New Feature Highlights Sage X3 2022 R4 & 2023 R1

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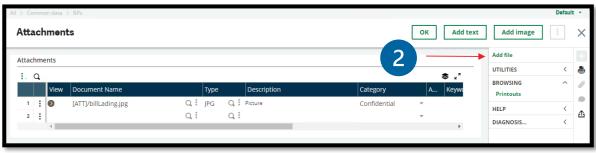
2022 R4 Attachments

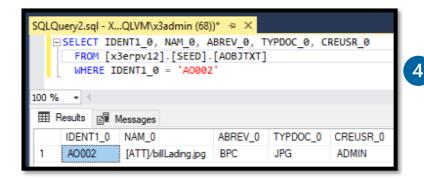


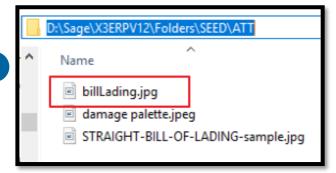
Attachment in Sage X3

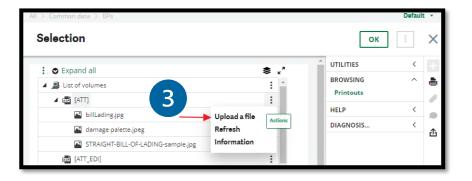
In Sage X3, you have always had the ability to attach files of different types to object-based functions, like Sales orders (GESSOH), Customers (GESBPC), using the attachments button in the right menu. Using the add file button, you will be presented with a list of volumes defined in Sage X3. You can then upload your attachment to a volume of your choice using the action button, for example, ATT and link to your object. The link is saved in the AOBJTXT table.





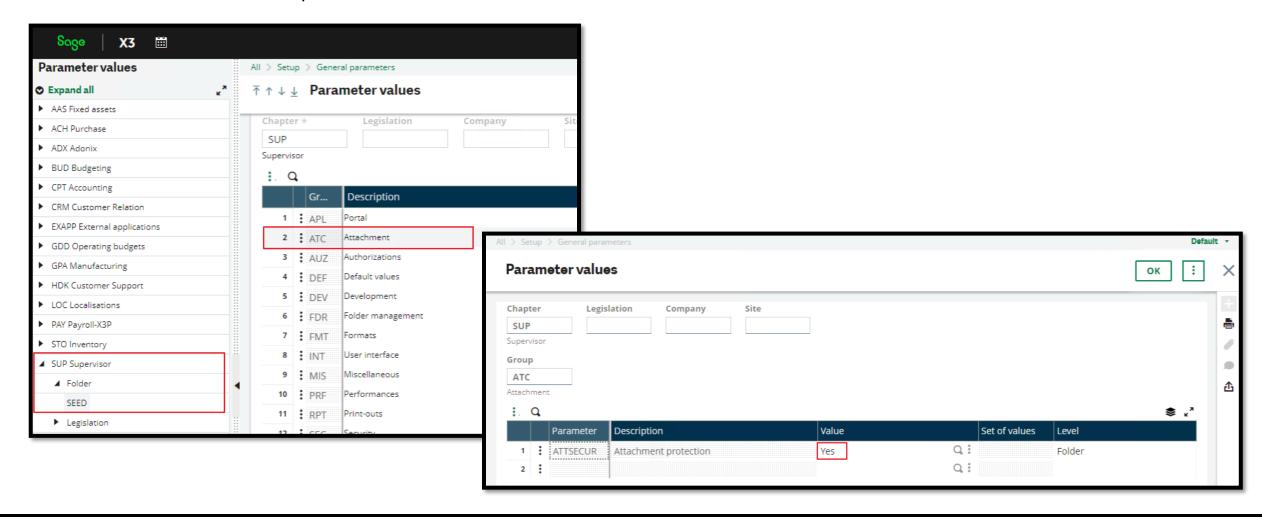






Enabling Security

From 2022 R4, we have a new parameter which enables the more secure attachments

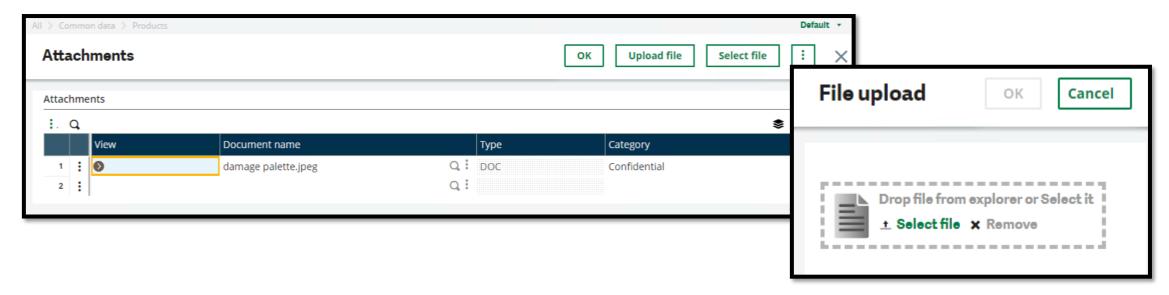




Simpler File Uploads

Changes to the attachments window

- **Upload file:** This uploads an attachment directly from the user's local device and lists it immediately in the attachments table with no additional user entry required. The user can either select a file through the browser's selection window, or drag a file onto the upload section of the screen
- When uploaded, the file appears in the attachments list with its filename (Document name), Type (from the extension if present), and a default Category set to Confidential (This can be changed by the user and is informative only).
- **Select file:** This opens an additional window where the user can select a file from an existing volume on the server (or to upload a file from the local device onto a volume on the server), as with previous Sage X3 releases.

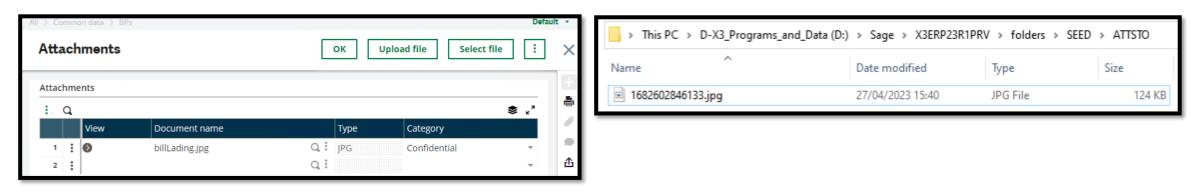




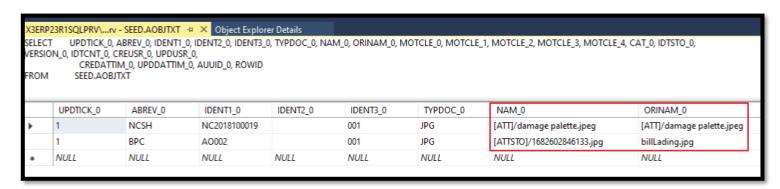
Attachment Security

One of the main concerns with attachments is that because they are saved in the storage area, the contents of the folders can be accessed through the Usage > Usage > X3 storage area's function (AVOLUME). No specific access rights can be applied, and users will have access even if there is no access to the Object the attachment was linked to.

From Sage X3 2022 R4, The attachments linked to the objects are now saved into a new folder ATTSTO Folder with an automatically generated numeric file name.



AOBJTXT table holds the link to the document and now the original file name (ORINAM_0)



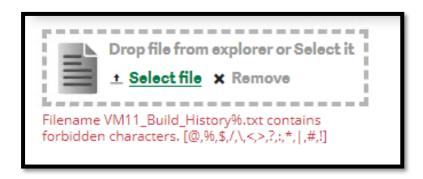
- Existing attachments still in ATT Folder
- New attachments now use the ATTSTO Folder.

Filenames

When uploading files, the system performs controls to remove unwanted characters and displays clear error messages when the file's name cannot be used.

The following characters are not allowed in attachment file names:

- You cannot use @, %, and \$ in Sage X3 file names. These are Sage X3-reserved characters.
- You cannot use /, \setminus , <, >, ?, :, *, ", and | in operating system file names. For example, Windows file names.
- You cannot use *, !, #, and ? in any file name because those are used in regular expressions.





2022R4 New HTML Text Editor



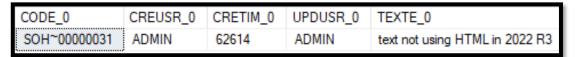
Text Storage

Prior to 2022 R4 Text is stored in either RTF or plain text format in the TEXCLOB table.

SELECT CODE_0, TEXTE_0
FROM SEED.TEXCLOB

WHERE (CODE_0 LIKE 'SOH~00000031')

Plain Text





Rich text format (RTF)

 $$$ \{\r f1\ansi{\fonttbl}{f0 MS Sns Serif;}}{\colortbl;\red0\green0\blue153;\red204\green204\blue255;\red51\green102\blue255;\red204\green0\blue0;}\uc0\pard\fs24\pard\ql\pard\ql{\cf1\i\b\fs28 Rich\b0\i0}{\fs24\cf0\b text\b0\cf0}{\fs24\b{\cf2 not}\cf0\ul using\ul0\strike0}\b0}\fs24\b{\cf3 HTML in }{\cf4 2022}\cf3\i R3\i0\cf0\b0\fs24\par} $$$





Prior to 2022 R4

Prior to 2022 R4, Sage X3 used RTF format to embed text in the application for documents like Sales orders, Invoices and other mainly customer-facing documents.

What is RTF Format

- It was developed by Microsoft in the late 1980s with the purpose of creating documents that could be shared across different platforms and operating systems without losing formatting or other styling information.
- Rich Text Format (RTF) is a file format that is used to exchange text documents between different wordprocessing software applications.
- RTF files can contain text, images, tables, and other objects and can be opened and edited using a variety of software applications, including Microsoft Word, LibreOffice Writer, and Google Docs.
- Unlike plain text files, which contain only the ASCII text characters, RTF files contain formatting codes that describe how the text should be displayed, such as font style, size, colour, and alignment.

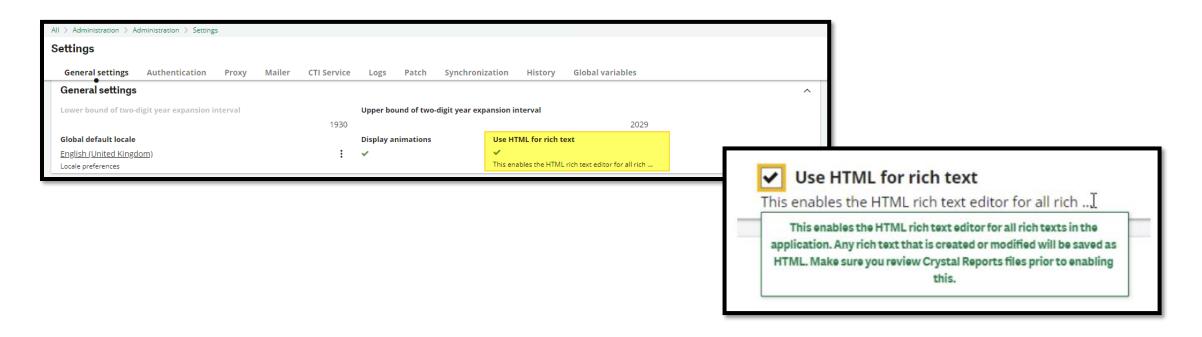
2022 R4 HTML introduced

From 2022 R4, a new feature has been implemented to allow the use of the HTML format to save rich texts in Sage X3. This can be enabled from global settings. The advantages include

- Resolve issues that appear when text is translated back and forth from RTF to HTML to be displayed on screen
- You can now move to an open standard HTML format
- Resolve formatting issues with rich texts when printing through Crystal reports
- Sage X3 Environment can progressively move to start using HTML Format
 - Existing text continues to use RTF
 - New & modified texts use HTML

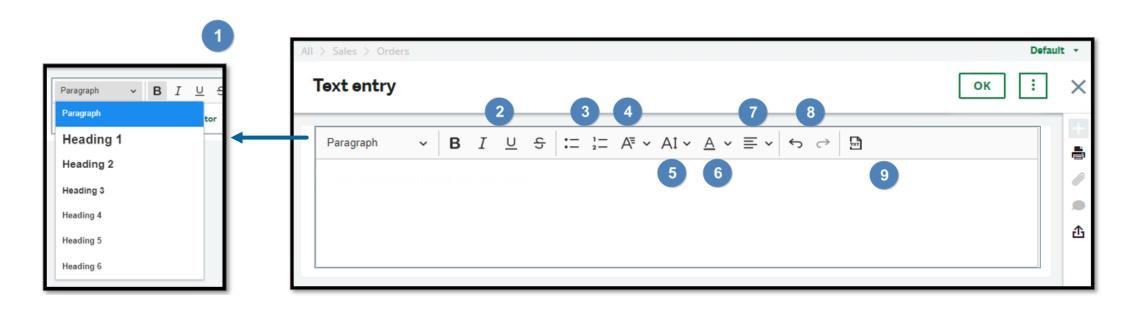
Switching to use HTML

From Sage X3 2022 R4, you can activate the flag Use HTML for rich texts in **Administration > Global Settings.** This enables the new HTML editor in Sage X3. You must log out of the application once the flag is enabled.



Sage X3 Environment can progressively move to start using HTML Format. Existing text continues to use RTF New & modified texts start using HTML

The New Editor



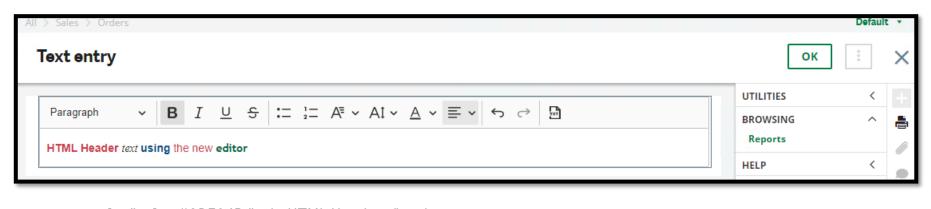
- 1. Paragraph heading options
- 2. Font formatting (bold, italic, underline & strikethrough
- 3. Bullet & numbering options
- 4. Font Styles
- 5. Font Size

- 6. Font colour
- 7. Text alignment
- 9. Option to switch to plain text (removes all formatting)

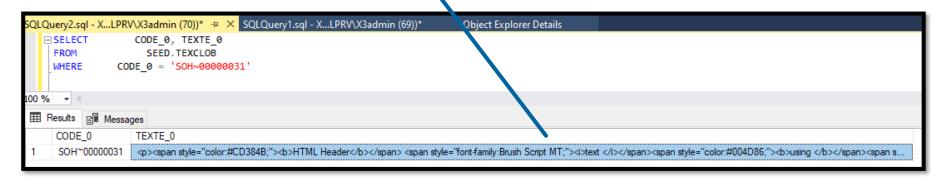


The New Editor

This is an example of how HTML is now stored in the TEXTE field in this case.

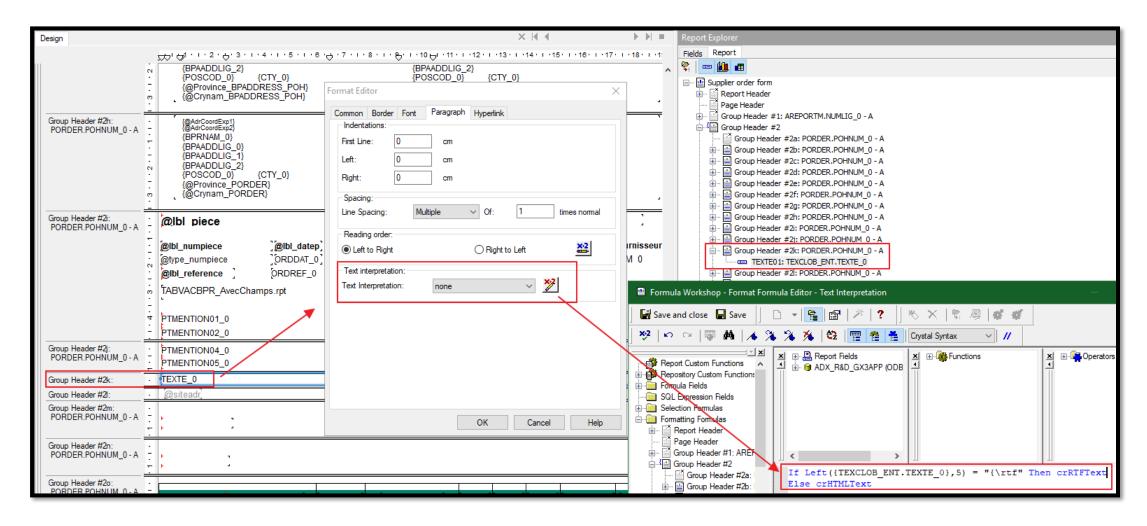


HTML Header <i>text </i> using the new editor





Crystal Reports





Crystal Reports

When using HTML, there are some changes that you will have to make to your Crystal Reports so that the HTML can be rendered correctly. Changes have already been made in the standard reports shipped with Sage X3.

- Modify any custom reports that use rich text fields, for example, the TEXTE_0 field in a Sales order
- Set the field interpretation value from RTF text to none
- In the formula enter If Left({TEXTCLOB_DEB.TEXTE_0},5) = "{\rtf" Then crRTFText Else crHTMLText

The formula instructs Crystal Reports to interpret the text as RTF if formatted as such and HTML otherwise. If the text is raw (no formatting), the Crystal Reports HTML engine will display it as such

2023R1 Syracuse (12.18)



NodeJS Version 18

Syracuse Server (12.18) delivered with Sage X3 2023 R1 now runs Node.js framework 18.

What is NodeJS Framework

Node.js is an open-source, cross-platform, back-end JavaScript runtime environment that allows developers to write server-side code using JavaScript.

- Node.js allows developers to use JavaScript not just for client-side scripting in web browsers but also for creating serverside applications and services that run on the server
- Node.js provides a rich set of built-in modules and libraries, making it easier for developers to build scalable and highperformance applications

What it means for Sage X3 - This will affect Sage X3 deployments.

- Node.js 18 does not support a specific tool called node-fibres. If you're a developer who has created JavaScript bundles to
 work with Syracuse, you need to check if your code uses node fibres. If it does, you may need to find alternatives to nodefibres to make your code work with Node.js 18.
- Linux 7 is no longer supported (announced in February 2023)
- Controls have been put in place so Syracuse will only deploy on Enterprise Linux 8 platforms (Redhat 8 or Enterprise Linux 8) if prerequisites are not met, the installation will not continue

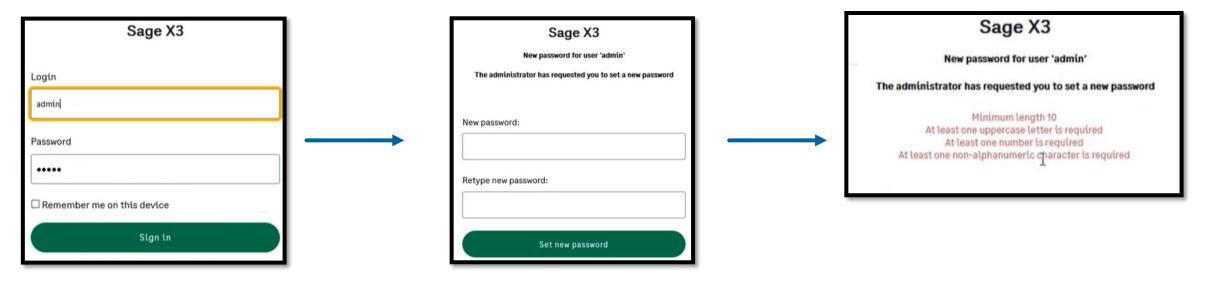


Syracuse Password

Starting from Syracuse 12.18, a new password policy is automatically applied to all new installation of Syracuse which means that you can no longer use the simple password.

First login

- After the Successful Syracuse installation on the first login, you are prompted for the admin login credentials, which remain admin & admin.
- On the next screen, you define your new password for the admin user
- The password needs to fulfil the new default 'SAGE' password policy

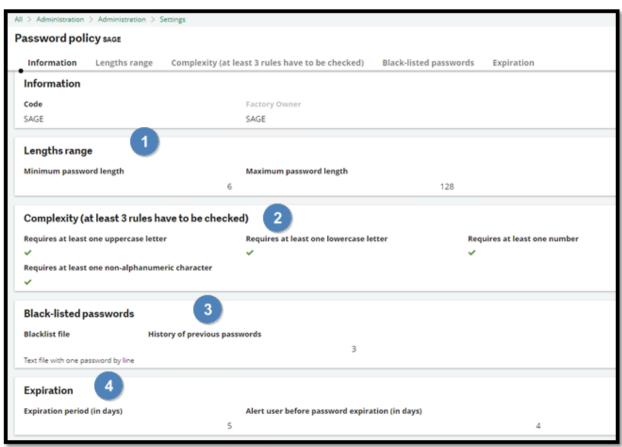




Password Policy Definition

The new default password policy (SAGE) is defined in **Administration < Administration < Settings < Password Policies function**. The policy will exist on updates & migrations but will not be enabled.

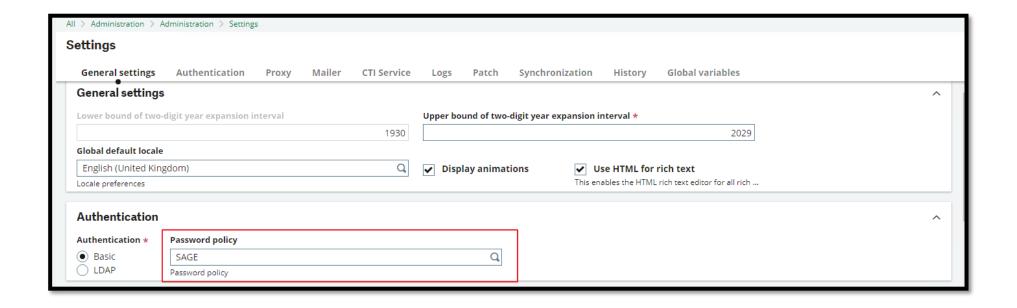
- Set minimum & maximum password length.
- Assign mandatory complexity rules to all passwords. A minimum of 3 rules have to be selected.
- You can import a text file with a list of forbidden/weak passwords.
- Define the number of days before the password expires. It is also possible to disable the expiration period for a user.
- Set an expiration for the password. This will override the user
- setting
- Indicate how many days before the password expires the user is notified to change.





Applying the Password Policy

The password policy is applied to Syracuse users in **Administration > Administration > Settings > Global settings,** by default the 'SAGE policy is applied to all new installations of Syracuse. There is the ability to create your own password policy.





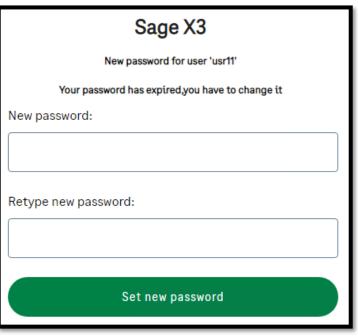
User Passwords

New installation

- Password policy is automatically enabled
- All Syracuse user passwords need to fulfil the policy requirements

Existing installations (when you enable the password policy)

- New users will need to fulfil the password policy requirements
- Any changes to the password in the Syracuse 'USERS' function will enforce the policy
- Existing user passwords will expire & a new password that fulfils the policy requirement needs to be set on login.
- If the password is set to 'not to expire' for a user. The password will not expire

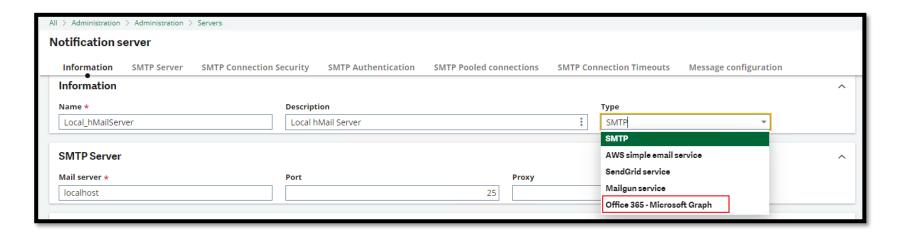


2023 R1 Notification server



Notification server

The Sage X3 notification server function, which is used to connect to different predefined email service providers and SMTP Servers, has been updated to support connections to Microsoft Exchange Online.

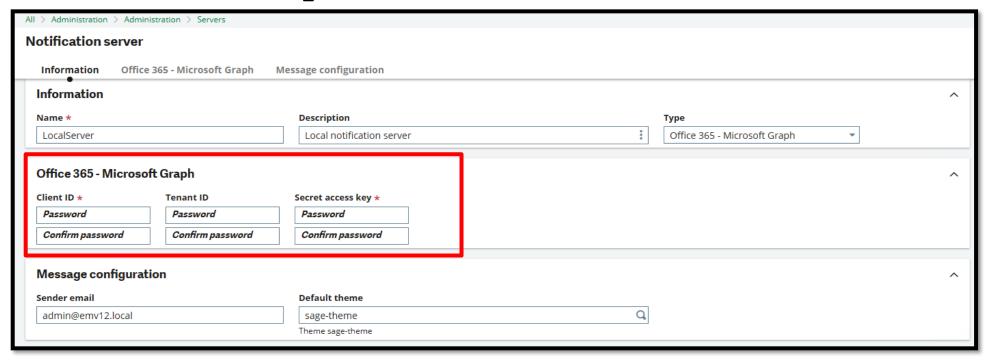


Exchange online requirements change, and basic authentication to Microsoft Exchange is no longer supported. Microsoft now recommends using the Microsoft Graph API to connect to your Exchange Online account using the Azure active directory.

Deprecation of Basic Authentication in Exchange Online | Microsoft Learn

<u>Graph Explorer | Try Microsoft Graph APIs - Microsoft Graph</u>

Microsoft Graph



Tenant ID - The Azure Tenant ID is a unique identifier. It is assigned to an Azure AD tenant when it is created and remains the same throughout the tenant's lifecycle. The Tenant ID is used to differentiate and identify tenants within the Azure ecosystem.

Client ID — A unique identifier assigned to an application or service principal in Azure Active Directory (Azure AD). The Client ID is used to uniquely identify the application or service principal within the Azure AD tenant.

Secret Key – Credential used for authenticating and authorizing access to various Azure services and resources



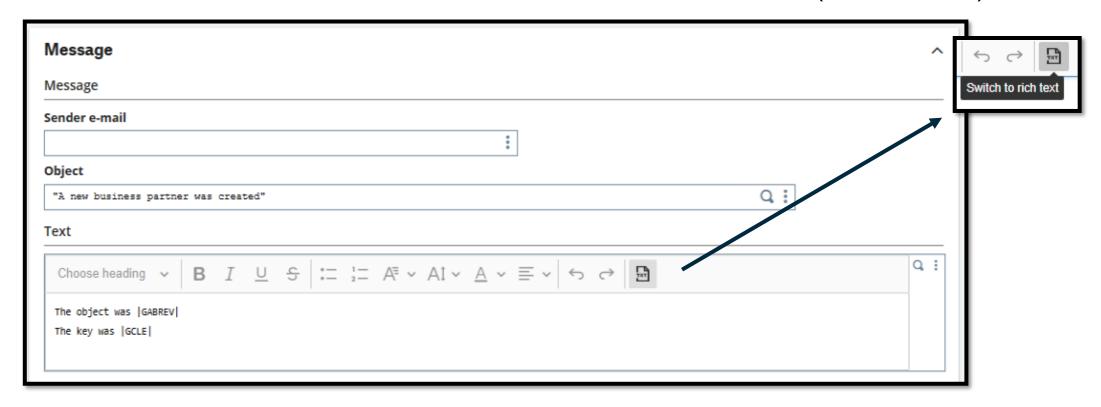
2023 R1 HTML Emails with Workflow



HTML Emails with Workflow

2023 R1 Introduces the ability to send HTML emails instead of plain text from workflow rules when using the notification server to send emails.

A new HTML editor for workflow rules is available in the GESAWA Functions (Workflow rules)

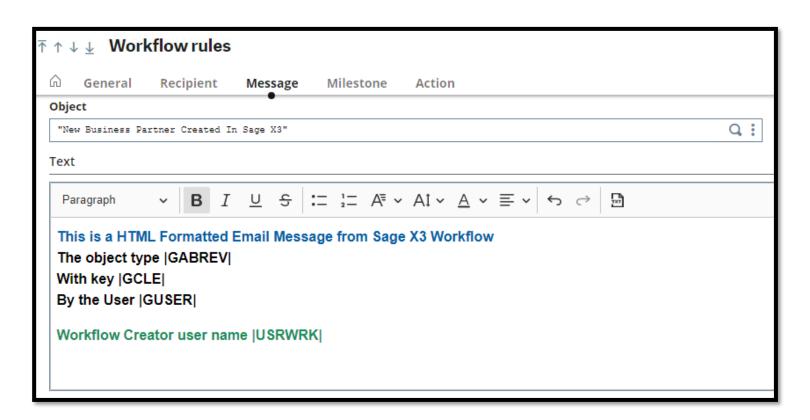




HTML Emails with Workflow

2023 R1 Introduces the ability to send HTML emails instead of plain text from workflow rules.

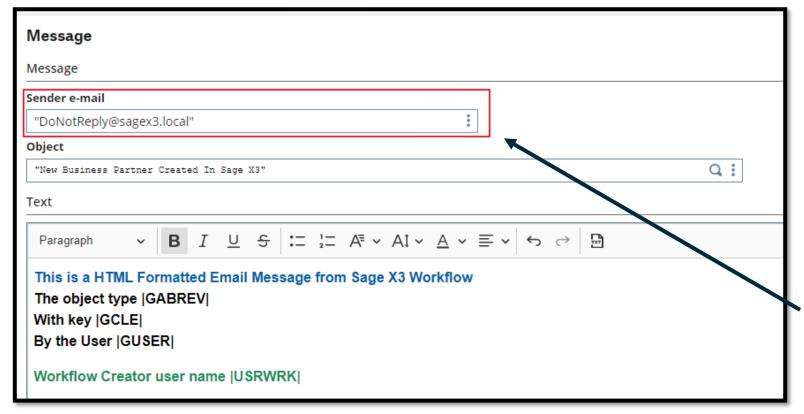
New HTML editor for workflow rules

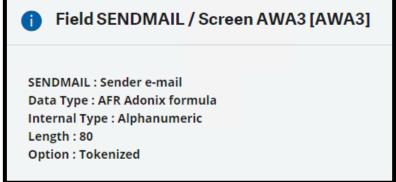


- •When applying HTML formatting, any formatting change that covers an expression (formula) in the text needs to apply to the entire expression (formula), including the pipe separators.
- •This requires using the Notification server and does not work with the legacy email client meladx.

Sender Address

The sender email has been added to the workflow rule definition because, with the notification server functionality, the entry points used historically to change the sender are no longer available.

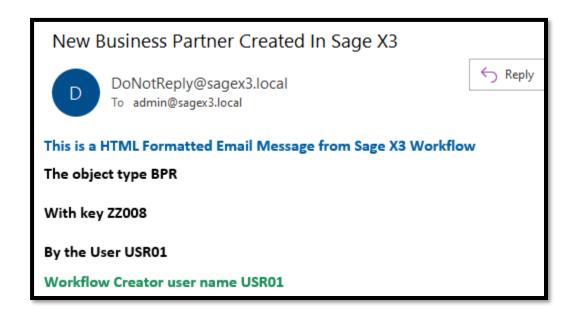


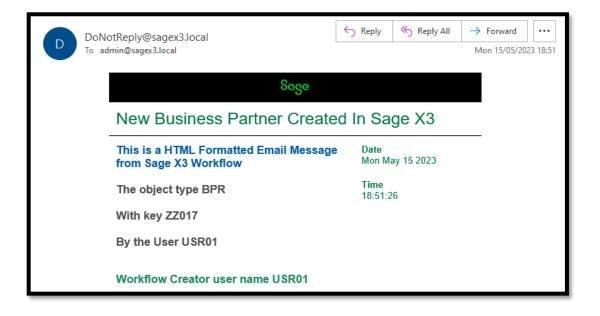


The sender email value can be a function or constant & will override the notification server sender email.

HTML Email Example

HTML Email Examples with & without the Sage theme applied





Management				
✓ Trigger mail	Trigger action	Trigger tracking	Debug mode	✓ Use a theme



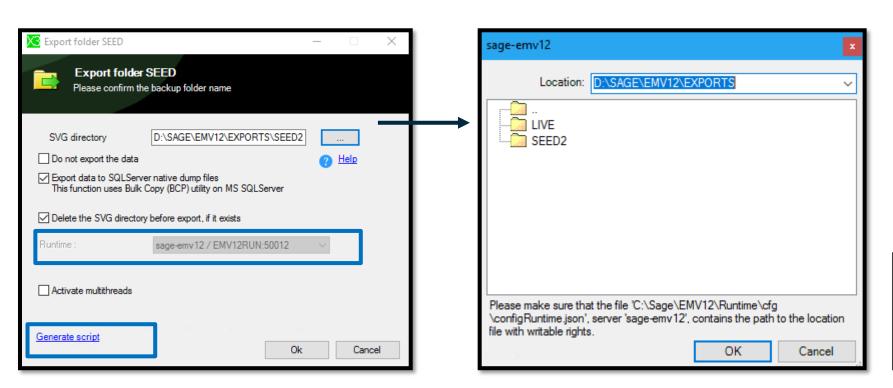
Sage X3 Console (2.57) Enhancements



Folder Exporting

Console version 2.57, released with 2023 R1, has some new features to help handle large datasets. These improvements have been introduced to help with the migration of environments where the datasets have grown over time (V6).

SVG Directory no longer has to be a subfolder of the data folder. We can now export the folder data to an absolute path which could be another drive.



The location has to be configured in the configRuntime.json file found in the runtime\cfg directory.

Although not a new feature there is also the option to specify a runtime for the process

```
},
{
   "path": "D:\\Sage\\EMV12\\Exports",
   "extensions": ["*"],
   "writable": true
},
{
```

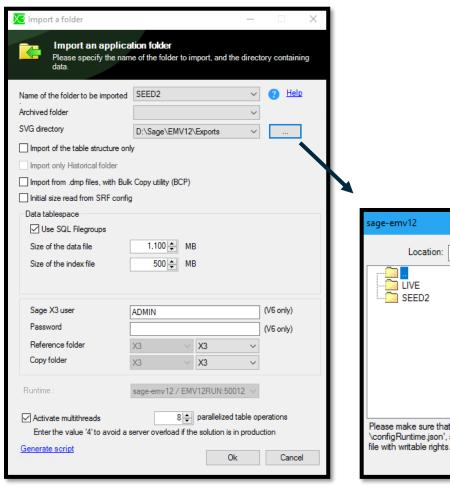


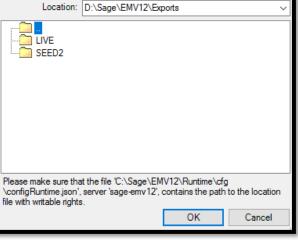
Importing

The importing functionality has also been improved, as with exporting, the SVG directory no longer has to be a subdirectory of the folder, so we

can now import from an absolute path.

- Database tables are sorted and imported based on the sizes of the "tablename.dat" files, starting from the largest and descending to the smallest.
- The program creates HardLink or Symbolic links to the data files (.dat) and does not copy or duplicate the data files from the SVG directory to the "FIL" directory. The new process saves space and time during the import.
- As with export, there is also the possibility to generate a script which can be used to initiate the import with the same settings

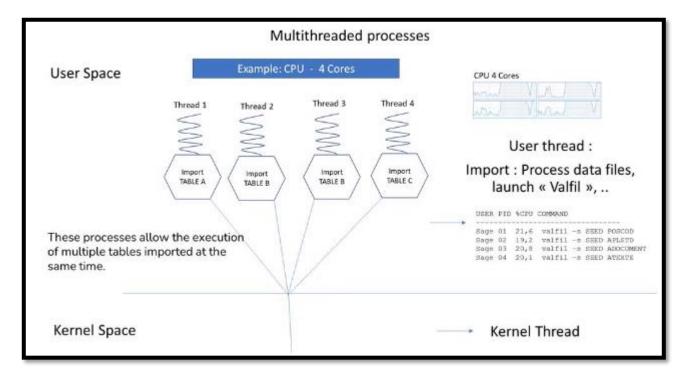




Multi-Threading

The folder import and export now support multi-threading.

The import process can now handle multiple tables simultaneously. Each table import is started on a particular thread. The program launches at least 8 threads / 8 tables import at the same time, and more if the number of CPU cores is greater than 8. In testing this improvement showed a 50% reduction in the time taken.



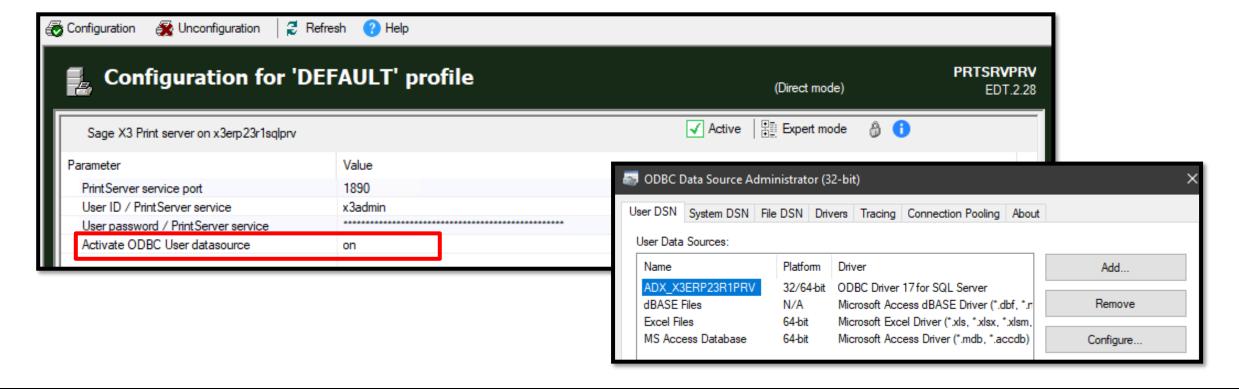
More details available in the console 2.57 help



Print server

Parameter 'Activate ODBC User data source' is now available in the print server configuration, not just in expert mode.

When configuring the Print Server service, the default type for the ODBC data source is "System," assuming that the Windows user associated with the logon account for this service has administrator rights. If the user does not have administrator rights, the creation of the System DSN will fail. If the user has restricted rights, you can set the value to "On" in order to create a User ODBC data source exclusively for that particular Windows user.





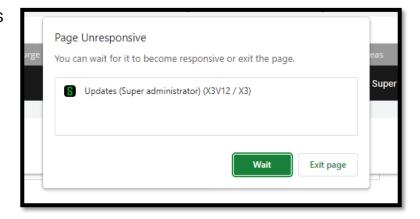
2023 R1 Updates Function

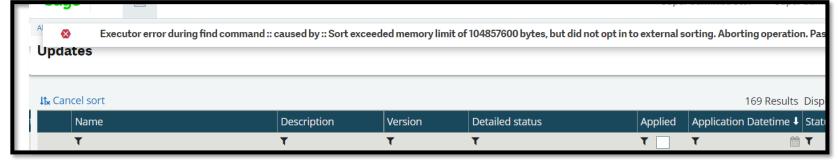


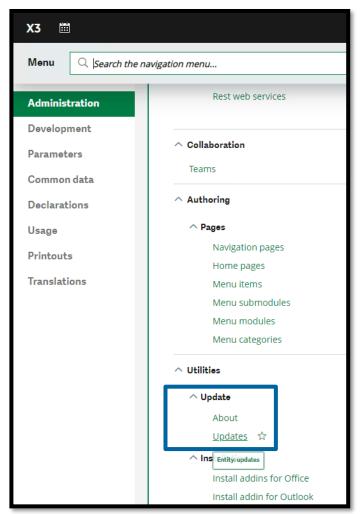
Update's Function Performance

The performance of uploading and managing large updates has been improved; you may have seen this in the past with

- Page unresponsive message saving updates
- Error messages when sorting applied updates
- Error messages when selecting folders



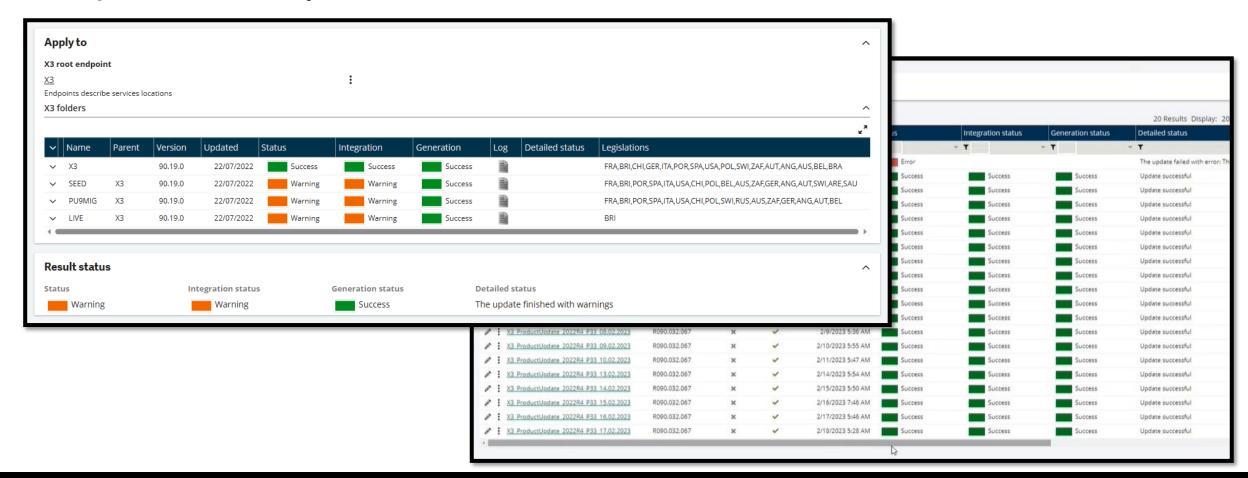






Updates Function Display

The update's function display has been improved with colour coding added to the patch results columns making it easier to identify the results.





2023 R1 OS & SQL Server



SQL Server changes

- Sage X3 2022 R4 has been certified with Windows Server 2022
- Sage X3 2023 R1 is certified with both Windows Server 2022 and SQL Server 2022
- SQL 2022 New features What's new in SQL Server 2022 SQL Server | Microsoft Learn
- In order to take advantage of new features, make sure customers have the latest compatibility level, if they have migrated from older versions of SQL Server.
- Detailed prerequisite information can be found online
 - V12 prerequisites (sageerpx3.com)
 - Prerequisites overview (sageerpx3.com)



Appendices





Useful Links

Resource	Link	
What's new info available on Sage University 1st of June	CoEx New Features Highlights	
Attachments online help	Attachments online help	
Node.js version 18 support update	Sage X3 Red Hat & Linux Update	
Sage X3 Release notes	All V12 release notes	
Prerequisites information for V12	<u>Prerequisites overview</u>	
Technical online help	<u>Technical help</u>	
SAP Online help	Supported HTML tags in Crystal reports	
SQL Server 2022 what's new	What's new in SQL Server 2022 - Microsoft Learn	
Microsoft Graph API Help & tools	<u>Microsoft Graph APIs - Microsoft learn</u>	
Exchange basic authentication update from Microsoft	Basic Authentication in Exchange Online - Microsoft Learn	



Thank you!

