can still be added to a limited container and documents within the container are still accessible via facets or search.

2.9.4 Minor Versions

A number of changes have been made to address usability issues with Advanced (major/minor) Versioning.

1) A new Advanced Version Type setting is now available on the Administer Item Control admin page with an option to enable "Enhanced Advanced Versioning". This new mode will cause the browse view of the Classic view to describe each listed document based on the most current version the user has access to (major or minor). This affects thumbnails, document links and actions (including short links), and various browse Columns that display document metadata.

   Note: Due to architectural restrictions, some Custom Column types do not support the new model (e.g., Version and Category Attribute Columns).

2) The "Promote to Major" action is now directly available in the Function menu of documents if "Enhanced Advanced Versioning" is enabled. The action acts on the most current minor version of the document.

3) A new Custom Column data source is available, titled "Advanced Version". If a Column based on this data source is exposed in the browse view, the current advanced version number will be presented. This Column respects the "Enhanced Advanced Versioning" model, and will show information based on the user's permission to see minor versions. Various Column replacement tags are available for designing clickable Column values.

   Note: The legacy Version Column is no longer automatically created in new installations of Content Server.

4) "Edit Permissions" is no longer required to Promote to Major or add a new major version to a document using Advanced Versioning. Instead, a new "Add Major Version" permission is now available for this purpose, allowing for a more restricted permission set for major version publishers. The permission option will only be available on systems using Advanced Versioning.

   Additional support for this permission is as follows:

   - The Content Server REST API allows the permission to read and set.
   - As a legacy API, Content Web Services does not explicitly expose this new permission, however, it can be implicitly enabled/disabled by enabling Edit Permissions, or removing See, See Contents, Modify, or Reserve permissions.
   - Object Importer offers support for the new permission as a 10th digit for an <acl> directive, with backwards compatibility for older 9-digit <acl> values.

   Note: Permission entries on existing objects with Edit Permission enabled will automatically be granted the Add Major Version permission upon the application of this Update.

5) The Versions tab in the Properties pages of the Classic view now offers simple pagination.

6) The MIME-type on a document's specific properties tab will reflect the latest version that the user has access to. For advanced version documents, in the past the mime-type listed would be of the latest major version, now it will display the MIME-type for the latest version the user has access to i.e. if you have access to minor versions then the MIME-type of the latest minor version would be shown, otherwise it will remain showing the MIME-type of the latest major version.

2.9.5   Document Management

- Last Version Date column will display minor version data (i.e. the date that the last minor version was added) if the user has access to minor versions.
- The Version column will not be automatically created on new installs of Content Server. There is some overhead on node creation associated with extra columns, so in order to minimize this the decision was made to not automatically create the "Version" column on new installations. The data source for "Version" and "Advanced Version" is still available if a customer wishes to create these columns. Existing installs will not be affected by this change.

2.9.6   Installation

A number of simplifications to the installation process have been implemented. Most notably, all optional modules can be included as part of the base product installation, eliminating the staging database process that has often been needed.

The Records Management modules, including Records Management, Physical Objects and Security Clearance modules, are now included in the baseline installation package and no longer need to be separately installed.

2.9.7   Autoconfig

The Autoconfig feature allows essential configuration settings (database, OTDS, etc.) to be set by means of a file when a previously unconfigured Content Server is started for the first time. This feature is considered experimental, and intended for use when deploying containerized images of Content Server. A new admin page to "Generate Sample Autoconfig.xml file" is available to help create the configuration files.

2.9.8   Customized Strings

A new method is available for adding or editing custom translation strings (XLATEs). XLATE files can be placed in the config\custom_strings directory. On startup, these XLATEs can be used to define new XLATE keys, or will replace strings for existing keys. This feature allows

customized strings to be created that survive updates, upgrades and re-deployments of the software.

2.9.9 Smart View

An HTML widget is available to allow editing of HTML content of a Content Server page in-place like a wiki page. When an HTML widget is added to a Perspective template, sample content (for example a quick link list) can be selected. That way users who edit the content of the widget do not have to start from scratch. Editing the HTML content can be delegated by giving other users edit permissions to the widget.

Collections are now supported. Users can create new Collections, add items to a Collection using the Target Browse dialog, or remove items from a Collection.

You can now open Content Server URL's that include nicknames instead of node ID's in Smart View.

The Document Overview page now includes a Function menu extending the range of possible actions available on the page.

When a version is added to a document that was not reserved and the last version was added by another user, a warning message is displayed.

2.9.10 Administration

Hostnames can now be used as Trusted Referring Websites in the security settings.

A confirmation challenge is now presented to confirm deleting a Storage Rule.

The "Category Update Batch" setting has been relocated from the Configure Server Parameters administration page to the Performance Settings administration page. The setting is now stored in the database instead of the opentext.ini file.

2.9.11 Administration Auditing

New administration pages that now have auditing that captures before/after values and performer information include:

System Messages, Control IP Access to search Components, Purge Search Statistics, Configure Search Statistics, Audit Security Settings, Search Forms and Search results template.

2.9.12 Admin Index Page

The Content Server Administration area provides a filtering mechanism that allows administrators to find specific pages based on a given criteria. The filter works in either

the Show All Sections or Show as Tabs mode at the admin.index page level.

The filtering is case insensitive and is done on a "starts with" basis. There is no wildcard support.

2.9.13 Transport

Additional information was added to the XML Export data, allowing Transport to resolve dependencies on data sources for Custom Columns and Facets.

2.9.14 Reminders

The term Reminder is now used in Classic UI, Smart View and product documentation for the former "Follow-Up Management". This does not imply any change in functionality. This change was introduced to improve the usability because it reflects the most common use case of this feature.

Reminders are now fully available in the Smart View. This includes adding, editing and viewing of Reminders as well as acting on Reminder assignments. A compact pop-up panel serves for adding and viewing reminders. It is augmented with a large panel for editing sophisticated reminder schedules.

2.9.15 Workflow

Workflow Designers can now pick Form field sets (of Form Templates) for the use in Smart View Forms. Sets are exposed as a whole; no individual attributes are selectable. Multi-row sets will render in table style at runtime.

The Workflow SDK has been extended to support custom extensions to the Smart View sidebar of the Workflow Panel or to replace the Workflow Panel with a Custom View programmatically.

2.9.16 Records Management

The Finalize Record disposition action introduced in Records Management 16.2.3 now applies to sub-items.

New visual indicators for View Record details, View Official Record details and View Holds details display beside objects in the Smart View browse view if configured. The icons link to their respective metadata.

Apply Holds action is now supported in the Smart View from the item's Functions menu on the Properties page. Remove one or more holds from the item's Properties > Holds page.

Assign Cross-Reference action is now supported in the Smart View from the item's Functions menu on the Properties page. Remove one or more cross-references from the item's Properties > XReference page.

There is a new Records Management WebReports release, OTRMReports package version 1.5. The OTRMReports can be configured to display within the Smart View as tiles using Perspective Manager. See Install and Upgrade section for important OTRMReports upgrade note.

2.9.17 Physical Objects

Borrowed circulation metadata for a Physical item now displays on the item's Smart View Properties page.

Request and Borrow physical item actions are now supported in the Smart View's Browse View and from Search Results.

New My Requested Physical Items Circulation tile displays the user's requested Physical items, with action to Cancel Requests. New My Borrowed Physical Items Circulation tile displays the user's borrowed Physical Items with actions to Acknowledge receipt and Flag items for pickup. The Circulation tiles can be configured to display within the Smart View using Perspective Manager.

There is a new Physical Objects WebReports release, OTPOReports package version 1.5. The OTPOreports can be configured to display within the Smart View as tiles using Perspective Manager. See Install and Upgrade section for important OTPOreports upgrade information.

Physical Object's label columns can now be renamed.

2.9.18 Security Clearance

New Security Clearance Level usage statistics tile displays Security Clearance Level statistics with the option to filter the results. New Supplemental Markings usage statistics tile chart displays Supplemental Markings statistics with the option to filter the results. The Security Clearance tiles can be configured to display using Perspective Manager.

There is a new Security Clearance WebReports release, OTRMSecReports package version 1.5. The OTRMSecReports can be configured to display within the Smart UI as tiles using Perspective Manager. See Install and Upgrade section for important OTRMSecReports upgrade note.

2.9.19 External File Sharing

Enhanced the external file sharing widget to display documents that have been shared to the user in addition to documents that the user has shared with others.

Added support for Office Editor so users can edit a shared document directly from Content Server without having to navigate to the OpenText Core user interface. New versions of the document are uploaded directly to OpenText Core.

The ability to manage a share was added so that Content Server users can add, remove or change the role of a share participant directly from Content Server without having to navigate to OpenText Core user interface.

A new method was introduced so that Content Server administrators can release a shared document.

2.9.20 Content Server WebDAV

Content Server 16.2.4 will be the last version that supports WebDAV. Enhanced functionality in Content Server, Enterprise Connect and Office Editor 16.2.4 have been added to replace much of the similar uses cases supported by WebDAV.

2.9.21 Content Intelligence (including WebReports and ActiveView)

Several new features added including:

- WebReports requiring input can now run within Smart View
- New status screen in Smart View for WebReports with destinations other than browser and desktop
- New volume to store Perspective assets

2.10   Changes – 16.2.3 (December 2017)

2.10.1 Configuration Settings

Several settings on the "Configure Server Parameters" admin page have been relocated to the "Configure Container Options" page. These are the number of items per container, the duration of the "new" icons, and the ability to edit icons.

A new control for configuring the timeout for sending responses has been added. This control is on the Configure Server Parameters page. An existing INI setting for the timeout on receive has also been given a presence on this admin page.

2.10.2 eLink

Secure POP3 libraries have been incorporated into Content Server, and the eLink integration has been extended to allow Secure POP3 communication.

2.10.3 Search Query Language

- There are two new region features, ALL and ANY, that simplify constructing searches for a value in multiple metadata regions.

> [any owner,createdby,modifiedby] "bsmith"
> [all created, modified] < "-2y"

- A new ANY operator is available for matching terms in a list. Similar to the IN operator, except that ANY will match partial values when searching within metadata regions.

> any (house, home, dwelling, "place of residence")
> [region Model] any (acorn, atari, "radio shack", commodore)

2.10.4 Wiki links

Wiki links were not working correctly under certain circumstances after an upgrade was performed from Content Server 16.0.1.

2.10.5 Clear Unpurged Items

A new database correction utility was provided that identifies objects that failed to purge, and then resubmits them for processing.

2.10.6 Deleting Thumbnails

An administration feature has been added to allow thumbnails of items in a Collection to be deleted. The Delete Thumbnails feature works on every version of every object in the Collection. There is a new Usage Privilege associated with this feature, restricted by default.

2.10.7 Regenerating Search Slices

An administration tool has been implemented that will generate new search slices for a system. This situation may be required if improper upgrade procedures or direct database manipulation has occurred. The "Generate new Search Slices" feature will delete any existing Enterprise slices, create new ones, and make a best effort to update references to the old slices.

2.10.8 Administrator Permissions

A new Admin setting has been created that can allow users with "See Contents" permissions to view (but not edit) the permissions of object.

2.10.9 Administration Auditing

Coverage of auditing for configuration changes and administration activities has been improved. New coverage has been incorporated for:

- WebReports Administration settings
- LiveReports Administration settings

2.10.10 Configuration Settings

In an effort to eliminate unnecessary steps during initial configuration, Container Configuration settings have been relocated from the Configure Server Parameters admin page to the Configure Container Options admin page. These include "Configure Edit/Organize: Maximum Items Per Page", "Duration of New and Modified Indicators", and "Administer Icons for Folders: Allow Users to Select Icons".

2.10.11 Filters – Viewing EML Files

EML View as Web Page will not be configured on by default. The customer will need to remove the message/rfc822 from the [ViewableMimeTypes] section of opentext.ini.

2.10.12 IM Filters for View as Webpage

When Content Server is configured to use IMFilters for View as Web Page (CS 16+ default is Email Management), .eml files render as plain text view. In this mode, inline (embedded) images in the email are rendered after the message text content. Image formats that are supported are: bmp, gif, png, emf, wmf, tiff and jpeg.

2.10.13 Permissions

Previously a user required "Edit" permissions to view (and edit) permissions on an object. A new configuration setting has been introduced that allows a user with "See Contents" permissions to display a read-only version of the Permissions page. New installations have "See Contents" as the default, existing systems are unchanged during upgrade. The control is located on the "Configure Access Control" administration page.

2.10.14 Workflow Status Tracking

A new Smart View widget for "Workflow Tracking" has been introduced. It is available through Perspective Manager for the use on landing pages. It can be configured by a business administrator. It shows the inflight workflows and completed workflows the current user has initiated or is managing.

2.10.15 Workflow Activities Panel

Workflows displayed in Smart View have a new sidebar element showing the user activities and comments of previous workflow steps.

2.10.16 Distributed Agent Worker

Registered Distributed Agent workers and agents can now be deleted from the Distributed Agent Dashboard. This will allow administrators to remove agents and workers that were previously registered by a decommissioned Content Server instance.

2.10.17 Date Time Fields

The REST API will now return date & time fields in UTC format instead of the ISO-8601.

2.10.18 OTDS oAuth Bearer Token

Content Server RESTAPI now supports OAuth bearer tokens.

2.10.19 Template Workspaces Changes

- The Follow-up Management module has been integrated into Content Server.
- A new business administration privilege for Follow-up Management has been introduced. Users associated with this privilege can configure Follow-up Clients and Types.
- In previous releases, the "My Assignments" widget displayed active Follow-up items, but they could not be clicked. They now will open in Classic UI.
- Follow-up items can be viewed from the browse view in Smart UI.
- Follow-up items have been extended with a priority column. Users can choose between High, Medium and Low. The default value is Medium and can be adjusted in the Follow-up Type administration.

2.10.20 External File Sharing

A new Content Sharing module will be installed with Content Server 16.2.3 that will provide external file sharing capabilities using OpenText Core.

The Content Sharing module enables users to share documents that reside in Content Server with other users who are inside or outside of their organization. Users select the documents that they want to share in Content Server Smart View, and then specify who they want to share them with in OpenText Core.

> 📄 **Note:** Before you configure the Content Sharing module, your organization must be subscribed to a tenancy for OpenText Core.

This is the first version of external file sharing and new features and enhancements will be added on a quarterly basis. Some of the notable features for Content Server 16.2.3:

- Provide a way for administrators to configure who has access to External File Sharing features.
- Provide a way for administrators to configure their OpenText Core tenant.
- Provide OAuth capabilities so share originators can use OpenText Core authentication configurations.
- Provide user look-up capabilities for share participants.
- Allows share originators to specific share participants as Viewers or Collaborators.
- Copy shared documents to OpenText Core to handle notifications.
- Allow users to revoke shared documents and incorporate them back in as new versions in Content Server.
- Allow a user to quickly navigate to all shared content using the shared items widget.

2.10.21 Content Intelligence (including WebReports and ActiveView)

Implemented several new enhancements, including:

- A new sub-tag to return the user-interface label for commonly used database values, such as AuditID and Subtype
- Enhanced INSERTJSON @FILTEREDCOUNT to support more complex tag replacement
- Converted administration pages requiring a services restart to save settings in the KINI table.
- Improved translation to UI elements of the new WebReport online editor.
- Enhanced TOJSON to cast strings to their native type before conversion.

Fixed several issues including:

- An issue with the WFTASKINFO sub-tag when used on a task assigned to a group
- An issue with the PERMACTION sub-tag applying permissions to a collection
- The Reserved Items LiveReport showing two rows for each item
- ActiveView module database upgrade from 3.0.2 to 3.0.4
- Enhanced DBUpgrade to convert old columns that are still type Number(10) to type Number(19)
- Fixed an issue with filtering in the Visual Count widget expanded view when only one column is active.
- Fixed an issue where a widget header icon wasn't shown when using the Nodes List widget within the Carousel widget.
- Fixed an issue where the Visual Count widget didn't work in a tabbed layout.
- Fixed an issue where Content Server would not respond using the WFTASKINFO sub-tag on a task assigned to a group
- Fixed an issue where pagination controls are not displayed in the expanded nodes list widget until sorting a column.
- Fixed a javascript error in the Visual Count widget when clicking the expand icon.

- Fixed an issue with WebReports conversion where MIME type could be lost.

2.11 Changes – 16.2.2 (September 2017)

2.11.1 Administration Infrastructure

The administration setting page "Default DOCTYPE for HTML Pages" was removed from the Content Server administration area. The DOCTYPE declaration is an instruction to the web browser about what version of HTML the page is written. Content Server now supports only HTML5 (<!DOCTYPE html>), and this parameter cannot be changed.

2.11.2 eLink

SMTP Settings in eLink Configuration now include options to use TLS and authentication (username/password) to connect to the mail server.

2.11.3 Search Query Language

- There are two new region features, MIN and MAX, that simplify finding search results based on the smallest or largest values within a list of regions. MIN and MAX synthetic regions can be configured in the LLFieldDefinitions.txt file, or specified dynamically as part of a query. Query syntax examples are:
    - [min date1,date2,date3] > "20170101"
    - [max region1,region2] <= "1000"
- Searching for feet and inches in the imperial measurement system has been improved. Apostrophes and quotation marks that follow within a few characters of a number are assumed to represent foot or inch marks, and are removed from the query (matching the default search indexing behavior).
- The behavior when searching for "any words" or "all words" in advanced search has been changed to ignore Boolean operators (such as "and", "or", "not") and treat them as keywords. This makes the behavior consistent with other search operators. Depending on configuration, this may also change the default search bar behavior.

2.11.4 Exact Substring Matching

The feature in the search engine for matching exact substrings in metadata regions now has a configuration interface in the administration pages, on the region modifiers tab of the regions page. To support this, the search engine tokenizers are now located in a new config\tokenizers directory. A restart of the search grid with today's date validated is required after changing the exact substring settings.

2.11.5 REST Client Library

The OScript library that supports outbound communication using REST has been enhanced in a number of ways, including:

- Uploading from a specified file path
- Supporting HTTP POST parameters
- Exposing HTTP headers to OScript layer
- URL encoding of parameters
- Communication with unvalidated HTTPS sites
- Bug fixes

2.11.6 Microsoft Cluster Management

The Admin Server has been enhanced to detect when it is operating within a Microsoft Cluster Management environment. In this case, the Admin Server will consider either the host name or the Cluster Name as valid. The administration page for the Admin Server will also display a reminder to administrators that using the Cluster Name is needed to allow cluster failover to operate without placing the Admin Server into Safe Mode.

2.11.7 ADN TKL Search

Support for Automatic Document Number Table Key Lookup has been added to the search infrastructure and REST APIs. This allows TKL values to be exposed in the Search REST API, and presented in search widgets in the Smart UI.

2.11.8 Administration Auditing

Coverage of administration settings for auditing has increased again this update. New administration pages that now have auditing that captures before/after values and performer information include:

ActiveView, Log Settings, Performance Settings, Container Options, Promoted Functions, Thumbnails, Project Settings, Server Parameters, Administer Item Control, Recycle Bin Settings, Copy/Move/Delete Operations, Users & Groups > Department Selection, Languages, JavaScript on exported HTML, Scheduled Activities, Workflow Parameters, Workflow Agent Parameters, Integration Settings, Applications Management, Limit Admin Account Log-in, Communities, Multi-File Output, eLink, Multilingual Metadata

In addition, the presentation of audit information for several areas, such as the Recommender, has been enhanced for readability.

2.11.9 Dataflow Maintenance

The Test feature of Dataflow management has been changed to include a confirmation challenge, prevent use if the dataflow is not empty, and ensure the administrator is aware of side effects such as loss of quarantine files. Similarly, the Flush feature for the dataflow includes a confirmation challenge and explanation of side effects.

2.11.10 File Type Repair

A scenario was identified whereby the file type information in DVersData could be incorrect. In some cases, the extension was prefaced by a period, for example, .PDF instead of PDF. The defect has been corrected, and a new database repair utility introduced that will fix any incorrect file type values.

2.11.11 Transport

- Workflow Maps are now supported for deployment and update.
- Objects can now be deployed if there is "No Owner" or "No Owner Group".

2.11.12 Cluster Management

- Multiple Network Interface Cards (NICs) are now supported in Cluster Management. The Agent Settings page has been changed to allow the administrator to select a specific interface from available NICs.
- In order to apply the 16.2.2 (September 2017) Update using the Cluster Management tool, the patch pat 162000159 must be present in the system. This applies to Linux environments only. If this patch is not available for your Content Server version, please contact Customer Support.

2.11.13 Business Administration

- The Business Administration feature eliminated the need for users with administration privileges to use a separate webadmin password when accessing the Content Server administration area. The Admin menu is now automatically displayed for users with the following privileges:
  - System Administration rights + Web Admin privilege
  - Any Business Administration privilege

- The following administration pages have been reorganized in order to extend the Business Administration support:
  - Configure Features: This new section has been created under the Server Configuration section in order to group relevant settings to be exposed to Business Administrators.
  - The pages "Configure Container Options" and "Configure Thumbnails" have been moved from Configure Presentation section into this new area (Configure Features).
  - Query Audit Log: It has been moved from Administer Event Auditing section and it is now located at the root of the System Administration section.

2.11.14 Wiki

- Previous versions of Wiki pages now can be viewed in the Smart User Interface. They can be opened from the version history.
- The version history of a Wiki page in Smart UI allows to compare two versions of a page with visual cues about added, removed and re-formatted content.
- The usability of the Table of Content sidebar of Wiki pages in the Smart UI has been adopted in the following areas:
    - Button to expand and collapse the sidebar was moved to the page header
    - Improved formatting and alignment of different header levels
    - Name of the Wiki is displayed as a clickable link.

2.11.15 UI Widgets

Content Server item URL links can now be configured to redirect to Smart View.

2.11.16 Pulse

Pulse and Activity Feed efficiency was improved to reduce server load for idle users.

2.11.17 Content Intelligence

- Enhancements to the flow layout in the CSUI framework where different sizes can be specified for widgets as part of a flow-based perspective.
- A new walk-through has been created to demonstrate setting up the Visual Count widget with simple data.
- Non-administrators cannot access the Perspective Manager request handler ?func=activeview.perspectivemgr unless they have both the 'ActiveView' object privilege and the 'Perspectives Tab' usage privilege.
- The Visual Count widget has been updated to include a progress indicator when it's fetching data from the server.
- The Perspective Manager has been converted from a Content Server application to a standard Content Server request handler. The Perspective Manager Administration page link has been changed to point to the new request handler URL. Any hard-coded links to the Perspective Manager will need to be changed to use either: http://server/cgi/cs.exe?func=activeview.perspectivemgr or http://server/cgi/cs.exe/perspectivemgr

2.11.18 WebReports

- The E-Mail destination in WebReports has been improved to make use of new secure SMTP mechanism in Content Server.
- The WebReports Parameters configuration page has been updated to disable date-type input fields if 'Use Current' option has been selected.

- The 'Password' field on both WebReports Source and Destination configuration pages has been changed so that autocomplete functionality is disabled.
- The WebReports online editor has been redesigned and provides a modern development interface using the ACE Editor library.
- To support the new WebReports online editor several configuration settings have been created to allow the developer to personalize their development environment.
- With the new WebReports online editor released in this version an option has been provided to enter full-screen mode.
- Part of the WebReports online editor, a new feature provides the ability for the WebReport developer to choose a mode for syntax highlighting, selectable based on the code type contained within the Reportview.

2.11.19 Categories and Attributes

Category upgrade events can now be audited. Auditing can be enabled from the Set Auditing Interests administration page.

2.11.20 Enterprise Workspace

The color selector, on the My Color Settings page, was enhanced to improve the usability of the browse view for users with a visual impairment. A default palette of WCAG 2.0 AA compliant color options and a custom color picker (Firefox, Chrome, and Edge only) is now available. The color palette options can no longer be customized by the Administrator through opentext.ini settings.

2.11.21 Workflow

- It is now possible to deploy updates for Workflow Maps that already exist in the target environment using the Transport feature in Content Server.
- Workflow designers can now choose fields from Forms for use in Smart View forms. This applies to all primitive attributes of Forms that have been associated with the Workflow Map, but does not include set attributes.

2.11.22 Content Server Links

Introduced a user option that allows recipients of a Content Server link to automatically navigate the link in the smart user interface.

2.12   Changes – 16.2.1 (June 2017)

2.12.1 WebReports

- The IMEMBERSHIP sub-tag has been enhanced to include a new FACTORY option to return object and usage privilege information.
- A new RMXREFACTION sub-tag was created to create, assign and remove cross references.
- As the node upgrade capability in WebReports was extended to provide the ability to upgrade ActiveView templates, a link is now provided from the ActiveView administration pages to the page to execute upgrade scripts.
- A new sub-tag was created to perform REST calls during the execution of a WebReport.
- As there was a change to Content Server .js and .css files for presentation formatting of tabs in the user interface, a node upgrade script was created to identify the legacy syntax calling these libraries and update paths to the new libraries.
- A node upgrade script was created to add support for secure request tokens in the ActiveView tab override templates.
- New functionality in the WebReports REST API to execute WebReports by their nickname, rather than the DataID.
- Fixed an issue where some WebReports additional information such as constants were not updated after the upgrading CS Application.

2.12.2 Enterprise Connect

- Administrators can now allow control of the format of User properties on the Insert Properties administration page.
- Added a new context menu that allows sending "Content Server item link" to clipboard. Existing menu options for other formats are now turned off by default in administration pages.

2.12.3 Facets

The "Count accuracy" facet setting has been modified. The setting is now called "Display count". The "Precise" option has been eliminated as it was causing confusion for non-administrators. When the "Approximate" option is selected, the displayed facet count will now depend on whether or not the user is a highly-privileged user (Admin or System Administrator). Highly-privileged users will see the actual known values; this was previously known as 'Precise'. All other users will see values displayed up to three significant digits; this was previously known as 'Approximate'. Facets previously using 'Precise' are remapped to 'Approximate' upon applying the update.

2.12.4 Wiki

- Smart UI Wiki editor will only display the add-image feature when the system configuration for opening documents in the browser is enabled.
- The Wiki page view in the Smart User Interface now contains the modified date in the header.

2.12.5 Pulse

Improved Pulse and Activity Feed efficiency to reduce server load for idle users.

2.12.6 Administration Security Hardening

A number of changes have been made to the Administration pages for Content Server to improve application security. In addition to the existing security features such as the administration passwords and IP address restrictions, the following additional restrictions have been implemented.

- Cross Site Request Forgery risk has been reduced by the introduction of tokens on pages that perform actions and submit forms.
- Old administration passwords must be provided before new passwords can be set.
- The Web Administration password must now be provided for several operations that can change data, disrupt processes, disconnect the database or may have an impact on system performance.
- A number of administration actions that were triggered by links or function menus now introduce a confirmation step.

2.12.7 Administration Auditing

Additional administration pages now have enhanced auditing of configuration changes. The "before" and "after" values and the user who makes the change are capture in the audit records. The administration section name is provided as the audit item type. Newly added areas include Users and Groups, Logging, Content Suite Viewer, Pulse, Archive Storage Provider, Wikis and Server Parameters.

2.12.8 Notifications on Collections

The ability to obtain notifications when objects are added to a Collection is now available.

2.12.9 Search Query Parser

Previously, when using "any words" or "all words" mode in the full text component of advanced search, the words "IN", "NOT" and "NOT IN" were treated as search operators. This has been corrected, and they are now treated as words. This may affect the interpretation of some existing saved queries.

The use of quotation marks around region names in LQL is now optional, these are equivalent:

[region "OTFileType"] "Word"

[region OTFileType] "Word"

2.12.10 Prioritized Sparse Metadata Search

A new search feature is available in advanced search, the ability to formulate a search term which is based upon a prioritized list of regions. For example, if the regions OTDocCreatedDate, OTExternalCreateDate, and OTCreateDate are preferred in that order, but not always defined, you can search using

[first OTDocCreatedDate,OTExternalCreateDate,OTCreateDate] < "-5y"

To identify documents older than 5 years based on OTDoc value if populated, otherwise on the OTExternal value if populated, otherwise on the OTCreateDate.

2.12.11 Document Conversion Server

The URN logging feature that was disabled in the previous update has been reverted to enabled by default. It was established that this log is a lightweight record of all items that were indexed, and may be useful in dataflow recovery scenarios.

2.13   Changes – 16.2.0 (March 2017)

2.13.1 Integrated Modules

The following modules are now integrated into the core Content Server installation for 16.2.0: Answer Desk, Attribute Extensions, Blog, Calendar, Classifications (also available in 16.0.3), Comments, Community, Community Notification, Content Server Generic Wizard, Document Properties Synchronization, eCommunity Directories, FAQ, Forums, GUI Enhancements, Journal Core and Wiki. If already installed, these do not need to be uninstalled before upgrading to 16.2.0.

2.13.2 Collaboration

A range of previously optional extended collaboration features have been included in the standard Content Server product, with no additional downloads or licensing requirements (see Integrated Modules list). Wikis are supported in the Smart View, as well as the Classic interface with full compatibility and no migration step required. The remaining new collaboration modules are currently limited to the Classic view.

2.13.3 Smart User Interface

Several new capabilities are incorporated into the Smart View:

- Support for Virtual Folders, Table Key Lookup attributes, and Generations.

- A new document overview page provides users who get a URL link to a document a basic set of metadata and controls for viewing, downloading, editing, or accessing document metadata.
- Uploading multiple documents into a folder with required attributes is simplified with an "Apply to all" capability for metadata.
- Enhanced keyboard navigation.
- Browse and Search Result displays are condensed to display more objects.

2.13.4 Classifications

Add a Classification or RM Classification from the Smart View Upload page. Apply and remove one or more Classification in the Smart View Properties pages. Apply and Remove an RM Classification in the Smart View Properties > Records Management page. Search using Classifications in Smart View and via REST API.

📄 **Note**: Classifications were added to core Content Server in Content Server release 16.0.3.

2.13.5 Search Permissions

A new user privilege is available that allows selected users to be presented with search results for objects for which they have See permissions. See Contents permissions remains the default requirement for accessing search results.

2.13.6 System Administration

The Content Server Administration page now uses OpenText Directory Services (OTDS) as its authentication mechanism. To allow a System Administrator to access the administration area, grant the user the Web Admin usage privilege.

It is no longer necessary for System Administrators to enter the Web Administration password when initially accessing the Administration page.

The Web Admin privilege is not automatically granted to System Administrators in an Upgrade scenario, because Content Server cannot know which users had access to the Web Administrator password.

After an upgrade, you must log on using the "Admin" user and grant the respective privilege to existing System Administrators as necessary.

2.13.7 Business Administration

Selected administration pages are now accessible to users who are granted Business Administration privileges, improving the separation of application configuration from true system administration. The web admin password challenge is no longer required in these scenarios. In addition, the auditing

system now captures most Business Administration configuration changes, including the before and after values and the user who enacts the change.

2.13.8 Administration Settings

A new Configure Document Functions administration page was created. The Open and View as Web Page settings on the Configure Security Settings page was moved to this new page. The setting on the Configure Document Overview Function page was moved, and the page eliminated. On the Configure Server Parameters admin page, the Character Set Encoding setting was eliminated. Internally, the encoding is now forced to UTF-8.

2.13.9 Source Attributes

There are now standard methods of capturing and storing metadata attributes associated with objects before they were ingested into Content Server. Where possible, the Source Create Date, Source Modify Date, Source User Account, and type identifiers for the User Account and source data are captured. This data is retained at the version level, and version 1 attributes are preserved at the node level. Metadata gathered varies by input method, with support available for Add Item, Drag and Drop, REST and CWS APIs, Object Importer and XML Import. The Source Attributes metadata are also searchable, displayed on the Properties tab for an object, and included in Collection Disk Images for discovery applications.

2.13.10 URL Encoding

A recent change to the Tomcat web server now prohibits the use of certain characters in URLs, such as vertical bars and curly braces. Content Server was changed to accommodate this. External applications should review their implementations and adjust as necessary.

2.13.11 Trusted Referring Websites

This security configuration setting was changed to increase security and allow more configuration flexibility. If using this feature, review the changes after an upgrade to ensure security settings are correct.

2.13.12 License Keys

Software license keys are now stored within the "Software Protection System" feature of OpenText Directory Services. OTDS 16.2 or later is a pre-requisite for installing Content Server 16.2.

2.13.13 Document Properties Synchronization

For use with Microsoft Office 2007 and later formats, there are several new features available:

- Document Properties Synchronization (DPS) is available on the Linux platform.
- Microsoft Office is no longer a server-side requirement.

- Fields referencing properties in Microsoft Word documents can be automatically refreshed with the latest property values when synchronizing. This ensures that the correct property value is visible each time the document is opened for viewing or editing.
- Metadata properties can be created within an Office document, whereas in the past only updates to existing properties was possible.
- Security Clearances and Supplemental Markings can be used as data sources.

2.13.14 Secure Email Notification

Secure SMTP mail server connectivity is now available for use with notifications. Most standard notification methods were upgraded to support secure SMTP connections (TLS). Authenticated user support is also available, with adjustments to the Reply To field changing as appropriate.

2.13.15 Transport

Category Folders are now transportable subtypes. The performance of dependency scanning for parent containers was improved, and preference is now given to dependencies that resolve to parent objects in a deployment package (the current Workbench).

2.13.16 eLink

A new control specifies the maximum number of recipients in an eLink message; when necessary the outbound message will be broken into multiple messages based on this size. The control to select Properties or Open links for attachments in eLink messages was removed – instead the new /link/ method is always used, which gives control over link behavior to the recipient.

2.13.17 Favorites

Favorites now behave more like browser bookmarks. They have independent names that can be edited. Internally, performance was improved by storing information about favorites in database tables, where previously blobs in the database were used. In the Classic view, the concept of a default tab was eliminated, and the location of each favorite item is displayed in the Favorites interface.

2.13.18 Logging

A minor enhancement was implemented where the Web Client process generates a UUID with each request and includes this in the request. The Web Client, Connect and Thread logs all record this UUID, improving the ability to cross reference log entries. CGI and IIS support for this feature is available. Servlet support (e.g. Tomcat) is deferred to a later update.

2.13.19 Document Conversion Server

The dcs_***urn.log file, used to capture information about email indexing, was deemed unimportant. It is now disabled by default, and can be re-enabled by adding LogFile=dcs_audit to the [DCSipool] section of the dcs.ini file.

2.13.20 Email Services

The Email Services module now supports creating Email Folders and Email Objects using Object Importer.

2.13.21 Content Server and Microsoft Office Online Service

OpenText Content Suite Platform Office Online Add-On enables Content Server users to do the following:

- Use Office Online applications, including Microsoft® Word Online, Microsoft® Excel Online, and Microsoft® PowerPoint Online to edit and open documents directly in the browser while connected to Content Server, without requiring Office to be installed on the desktop.
- Co-author documents with other Content Server users. Multiple users can make changes to the same document at the same time.

The Content Server integration with Office Online Service is only compatible with Content Server 16.2 and requires the Office Online broker. The Office Online Broker is deployed in the OpenText cloud and maintained by OpenText. Contact your OpenText representative to obtain the connection information for the instance of Office Online Broker you will be using.

2.13.22 Facets

Optimizations for computation of browse facet data was implemented, reducing database load and facet computation time. Systems with deep folder structures will experience the largest benefit.

2.13.23 Admin Server Protocol

The Admin Server communication protocol will now be advanced with each update, and verified during use. This will prevent incorrect upgrade attempts that leave an older Admin Server running in the upgraded environment. This error condition is exposed on the Admin Server Properties page, and on the Admin Server Configuration page of the install and upgrade wizards as "Admserv-Client protocol version mismatch".

2.13.24 Workflow

The User Step has a new display setting Smart View. With this setting enabled, a form can be configured for this step to display workflow attributes and workflow system fields in Smart View.

Workflow Smart View also supports attachments, dispositions as well as Send for Review and Delegate actions. Opening Workflow Assignments can start both in Classic view and in Smart View, show the step interface based on the display settings and after that return to the starting point.

Starting Workflows in Smart View is activated on Workflow Maps, shortcuts to Workflow Maps and on Favorites.

Workflow disposition labels can be localized.

2.13.25 WebReports

WebReports has several new features with this release:

- A new 'Visual Data Widget' that provides visualization of Content Server data that can be expanded in the user interface, and filtered in real time. This widget is configured using standard WebReports data sources.
- A new 'Carousel Widget' which provides the ability to load several WebReports widgets into one widget in the user interface as a carousel. Users can flip through the different tiles, and/or wait the carousel to advance automatically through the content.
- The WebReports REST API has been enhanced to provide POST support. This allows WebReports destinations other than 'Browser' to be executed using REST (such as initiating a workflow, sending an email, etc).
- Support for WebReports subtype, 30303, has been added for Transport.

 Note: While the WebReports module is packaged with Content Server, a valid WebReports license must be applied in order to make use of the above and other WebReports functionality.

3   Discontinued and deprecated features

The following features are discontinued:

> ⚠ **Important**
>
> In Content Server 10.5 Update 2015-03, changes were made to the storage format of OScript code that make up modules (OLL files). Backwards compatibility for the old format was provided as a transition for solutions. As of the March 2020 update, the old format will no longer be supported. For solutions that have not yet transitioned, the solution vendor will need to provide an update.

- The ability to specify a system character set encoding is discontinued in 16.2.0. The functions to check this value are deprecated. They currently are hard coded to return UTF-8 and will be removed in a future version.

- The control to select the link style for attachments in eLink message is discontinued in 16.2.0.

- The administration page for setting a login message is removed in 16.2.1. Login pages are defined in OpenText Directory Services.

- Ability to set the DOCTYPE for pages eliminated with 16.2.2. For compatibility with modern browsers, this must be hardcoded to HTML.

- The user privilege for "Show Admin Menu" has been removed in 16.2.2. The presence of the Admin Menu is now determined by whether the user has:
    o System Administrator right + Web Admin privilege
    o Any Business Administration privilege

- Support for the WebDAV protocol is being removed by web browsers. WebDAV support is removed beginning with Content Server 16.2.5 in June 2018.

- Cluster Management is eliminated beginning with the 16.2.6 release. Instead, System Center should be used (including to apply the 16.2.6 update), which is a superset of the Cluster Management features. For more details, please see section **2.2**

- The SEA Servlet is no longer supported as of 16.2.9. Standard proxy servers in "Reverse Proxy" configuration should be considered as an alternative.

- Based upon low demand and incompatibility with OpenJDK, WebSphere is no longer supported as an application server as of 16.2.8.

- The page that allows switching to Admin User (?func=ll.su) has been removed as part of system hardening as of 16.2.10.

The following features are deprecated. They are likely to be eliminated in a future update, and you should consider implementing alternatives.

- The OpenText Federated Query Server module is supported with Content Server 16.2.0 but is deprecated and will be eliminated in a future version.

- Search Web Services API is deprecated. The XML Search API or the REST Search API is recommended.

- eLink Server, an optional downloadable mail server for use with Content Server, will soon be discontinued. Improvements in eLink connectivity in recent Content Server updates allow for secure encrypted connections to your corporate mail server. A "catch-all" inbox via mail server rules will be the recommended model for eLink configuration.

- The "Read Only" mode for search partitions should not be used and will be removed from a future update. The nearest equivalent mode of operation is "Retired".

- The OpenText Spider module is deprecated and may be enabled for a transition period on the "Deprecated Features" admin page.

- Remote Search feature will be deprecated in a future update.

4   Packaging and documentation

Downloads and documentation for Content Server are available on OpenText My Support (https://support.opentext.com).

4.1   Related documentation

For additional information about Content Server, or for supplemental information about related products, refer to the following documents, which are available on OpenText My Support (https://support.opentext.com).

4.2   US Export Compliance

OpenText products are assessed for compliance with United States export control regulations. Per ECCN guidelines, Content Server is self-classified as 5D002 ENC.

5   Supported environments and compatibility

This section provides details about supported platforms, systems, and versions.

5.1   Platform Compatibility

> ⚠️ **Caution**
>
> Operating systems, databases, browsers and other platforms advance on independent schedules. OpenText identifies the version tested where applicable, and if a version is not identified, testing is typically performed on the platform software available approximately one month before the release date of Content Server.
>
> OpenText relies on the platform vendor to maintain backwards compatibility. If the platform vendor makes a change that affects compatibility, there may be period of time where the platform is not fully functional while OpenText makes appropriate changes. Depending on the severity of the changes, an update to the latest or next quarterly update of Content Server may be required.
>
> Platforms that may be subject to these constraints are marked with a † symbol.

5.2   Mobile Platform Matrix

Content Server functionality is supported on the following mobile platforms:

Device	Mobile OS	Mobile Browser	Note
iPad or iPad Mini capable of running the latest iOS version	iOS, latest version	Safari, latest version	Only supported with Content Server Smart View which is tested with the latest iOS version. If you run into a problem that exists only in a previous iOS version please upgrade to the latest version.

5.3   Client Platform Support

Content Server functionality is supported on all browser/client OS combinations with the exceptions specified in the Support Notes below:

Client OS	Client Browser	Support Notes
Windows	IE 10 and older IE 11 Enterprise Mode	Not supported.
Windows	IE 11	
Windows	Edge	• Print, WebDAV are not supported • Office Editor and Enterprise Connect features are supported however Windows 10 Falls Creator update is required in addition to Enterprise Connect or Office Editor 16.2.4
Windows	Firefox ESR Firefox Quantum † Firefox † Chrome †	• The Short Links section on the General properties page does not include options to Copy. • The Content Server Print feature is dependent on NPAPI. If you upgrade to a version of the browser where NPAPI is no longer supported then the Print functionality will not work. • Chrome version 42 does not support Drag and Drop. This issue is resolved with versions of Chrome newer than version 42.
Non-Windows	Firefox ESR † Firefox Quantum † Safari Chrome † Firefox †	• Print is not supported. • Office Editor functionality is not supported. • Enterprise Connect from here is not supported. • WebDAV is not supported. • The Short Links section on the General properties page does not include options to Copy.

† See Section **5.1 Platform Compatibility**

5.4   Application Server Support

The following chart describes the application servers/JAVA versions that are supported.

Supported Application Server	JAVA supported on Application Server	Notes
Tomcat 8.5.x Tomcat 9.0.x	OpenJDK 11.0.5	Validated with Tomcat 8.5.43 and earlier. Validated with Tomcat 9.0.22 and earlier.

5.5   Content Server Java Support

The following chart describes the version of Java that is included in Content Server. OpenText recommends that you use the associated Java and Content Server versions listed below as our testing is focused on these combinations.

Java Version	Notes	Content Server Update
Java 8 Update 112	Java 8 Update 112 is included with the Content Server full install.	16.2.0
Java 8 Update 121	Java 8 Update 121 is included with the Content Server full install.	16.2.1
Java 8 Update 131	Java 8 Update 131 is included with the Content Server full install.	16.2.2
Java 8 Update 144	Java 8 Update 144 is included with the Content Server full install.	16.2.3
Java 8 Update 152	Java 8 Update 152 is included with the Content Server full install.	16.2.4
Java 8 Update 162	Java 8 Update 162 is included with the Content Server full install.	16.2.5
Java 8 Update 181	Java 8 Update 181 is included with the Content Server full install.	16.2.6
Java 8 Update 192	Java 8 Update 192 is included with the Content Server full install.	16.2.7
OpenJDK 11.0.1	OpenJDK 11.0.1 is included with the Content Server install and upgrade packages.	16.2.8
OpenJDK 11.0.2	OpenJDK 11.0.2 is included with the Content Server install and upgrade packages.	16.2.9
OpenJDK 11.0.3	OpenJDK 11.0.3 (version distributed by the AdoptOpenJDK organization) is included with the Content Server install and upgrade packages.	16.2.10
OpenJDK 11.0.5	OpenJDK 11.0.5 (version distributed by the AdoptOpenJDK organization) is included with the Content Server install and upgrade packages.	16.2.11

5.6   Web Server Support

The following chart describes the Web Servers that are supported.

Supported Web Server	Version	Notes
Tomcat	8.5.x 9.0.x	Validated with Tomcat 8.5.47 and earlier. Validated with Tomcat 9.0.27 and earlier.
IIS	8.5, 10.0	IIS 10 supported on Windows 2016 as of 16.2.2
Apache HTTP Server	2.4.x	Validated with 2.4.29 and earlier on Windows.
Oracle iPlanet	7.x	

5.6.1   Web Server Support Notes

- HTTP/2 is not supported. Ensure you disable HTTP/2 in your web browser.

5.7　Server Platform Support Matrix

The following chart describes the server OS and server database versions supported by Content Server.

📄 **Note**: Please review the specific support notes in the sections immediately following this chart.

Content Server OS	Database	Note
Windows 2019[2]	SQL server 2017 Oracle 19c 19.3	Windows 2019 and SQL 2017 added with 16.2.9. Oracle 19.3 added with 16.2.10
Windows 2016 [2]	SQL Server 2016 SQL Server 2016 SP1 SQL Server 2016 SP2 Azure SQL † Oracle 12c 12.2.0.1 HANA 2.0 †	Windows 2016 added with 16.2.2 Oracle 12.2 and Azure SQL added with 16.2.4 SQL Server 2016 SP2 added with 16.2.6 Hana 2.0 added with 16.2.8
Windows 2012 R2 [1]	SQL Server 2016 SQL Server 2016 SP1 SQL Server 2016 SP2 SQL Server 2014 SQL Server 2014 SP1 SQL Server 2014 SP2	SQL Server 2016 SP1 support added with 16.2.2 SQL Server 2016 SP2 support added with 16.2.6 Oracle 12.2 support added with 16.2.4

	SQL Server 2014 SP3 Azure SQL † Oracle 11g R2 11.2.0.4 Oracle 12c 12.1.0.2 Oracle 12c 12.2.0.1 HANA 2.0 †	Hana 2.0 support added with 16.2.7. SQL Server 2014 SP3 support added with 16.2.8
Red Hat 7.0 - 7.5[4] Oracle Linux 7.0 - 7.5 [3,4]	Oracle 11g R2 11.2.0.4 Oracle 12c 12.1.0.2 Oracle 12c 12.2.0.1	Linux 7.2 support added with 16.2.1 Linux 7.3 support added with 16.2.3 Linux 7.5 support added with 16.2.6 Oracle 12.2 support added with 16.2.4
Red Hat Linux 7.1 - 7.5[4] Oracle Linux 7.1 - 7.5 [3,4]	PostgreSQL 10.3+	Linux 7.2 support added with 16.2.1. Linux 7.3 support added with 16.2.3 Linux 7.5 support added with 16.2.6 PostgreSQL 10 support added with 16.2.6
Red Hat Linux 7.1 – 7.5[4]	HANA 2.0 †	Hana 2.0 support added with 16.2.7 Linux 7.6 support added with 16.2.8
Red Hat Linux 7.6, 7.7 Oracle Linux 7.6, 7.7	Oracle 11g R2 11.2.0.4 Oracle 12c 12.1.0.2	Linux 7.6 support added with 16.2.8

	Oracle 12c 12.2.0.1	Oracle 19.3 added with 16.2.10
	Oracle 19c 19.3	
	HANA 2.0 †	PostGreSQL 11.5 added with 20.1.0
	PostGreSQL 11.5	
		Linux 7.7 added with 20.1.0

[1] Windows 2012 R2 support includes Standard, Datacenter, and Hyper-V.
[2] Windows 2016 support includes Standard and Datacenter.
[3] Covers both UEK (Unbreakable Enterprise Kernel) and Red Hat compatible Kernel.
[4] Linux is supported on x86_64 architecture.

† See Section **5.1 Platform Compatibility**

5.7.1   Database Support Notes

5.7.1.1   General

Databases are supported on any Operating System platform supported by the database vendor. It is not required that the database be on the same platform as Content Server. Databases which have a client component must have that client supported on an Operating System platform supported by Content Server.

5.7.1.2   Azure SQL

- **Compatibility Mode**. Due to the known issue CSARC-861 you must set the compatibility level to SQL 2012 (110).
- **Adding and Connecting to an Azure SQL DB**. You must create the Content Server database in Azure SQL and then use Content Server to create the tables. Please refer to the *Content Server Installation Guide* for additional details.
- **Database Maintenance**. If your Content Server database is a SQL Server database deployed on Microsoft Azure, you cannot use any of the tasks on the Microsoft SQL Server Maintenance page. Use other tools (for example, SQL Server Management Studio) to perform these tasks.

5.7.1.3   Microsoft SQL Server 2017

- SQL Server 2017 support includes Standard and Enterprise.

- **Compatibility Mode**. Due to the known issue CSARC-861 you must set the compatibility level to SQL 2012 (110).

5.7.1.4   Microsoft SQL Server 2016

- SQL Server 2016 support includes Standard and Enterprise.
- **Compatibility Mode**. Due to the known issue CSARC-861 you must set the compatibility level to SQL 2012 (110).
- **SQL Server Always On.** Content Server supports SQL Server 2016 Always On. Follow the documentation from Microsoft to configure Always On - https://social.technet.microsoft.com/wiki/contents/articles/36143.sql-server-2016-step-by-step-creating-alwayson-availability-group.aspx .

5.7.1.5   Microsoft SQL Server 2014

- **Performance**. In Content Server, when you have a Content Server instance running on Microsoft SQL Server 2014, performance degradation may occur. Please see our knowledge base article Content Server - ""unable to add user (X) from group (X)- error saving Group"" Message appears and performance degradation may occur in Content Server 10.5 running SQL Server 2014
- **SQL Server Always On.** Content Server supports the SQL Server 2014 Always On solution with the ODBC Driver 11 for SQL Server. Follow the documentation from Microsoft to configure Always On - https://msdn.microsoft.com/en-CA/library/ff877884.aspx . The Content Server system should connect to the availability group listener (virtual IP).
- **Compatibility Mode**. Due to the known issue CSARC-861 you must set the compatibility level to SQL 2012 (110).
- SQL Server 2014 support includes Standard and Enterprise Editions.

5.7.1.6   Oracle 11g

- Oracle 11.2.0.4 is the recommended version of Oracle 11 with Content Server.
- Oracle support includes Standard, Enterprise and RAC as well as deployment on Oracle Exadata Database Machine and Oracle SuperCluster.
- Content Server Oracle support includes Oracle client and Server interoperability support as certified by Oracle where the minimum supported Database version for Content Server is 11.2.0.4.

5.7.1.7   Oracle 12c

- Oracle support includes Standard, Enterprise and RAC as well as deployment on Oracle Exadata Database Machine, Oracle DataGuard, and Oracle SuperCluster.
- **Oracle Multitenant**. The Oracle Multitenant option for Oracle Database 12c allows a multitenant container database to hold pluggable databases. To use the pluggable database

from Content Server you must reference the pluggable database in your TNSNAMES file, and you must connect to the pluggable database from Content Server.

- Content Server Oracle support includes Oracle client and Server interoperability support as certified by Oracle where the minimum supported Database version for Content Server is 11.2.0.4.

5.7.1.8 Oracle 19c

- Oracle support includes Standard, Enterprise and RAC as well as deployment on Oracle Exadata Database Machine, Oracle DataGuard, and Oracle SuperCluster as supported by Oracle.
- Content Server Oracle support includes Oracle client and Server interoperability support as certified by Oracle.

5.8 Virtualization Support

OpenText Content Server is supported for use with the server operating systems listed in the previous sections. The supported server operating systems may be installed on physical or virtual hosts, including cloud environments such as Google Cloud, Amazon Web Service and Microsoft Azure. Customers that choose to use a virtual environment are encouraged to select a virtualization platform intended for production systems and known to be fully supported by the server operating system vendor.

Microsoft Azure is a supported virtualization environment. †

Note that Content Server is a resource intensive application and will require at least the same amount of resources in a virtual environment as it would in a physical environment. Therefore, additional resource scaling may be required to maintain the same level of performance in a virtual environment as observed in physical environment. Static or committed resources within a Virtual Environment are typically needed for performance sensitive scenarios.

5.9 Microsoft Office Integration Support

For information on integration with these versions of Office, please see the release notes for the OpenText Enterprise Connect and Office Editor products.

5.10   Microsoft Office File Format Support

Content Server supports storing, indexing, viewing, and thumbnail generation of the files generated by the versions of Microsoft Office in the table below. For information on support for these versions of Office, please see the release notes for the OpenText Enterprise Connect product.

Version	Releases	Notes
Office 95	Word, MS Project, and Excel 95	Only text indexing and hit highlighting are supported with MS Project.
Office 97	Word, Excel, MS Project, and PowerPoint 97	Only text indexing and hit highlighting are supported with MS Project.
Office 2000	Word, Excel, MS Project, and PowerPoint 2000	Only text indexing and hit highlighting are supported with MS Project.
Office 2003	Word, Excel, MS Project, and PowerPoint 2003	Only text indexing and hit highlighting are supported with MS Project.
Office 2007	Word, Excel, MS Project, and PowerPoint 2007	Only text indexing and hit highlighting are supported with MS Project.
Office 2010	Word, Excel, and PowerPoint 2010	
Office 2013	Word, Excel, Visio, and PowerPoint 2013	
Office 2016	Word, Excel, Visio, and PowerPoint 2016	
Office 2019	Word, Excel, Visio, and PowerPoint 2019	

5.11   Document Filters Format Support

The file types and versions the OpenText Document Filters support by default are listed here. All file types are supported on Windows, Linux, and Solaris, except where indicated.

MIME type extraction is supported for all file types, except CDR.

On Linux and Solaris operating systems, only Western languages are supported for View as Web Page and Thumbnails.

For details about format support, please refer to section 28.5.11 OpenText Document Filters of the Content Server: Admin Online Help.

File Types	Text Indexing, Hit Highlighting	View as Web Page, Thumbnails	Metadata Extraction
Word 95-2019 Excel 95-2019 Email – MSG WordPerfect RTF CALS	✓	✓	✓
PowerPoint 97-2019 Visio 2013, 2016 PDF Postscript	✓	✓	✓
OpenOffice Writer, Calc, Impress, Draw, Math	✓		✓
MS Project 95-2007 TAR, LZH, RDL, ZIP Mail RFC822 IGES (Windows only)	✓		
DWG (up to AutoCAD 2016), DWF, DWFx, DXF, DGN CADRA (Windows only) Calcomp, HPGL, CGM EMF, WMF ME10 (binary ME10 compressed format not supported)	✓	✓	
JPEG, BMP, PNG, GIF, TIF		✓	✓

Gerber		✓ Windows only	

5.12   OpenText product compatibility

The section provides details about which versions of other OpenText products are compatible with this release of Content Server 16.2.11.

Content Server	Version	Notes
Administration Client	16.2.0	
Archive Center	16.2.0	
Brava! for Content Suite	16.6.0	Requires license key to enable
Blazon for Content Suite	16.6.0	Requires license key to enable
Content Server Syndication	16.2.8	Included, requires license key to enable
Document Pipelines	16.2.0	
Enterprise Connect	16.2.8	
Enterprise Library Services	16.2.8	
Imaging Review and Notes	16.0.0	
Imaging Enterprise Scan	16.2.0	
Imaging Windows Viewer and DesktopLink	16.0.0	
Monitoring Agent	16.2.8	
Object Importer	16.2.8	Included, requires license key to enable
Office Editor	16.2.8	
Office Online Broker	16.2.8	
Open Text Directory Services	16.6.0	
Solution Registry Agent	16.2.0	
XML Workflow Extensions	16.2.0	
XML Workflow Interchange	16.2.8	
WebReports	16.2.8	Included, requires license key to enable

Note: For the latest compatibility information for OpenText products, refer to the Compatibility Matrix (https://knowledge.opentext.com/go/matrix) on OpenText My Support.

5.13 Language support

Content Server is currently localized in the following languages. Additional languages may be available in future releases.

Component	Languages																	
	EN	FR	DE	JA	ES	RU	KO	TW	AR	CA	ZH	NL	FI	IT	KK	PT	SV	UK
Smart UI	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Smart UI User Help	X	X	X	X	X	X						X						
Classic UI	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Classic UI User Help	X	X	X	X	X	X						X						
Administration	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Administration Help	X	X	X	X														

6 Install and Upgrade

Content Server 16.2 is available as a full install package for all supported platforms. The full install package should be used for new installations of Content Server as well as for upgrades from versions of Content Server that require a parallel upgrade (Content Server (Livelink) 9.7.1 UTF-8 and later).

6.1 Installation Note: OpenText Directory Services

If you update the Admin user properties, you may be prompted to update the password after logging in the next time. You can work around this using the following procedure:

1. Go through with the password change and set a temporary password
2. Login to OTDS administration (e.g. http://localhost:8002/otds-admin)
3. Go to Partitions->Global Settings (at the top) ->Password Policy
4. Set 'Number of unique passwords before an old password can be reused' to 0 so that you can reuse the desired password.
5. Press Save
6. Go to Partitions->otds.admin->Actions->View Members
7. otadmin->Actions->Properties->Account
8. Select 'Do not require password change on reset' and 'Password never expires'
9. Save
   Login to CS and change the password for Admin as you did in the first place to the desired value

If you are applying the 16.2.7 or 16.0.11 update to an existing Content Server that uses an Internal OTDS server, you must go to Directory Services Integration Settings -> Configure Integration Settings (?func=otdsintegration.settings) and click "Save" settings in order for Content Server to have administrative rights in the Internal OTDS.

6.2 Installation Note: Search file systems

The search system components require accurate file locking to function correctly. Some NFS systems do not properly propagate file attributes when configured for high availability, and may require the NFS **noac** configuration flag to be set.

Distributed File Systems are not suitable for storing the search index. Microsoft DFS is known to fail for search. Likewise, on Microsoft Windows Servers, SMB2 and SMB3 Cache Redirector features must be disabled. Microsoft has documented that this feature is not compatible with applications that use file-based communication. Per the Microsoft description here -- http://technet.microsoft.com/en-us/library/ff686200(WS.10).aspx, set or create the following registry keys of type REG_DWORD to ZERO:

```
HKEY_LOCAL_MACHINE\System\CurrentControlSet\Services\Lanmanworkstation\Parameters
        DirectoryCacheLifetime=0
        FileNotFoundCacheLifetime=0
        FileInfoCacheLifetime=0
```

6.3   Installation Note: Records Management, Physical Objects, Security Clearance modules

The Classifications, Records Management, Physical Objects and Security Clearance modules are installed with Content Server. For new installations or upgrades, where Records Management, Physical Objects or Security Clearance is not previously installed, the administrator needs to enable the modules by going to the Content Server Administration> Records Management Administration> Enable and Configure Records Management page to confirm licensing. A license number is not required.

The latest version of the Physical Objects label control file is available for download on My Support.

6.3.1   Records Management WebReports for Content Server 16.2.7

Any modifications to the Records Management, Physical Objects and Security Clearance WebReports shipped with previous releases will not be maintained on upgrade. You may wish to copy any reports you have modified prior to upgrade.

> ⚠ **Important**
>
> The release of Records Management OTRMReports 1.6, Physical Objects OTPOReports 1.6 and Security Clearance OTRMSecReports 1.6 reports will need to be manually upgraded by going to Content Server Applications Administration > Applications Management.

6.3.2   Records Management WebReports for Content Server 16.2.4

Any modifications to the Records Management and Physical Objects WebReports shipped with previous releases will not be maintained on upgrade. You may wish to copy any reports you have modified prior to upgrade.

> ⚠️ **Important**
>
> The release of Records Management OTRMReports 1.5, Physical
> Objects OTPOReports 1.5 and Security Clearance OTRMSecReports
> 1.5 reports will need to be manually upgraded by going to Content
> Server Applications Administration > Applications Management.
>
> There is an issue with upgrading OTPOReports from version 1.4 to 1.5
> whereby upgrading the Physical Object Reports leads to nodes
> incorrectly being added to the manifest. This has been resolved for
> 16.2.5 (See Known Issues.)

6.4   Upgrade Notes for the OpenText Email Services Module

> ⚠️ **Caution**
>
> Never attempt to upgrade the Email Services module by uninstalling and
> reinstalling it. Always follow the correct process for upgrading Content
> Server modules.
>
> Upgrading to Email Services 16.2 (included with Content Server 16) from
> Email Services 10.5.1 or earlier requires a schema change. Depending on
> the number of emails in Content Server, the upgrade might take some time
> to complete.

6.5   Installation Note: Performance Improvement When Applying 16.2.4 to an Oracle Database

For Oracle upgrades only:
Pre-checks cannot be done as the tasks below require DBA (or SYSTEM) access to the database.
DBA should perform the following tasks to improve performance on Oracle upgrades. The setting of
the Parallel parameters will ensure that statements with parallelism will be run as parallel.
1. Make sure Parallel parameters have been updated from the defaults.
2. Before running the upgrade:
ALTER SYSTEM SET parallel_degree_policy = AUTO;
ALTER SESSION ENABLE PARALLEL DML;
ALTER SYSTEM RECYLEBIN = OFF;
3. Calibrate the IO
sample:

```
--number of physical disks = phys_disk
--param max_latency = max_lat
SET SERVEROUTPUT ON
DECLARE
   lat  INTEGER;
   iops INTEGER;
   mbps INTEGER;
BEGIN
-- DBMS_RESOURCE_MANAGER.CALIBRATE_IO (<DISKS>, <MAX_LATENCY>, iops, mbps, lat);
   DBMS_RESOURCE_MANAGER.CALIBRATE_IO (phys_disk, max_lat, iops, mbps, lat);
   DBMS_OUTPUT.PUT_LINE ('max_iops = ' || iops);
   DBMS_OUTPUT.PUT_LINE ('latency  = ' || lat);
   DBMS_OUTPUT.PUT_LINE ('max_mbps = ' || mbps);
END;
```

6.6   My Support Review

Documentation and resources for Content Server 16.2 are available on OpenText My Support and linked from the Content Server landing page.

OpenText also recommends that you check the Content Server area of the OpenText My Support (https://knowledge.opentext.com/go/16534305) for any documentation updates that may have been posted after release.

6.7   Upgrade Note: Java – OpenJDK 11.0.1

As of version 16.2.8 Content Server now uses OpenJDK 11 instead of Java 8. There are no changes in customer licensing or our support of products with this switch. OpenJDK and selected Java classes are included in the install and upgrade packages.

Java 8 includes a number of Java classes that are not part of the standard OpenJDK distribution. If you have custom or 3rd party extensions to Content Server written in Java, you should review the use of Java classes by your application, and you may need to separately install any that are missing.

> ⚠️ **Important**
>
> Content Suite Viewer, available using the additional Brava! Server Components install, does not support OpenJDK 11. Administrators cannot install Brava! Server Components onto a Content Server system running OpenJDK 11.
>
> If Tomcat is used, it must also be set up using OpenJDK.

6.8   Installation Note: Kubernetes

As of version 16.2.10 Content Server is also available as a Docker Container to be deployed in Kubernetes – a container-orchestration system. For further information, please refer to the Content Suite Platform Release Notes document.

6.9   Install Critical Patches

OpenText recommends that you use the **OpenText System Center** to keep your Content Server up to date with all the applicable latest patches.

6.9.1 Configuration File Changes

Some features of Content Server, DCS and Search Engine are managed through configuration files. This section outlines changes that are implemented or recommended with each Update. In some cases, configuration files cannot be overwritten or updated automatically due to the potential for conflict with customized settings. You should review the suggested changes and apply those which can be safely made for your system.

Search Configuration Files. New versions of search configuration files are not installed when applying an Update to an existing system because replacing these files would overwrite customizations previously made. In this case the latest versions of the configuration files are placed in a reference folder where you can review them and select specific edits for your configuration files: **<OTHOME>\config\config_reference**.

If you are installing this update as a new install you will find these configuration files in **<OTHOME>\config**.

The table below shows the Content Server Update in which each of the configuration files was last changed. **If the update is being applied to a new installation, these files should be copied to the <OTHOME>\config directory before indexing any data.**

File	Change
20.1.0	
Config\licensemetering\default2fo.xsl Config\licensemetering\fop.xconf Config\licensemetering\header_opetentext.png Config\licensemetering\licensereport2fo.xsl	Update for LPAD-77295 – "License Metering: License Report PDF Export" Business Administrators have the ability to generate a PDF export of the license report for all registered ecosystems. The PDF export of the license report is basically taken from the Extended ECM Platform. The Business Administrator will have access to a web page displaying the license report for all registered ecosystems. The report will be based on calendar year, and will summarize not only the license usage but, will provide a list of all users with their assigned license as well as a list of users without licenses. Currently, the License Metering framework is only used by Extended ECM and therefore the license report shows only

	data for Extended ECM products. The report can be accessed only from the Extended ECM configuration volume.
16.2.9	
Config\antisamy\clean-customized.html Config\antisamy\clean-loose.html Config\antisamy\clean-standard.html Config\antisamy\clean-strict.html	Update for LPAD-74495 – "Update Antisamy third party library" • There are several changes in these files • Copy files from the config_reference\antisamy folder to support the updated Antisamy library
Windows and Linux • Config\filters\image.ini Linux only • Config/filters/startXVFB.sh • Config/filters/shutdownXVFB.sh	Update for FMT-1685 – "Filter configuration files must be moved after upgrade." • These are new files • Copy files from the config_reference\filers folder.

Config\LLFieldDefinitions.txt \ LLFieldDefinitions_EL.txt	Update for SRCH-5434 – "OTTracerExtratorID should be Long not Integer"
	
	In the `#Index Tracer` section of the file change the following:
	`INTEGER OTTracerExtractorID`
	
	To the following:
	`LONG OTTracerExtractorID`

16.2.7	

Config\application_dcs.ini	Update for SRCH-5240 – "Provide default patterns for full text matching"
	
	Pattern detection and normalization for search indexing is enabled by default on new installations for credit cards, social security numbers, and US 10 digit phone numbers.
	
	Add the following text:
	`[Patterns]`
	`#`
	`meta_sin=name:SIN   pattern:regex_SIN operation:count,insert   delim:zqsin`
	`# regex_SIN=(^|\n|(?<=\D)[\s:])\d{3}([ -])\d{3}\g2\d{3}(?=([\n\r]|[\s,\.;]\D))`

| | ```
meta_ssn=name:SSN    pattern:regex_SSN
operation:count,insert    delim:zqssn
regex_SSN=(^|\n|(?<=\D)[\s:])\d{3}([ -
])\d{2}\g2\d{4}(?=([\n\r]|[,\.;\s]\D))

meta_credit=name:CreditCard    pattern:re
gex_credit    operation:count,insert    de
lim:zqcc
regex_credit=(^|\n|(?<=(\D[\s:])))[\d]{4
}([ -
]?)[\d]{4}\g3[\d]{4}\g3[\d]{4}(?=([\n\r]
|[\s,\.;]\D))

meta_phone_na=name:PhoneNumber    pattern
:regex_phone_na    operation:count,insert
    delim:zqph
regex_phone_na=(^|\n|(?<=(\+\d|\s\d|\D\D
))[\s:])(\(()?\d{3}(?(3)(\))[ ]|[ \.-
])\d{3}(?(3)[ -]|[ -
\.])\d{4}(?=(\s\D|[ex]|[\r\n]|[\.,;]\s))
``` |
| **Opentext.ini** | The following settings were moved from opentext.ini file to the database:

• Configure Attribute Value Requirements
    o `[AttrRequiredValue]`
• Configure Status Page for Multi Select Options
    o `[General\multiSelectProgressNumber]` |
| **16.2.6** | |
| config\antisamy\clean-standard.xml | Fix for LPAD-68499 – "Update Antisamy Version to support updated HTML controls"<br><br>Add the text in *bold italics*:<br><br>```
<tag name="a" action="validate">
    <!-- onInvalid="filterTag" has
been removed as per suggestion at OWASP
SJ 2007 - just "name" is valid -->
<attribute name="href"/>
<attribute name="onFocus"/>
<attribute name="onBlur"/>
<attribute name="nohref">
    <regexp-list>
        <regexp name="anything"/>
    </regexp-list>
</attribute>
<attribute name="rel">
    <literal-list>
``` |

	``
	<literal value="nofollow"/>
	    </literal-list>
	</attribute>
	<attribute name="name"/>
	<attribute name="target">
	    <literal-list>
	        <literal value="_blank"/>
	    </literal-list>
	</attribute>
	
	</tag>
	``

16.2.5	

dcs.ini	New configuration settings for pattern matching and injecting normalize numeric values. Sample below:
	
	``
	[Patterns]
	Meta=name:SSN pattern:Regex_SSN
	        operation:count,match,insert
	        delim:ssn,ssn_x
	Regex_SSN=\b[0-9]{3}[-][0-9]{2}[-][0-9]{4}\b
	``

Opentext.ini	Update for Pyro-4090 "Add support for parallel for Oracle database when upgrading". This setting is only available in an upgrade on a Content Server system using Oracle. Parallel is enabled by default with the installer and disabled with the patch. ``` [DBUPGRADE] EnableParallel=false (or true, depending on what the user chooses) ```
Opentext.ini	Fix for CAR-704 "Adjust configuration to adhere to naming conventions". Settings to turn logging on and off have changed from ``` [contentmove_logs] entryLogEnabled=true|false ``` To ``` [spchange] enforceEntryLog=true|false ```
htmlToOTTag/mapping	Fix for FMT-885 "Add AddrSender and DisplaySender"

| | ```
#MSG Meta data Mapping
…
OTDocDisplaySender=OTDocDisplaySender
OTDocAddrSender=OTDocAddrSender
``` |
| **16.2.3** | |
| **Opentext.ini** | Fix for CSEM-982 "Email Services objects prompt for required attributes when dragged and dropped into a container"<br><br>A new entry is added as follows:<br><br>```
[PSTAGE]
AdditionalSupportedContainers={751}
``` |
16.2.2	
Search.ini	Fix for SRCH-4879 "Provide administration controls for configuring exact substring search regions" A new directory was created in the config folder called "tokenizers" to allow the administrator to pick from a list.
16.2.1	
| **Dcsrules.txt** | Fix for DCS-8271 "Update dcsrules.txt to remove unsupported formats."<br><br>Remove the following in `[Thumbnail]`<br><br>```
case OTMimeType = "application/iges",
"model/iges"
  try  IMTHUMB,  PruneDoc
``` |
| **Dcsrules.txt** | Fix for SRCH-2701. "QDFBranch should by removed from the try line of Office 2010/2007 formats in the DCSRules.txt file."<br><br>Remove the following in `[Convert]`<br><br>```
"application/vnd.openxmlformats-
officedocument.wordprocessingml.document"
  try IM, QDFBranch,PruneDoc
    exec ConvertAttachments
```<br>Add the following in `[Convert]` |

	`"application/vnd.openxmlformats-` `officedocument.wordprocessingml.document"` `try IM, PruneDoc` `exec ConvertAttachments`

Search_xmp_api.dtd	Fix for SFWK-7064 "Support facets in search REST API." Remove the following in [Convert]
	
	 `<!ELEMENT FacetItem EMPTY>` `<!ATTLIST FacetItem` `    Count CDATA #IMPLIED` `    Value CDATA #REQUIRED>`
	
	 Add the following:
	
	 `<!ELEMENT FacetItem EMPTY>` `<!ATTLIST FacetItem` `    Count CDATA #IMPLIED` `    DisplayName CDATA #REQUIRED` `    Value CDATA #REQUIRED>`

Opentext.ini	Fix for PYRO-3323 "Increase default size of SQL Connects and Threads logs to 250 MB."
	
	 In `[thread_logs]` AND `[connect-logs]` sections, update:
	
	 `maxBackupIndex=10` `maxFileSize=50`
	
	 To
	
	 `maxBackupIndex=4` `maxFileSize=250`

7 New features and Fixes

! **Important**

Security Fixes, Fixes of Note and New Features can be reviewed in the OpenText Content Server 16 Release Notes List in OpenText My Support.

8 Known issues

The following known issues exist in this release.

Component	Issue Number	Issue Description
Logging	PYRO-5040	HTTP 502.2 responses from livelink.exe may occur if Web Client logs are written to a shared Windows location. Workarounds include configuring IIS to connect as a Domain Account, or logging to a location that is not a Windows Share.
OTDS	CST-888	Content Server resource must be an "administrator" for OTDS. On upgrades, this status may lost. You can fix this by visiting the OTDS Integration Settings admin page and selecting "Save Changes".
Collections	SFWK-9387	The Disk Image Creation Settings page may show large red "Grid Builder" error text if a system has not updated the default Disk Image settings since update 16.0.0 was released. Workaround is to select "Save Changes" on the form.
Database	CSARC-2184	Some usage patterns may see unexpected levels of blocking on the KState table with SQL Server. It may be possible to mitigate this by setting dbOptionRecompile=TRUE in the opentext.ini file.
Content Move	CAR-676	Restriction for use of Content Move and Archive Server/Center: When using Content Move to move content inside Archive Center 16.0 or 16.2, Content Move must not be used, if the source and the target pool share the same disk buffer. For configuration of Archives, Pools, disk buffers and storage tiers see Archive Center Administration Guide.
Administration Infrastructure	PYRO-2367	Stopping the Admin Server service on instances running Memcached processes leads to significant performance degradation on the other instances in the cluster.

Document Properties Synchronization	DPS-800	DPS synchronization will set a blank value for fields whose data source is unavailable for the document being processed. If either endpoint of a DPS mapping is unavailable for a given binding, the value stored for that mapping will be blank. For example, if a Write Binding has a mapping between a Category Attribute and a Document Property, the Document Property will be set to a blank value for a given document if the Category is not applied to the document. Similarly, if a Read Binding has a mapping between a Category Attribute and a Document Property, the Category Attribute will be set to a blank value for a given document if the document is missing the Document Property.
Document Properties Synchronization	DPS-797	DPS does not process documents added to the system via Remote Cache Store and Forward. Documents waiting to be uploaded to the primary server are not processed by DPS as the document content has not yet arrived. The arrival of document content via Store and Forward does not trigger a DPS event.
eLink	LPH-418	eLink does not respect the system-wide Version Limit setting when adding documents through email to a container.
eLink	LPH-34	eLink does not support the inclusion of inline images in outbound messages.
Projects	LPAD-46442	Transport of a Project with Tasklist : the project groups aren't correctly handled for the Tasklist and Tasks inside the Project

Web Forms	LPAT-135	If a user completes a Form to initiate a Workflow, and adds an attachment using iFrame or a separate attachment pane, refreshing their browser before initiating the Workflow causes their attachments to not be included. This is because Workflows create a temporary map when the Form is opened. Refreshing the browser instantiates a new temporary map, therefore the Workflow does not know about the previously added attachments.
Physical Objects	LPU-10042	When a label is generated on item creation, some Records Detail fields do not display on the label. Once the physical object is created, regenerating the label displays the Records Detail fields.
Records Management	LPU-2635	In order for a User Hold to be applied to Text Documents (sub-type 145), the Managed Objects page must have the Document sub-type (144) checked for User Hold.
	LPAD-35560, LPU-5344	When RM metadata fields are required on the Add Item page and the items are dragged and dropped in the Classic view of Content Server, the user is not prompted to fill in the RM required fields. The content will be uploaded, and the next time the user accesses the Records Detail tab, the user will be prompted to fill in the required fields.
	LPAD-47804, LPU-7335	Deleted Category information of purged children is not captured. Category\Attribute information in the Audit Deletion Logs was added in Records Management 16.0. However, when items are sent to the recycle bin and later purged, the purged children's Category\Attribute information is not captured.
	LPU-9960	The Disposition Search Results Export creates an HTML page that allows it to be displayed in Excel with an .xls extension so that it is recognized as a spreadsheet. The Document Conversion process fails to process the file when using View as

		Webpage as the file is not a true .xls mime type. The Document Conversion process fails to process the file as the format is incorrect. When opening this exported file in MS Office an error occurs, however the file can be opened in Excel and the converted file saved to Excel.
	LPU-9257	When a disposition review assignment from the advanced review workflow assignment is reassigned, the RM Disposition Review link displays in the workflow assignment however no search results are displayed when accessing the RM Disposition Review snapshot.
	LPU-10161	When a hold is applied to a container, an indirect hold is applied to child objects within the container, regardless of whether the child objects are managed or unmanaged. The Holds tab does not display on unmanaged objects resulting in no information displaying to indicate a hold has been applied. To display the Hold tab, the child object will need to be declared as a managed object.
	LPAD-77079	In the Smart View, when clicking the RM Official, Records Details and Hold icons displayed adjacent to items, the icons link to the General Properties area instead of to the Records Management or Holds properties. This will be rectified in future releases.
	FYI	Retention Schedules using category attributes as time or event-based criteria may seem to export and import to other systems, but they will not be recognized in the destination system. Schedules using category attributes as criteria need to be manually edited after import.
	FYI	The option on Dispositions to auto-process search results will only be successful if Notifications are configured correctly.

Email Services	CSEM-972	Email Services Agent to Apply Missing Conversation ID sometimes does not scale under heavy loads
Smart View	AD-56626	A focus topic was accessibility support according to the WCAG 2.0 AA standard. For this purpose, HTML markup and CSS changes had to be done which might impact some CSS styling overrides. Please test your styling overrides carefully as there might be some places were adaptions are needed.
	LPAD-64931	When you change in the browse view the page size to 100, there might be situations where you get an error 'Invalid response received'. This issue can be avoided by increasing the limits of the URL length or the HTTP request header size in the web server configuration of your web front end (WFE) server(s).
Content Sharing with OpenText Core	EFSC-374	External file sharing using OpenText Core can be impacted whenever the Trusted Referrer settings in Content Server are not blank.
	EFSC-892	The Content Sharing integration with OpenText Core needs to be reenabled after a patch upgrade of Content Server 16.2.8
Office Online	OTOWA-435	Looping behavior when editing a document directly using Internet Explorer. To mitigate this behavior add `*.live.com` to the Internet Explorer trusted sites setting. For more information go here
	OTOWA-583	Office Online settings need to be re-enabled after a patch upgrade to Content Server 16.2.8

9   Contact information

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