Technical New Feature Highlights 2023 R2

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Sage

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New Features Highlights 2023 R2

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Security Improvements

- Elasticsearch * with secured DB and connection

- SQL Server Secure connection (console)

- Other Changes

Interface Improvements

Left List Improvements

Improved readability with a separate header section where we can apply filters

A light green alternate hovering colour has been introduced

Grey selected colour has been introduced to distinguish between the selected and hovering colours.

Alternate colouring has been reintroduced to the lines to make it easier to focus.

Order no	Sold-to	Order Date	Reference	Sales Rep	Shipment Status	Postal Code
TONPT02119/00001	PT005	05/09/24			Delivered	2910427
SOWFR0110007	FR004	08/07/24	Test report ACCINV	FR252	Not delivered	95370
SOWFR0110006	FR004	08/07/24	Test report ACCINV	FR252	Not delivered	95370
SOWFR0110005	FR004	05/10/23	Test report ACCINV2.	FR252	Not delivered	95370
SOWFR0110004	FR004	31/08/24	Test report ACCINV1	FR252	Not delivered	95370
SOWFR0110003	FR004	31/08/24	Test report ACCINV	FR252	Not delivered	95370
SOWFR0110002	FR004	08/10/24		FR252	Not delivered	95370
SOWDE0120012	DE001	21/07/24	WEB015182112	DE251	Not delivered	28201
SOWDE0120011	DE001	21/12/24	WEB015182112	DE251	Partly delivered	28201
SOWDE0120010	DE001	09/11/24	WEB015180911	DE251	Partly delivered	28201
SOWDE0120009	DE001	22/10/24	WEB015182210	DE251	Partly delivered	28201
SOWDE0120008	DE002	20/09/24	WEB015182009	DE251	Partly delivered	22047
SOWDE0120007	DE001	06/08/24	WEB014180608	DE251	Partly delivered	28201
SOWDE0120006	DE002	12/07/24	WEB014181207	DE251	Partly delivered	22047
SOWDE0120005	DE001	25/06/24	WEB014182506	DE251	Partly delivered	28201
SOWDE0120004	DE002	15/05/24	WEB013181505	DE251	Partly delivered	22047
SOWDE0120003	DE002	09/04/24	WEB013180904	DE251	Partly delivered	22047
SOWDE0120002	DE002	12/03/24	WEB013181203	DE251	Partly delivered	22047
SOWDE0120001	DE001	08/02/24	WEB013180802	DE251	Partly delivered	28201
SONZA0210006	ZA002	11/04/24		ZA101	Not delivered	1460

Collapsed Left Lists

Separator lines have been added to the sections.

Chevrons have been added to make it easier to see which section is opened and collapsed.

Grid Improvements

Alternating colour lines have been introduced to the grids to make it easier for users to focus when working with a large number of lines. Now when you hover over lines you can easily see they are enterable / also when you select to edit

Enterable lines on the grids are now highlighted making them distinguishable from read-only fields

Auto Collapse Feature

A new feature has been introduced called auto collapse to help improve the loading times on complex screens. Testing showed considerable improvements in the loading times when working with complex screens. The feature also allows the user to set the screen appropriately only to expand the tabs needed

Expanded Tabs

Buttons to expand all or minimise all tabs on this screen

Collapsed tabs

Enable Auto Collapse

The setting is per user and can be turned on and off from the user's profile using the Auto collapse toggle on and of switch. The settings for each screen are saved per user, and the 'reset auto collapse settings can be used to return to the default of the home & and first tab expanded, and all others minimized.
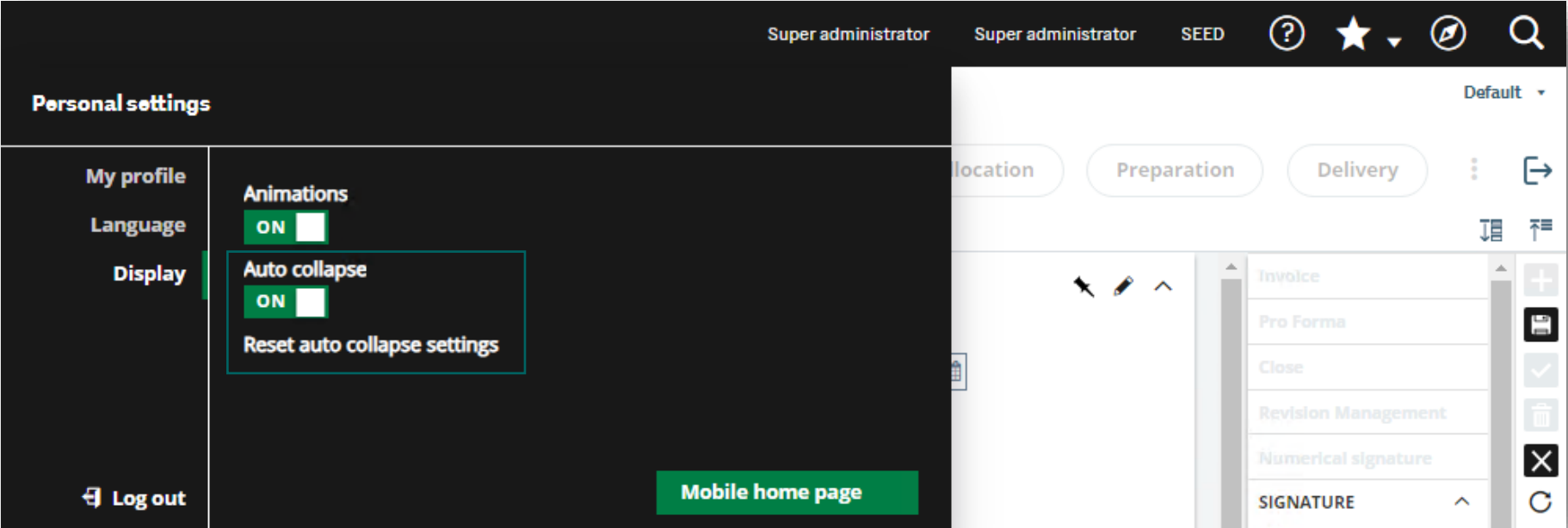
Batch Server Improvements

Batch Server Interface

Information panel
- Status
- AutoStart settings
- Start/stop time
- Host
- Process Name / ID

Activity Log
- Information including Errors since the start of the batch server

Queries log
- Status of task
- Start/end time of tasks
- Runtime
- X3 PID & Session

Batch Server Interface

For example, we can see that the DOSSVG Task is on error in the queries log we can easily identify that the reason is that the batch server stopped due to an error with node process 6740 highlighted in the activity log section. Previously in this type of situation we would have had to review the logs to identify the cause.

Queries Logs

The queries log screen allows you to see all the tasks executed since the start of the batch again with the overview of the status and other useful information like the start & and stop timings of the task, the folder and the runtime it was executed on.

Runtime Tags For Batch Tasks

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Runtime Tags for Tasks

When working with a X3 solution that has access to multiple runtimes, we can now direct our tasks to the runtime of our choice per task.

- This can be useful if you need some of your batch activity to execute on a runtime situated in different time zones if you're a multi-time zone business

- If you need to dedicate a runtime to certain types of batch jobs, maybe those that consume a large number of resources or would run for an extended period of time

Runtime Tags for Tasks

In previous versions the only option available was to specify a runtime tag at the batch controller level and all tasks would be executed on the specified runtime

Task Management

In the task management function (GESABT) when we select a task, we have an execution tag field where we can specify the runtime we want to direct this task to. If the value is blank the task will be directed to the main runtime.

The execution tag is set to 'BATCH' when the task is scheduled or executed it is directed to this runtime.

Task Groups

The execution tag can be specified for a group of tasks. In this example, you can see that the execution tag is set as MAIN however DOSSVG in the grid the execution tag is automatically set to BATCH

- If no tag is set in task management for the task the tag specified in the group is used.

- The tag specified in task management overrides the tag specified in the group of tasks.

Excel Add-in Improvements

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Excel Add-in Improvements

Previously the Excel adding used the right panel which contained the server settings as well as the data source settings.
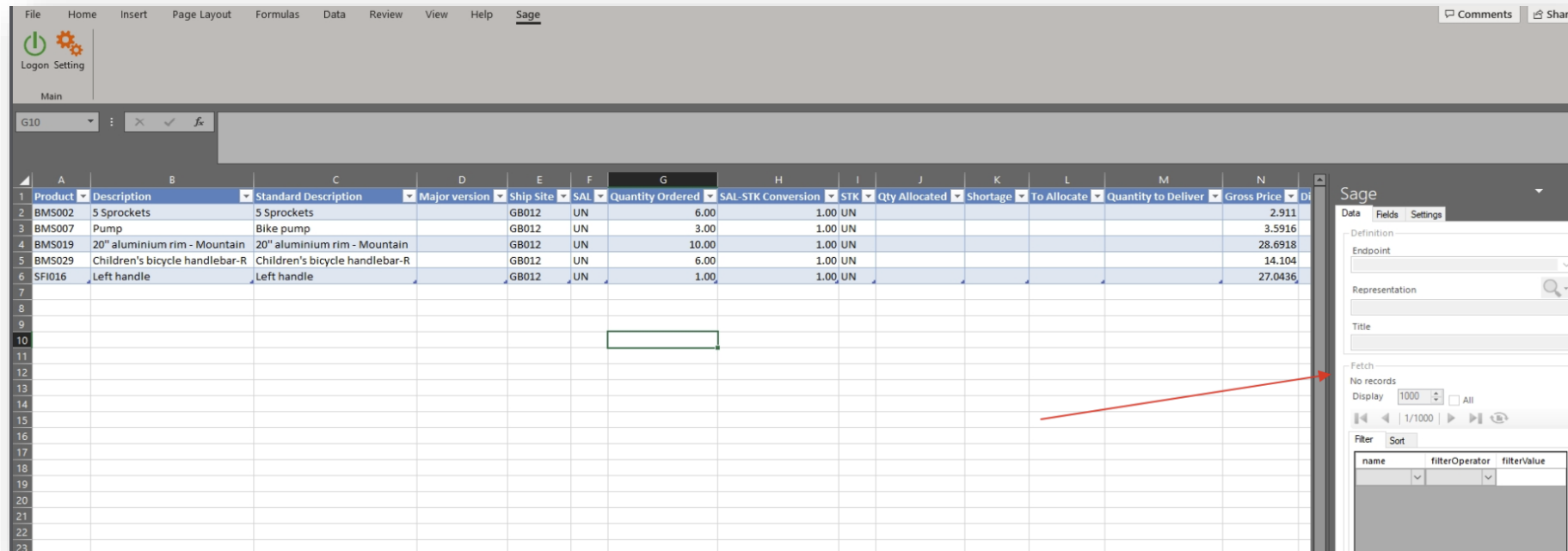
The synchronisation of the right panel posed a challenge, particularly when users switched between active worksheets. Given the intricate nature of the worksheets exported from Sage X3 and the potential for a substantial number of concurrently open worksheets, the user experience suffered. The constant synchronisation of the right did not provide a good user experience.

Excel Add-in Improvements

The user interface for the Microsoft Excel Add-in now has an improved ribbon and a more consistent experience for the user, providing much easier authentication and setup flows.

- Settings opens a new dialogue to specify the server settings

- The Data source button opens its own dialogue

- You can now save your exports to Excel without the need to immediately log in when you open the spreadsheet.

- If the sheet was manipulated offline when you press refresh, it will revert back to the template and re-populate the data.
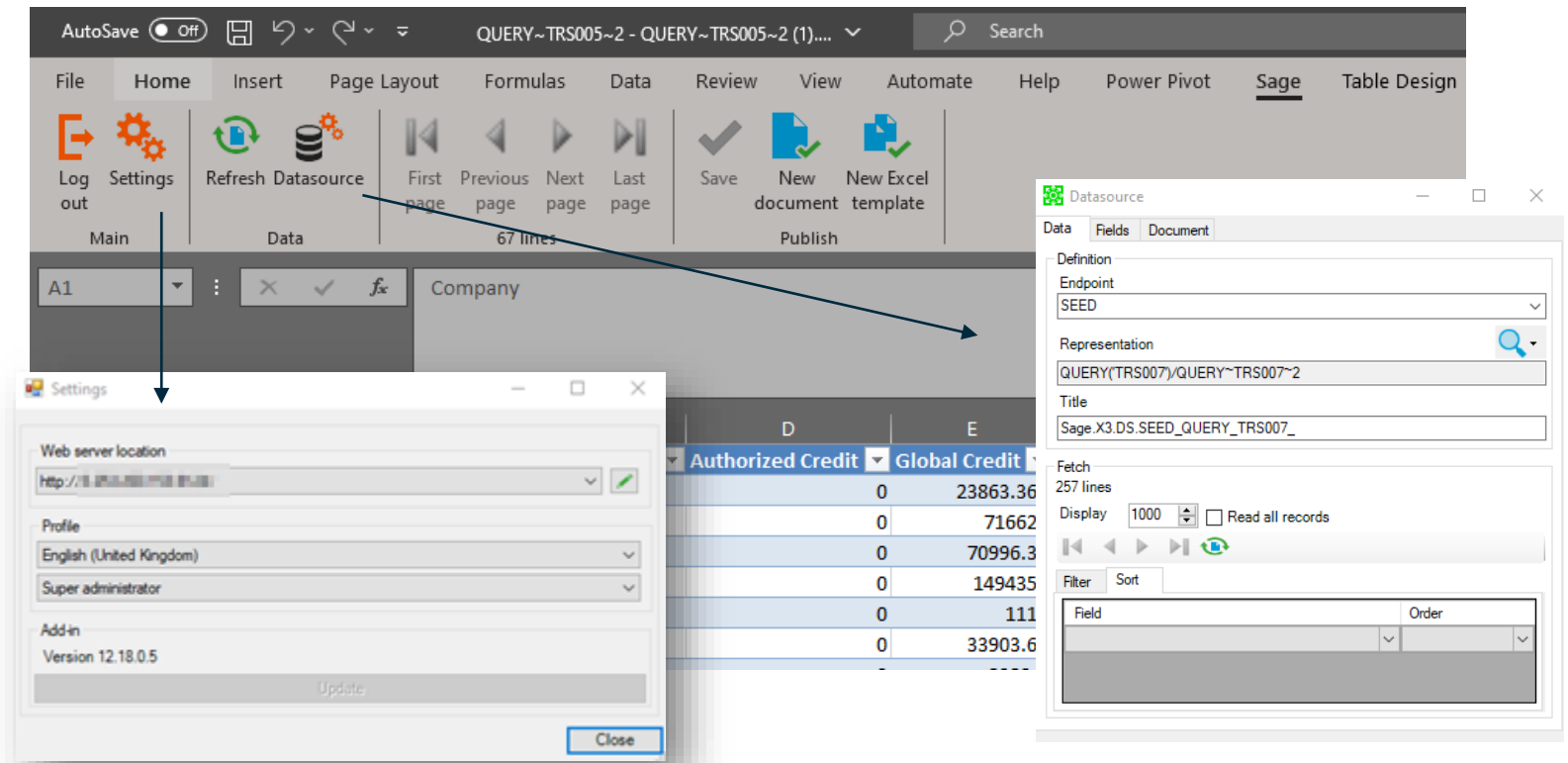
Print Server Improvements 2.29

Print Server Improvements

This function displays and manages the tasks within a specific print server. It allows users to view tasks, and delete tasks. The displayed information shows the print server's configuration, including the maximum number of simultaneous processes for parallel printing, the maximum length of the request stack, and details about connected clients, their IP addresses and connection dates. The function provides a grid presenting information about known print requests, providing a visualisation of the print server's state.

Printouts, Printouts, Print
Supervision (PSIMP)

Print Server Improvements

In the Print supervision function (PSIMP), a new functionality has been added where you can now more effectively monitor your printing. The function relies on having the print server 2.29 Implemented and Syracuse 12.19 (2023 R2)

- PSIMP can be customised to show the jobs you need using new console parameters

- Completed Jobs can now also be viewed previously Jobs would disappear once the status is completed

- Cancelled or On Error, jobs would stay in the task window for a long period of time or until the print server service was restarted. Many failures would sometimes cause issues printing from Sage X3.

- A new feature in Syracuse allows you to access PSIMP data using a rest interface Example URL http://x3erpv12sqlvm:8124/print/x3erpv12sqlvm:1890/$jobs. This could be potentially used to build a monitoring tool outside of Sage X3.

[{"order":1,"rank":1,"processId":5104,"state":"InProgress","serverDuration":6431,"processDuration":6430,"status":"OK","phase":"Taking into account the crystal print engine","destination":["Printers","report":"ARCCLIENT.rpt","application": {"folder":"SEED","host":"X3ERPV12SQLVM","port":"20101"},"user":"ADMIN","workstation":"X3ERPV12SQLVM.eu-west-1.compute.internal","linked":null},
{"order":2,"rank":4,"processId":9108,"state":"InProgress","serverDuration":4,"processDuration":2,"status":"Error","phase":"Taking into account the crystal print engine","destination":"Printers","report":"ADOVAL.rpt","application": {"folder":"SEED","host":"X3ERPV12SQLVM","port":"20101"},"user":"ADMIN","workstation":"X3ERPV12SQLVM.eu-west-1.compute.internal","linked":null}]

Print Supervision (PSIMP)

PSIMP allows you to visualise for the selected print server the list of tasks pending and finished

Print server

The client workstation, which has launched the request

In the tasks section, we can now see the finished and in-process jobs.
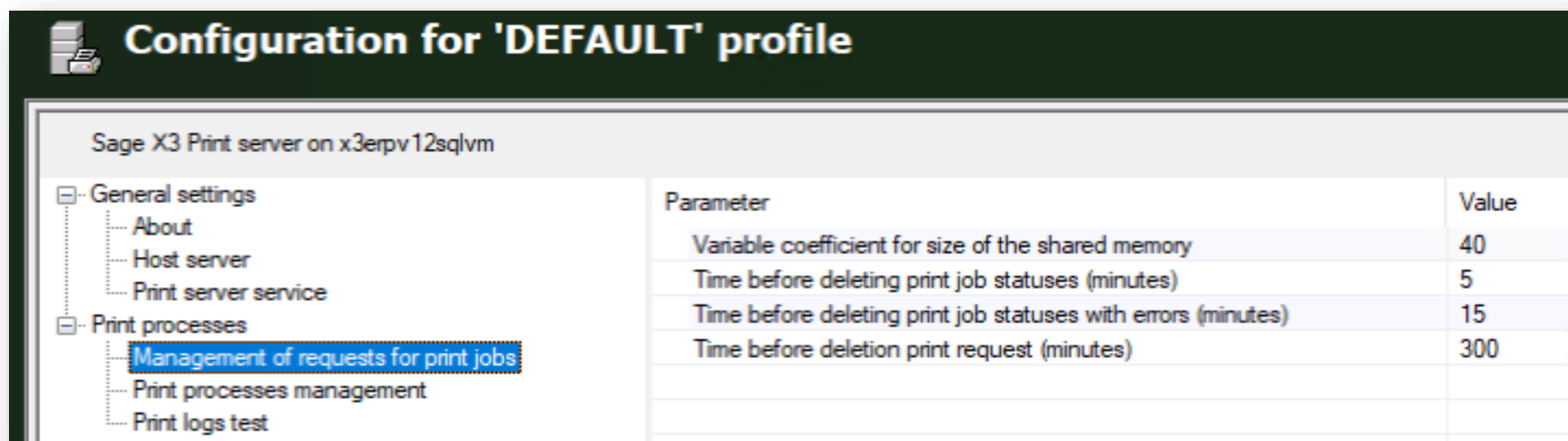
Full list of phases can be found online https://online-help.sageerpx3.com/erp/12/staticpost/print-supervision/

Console Parameters

Two new parameters have been added in the console to customise the behaviour in Print server supervision

Time before deleting print job status -Time before automatically removing a successfully completed print job, expressed in minutes. Default value: 0 minutes. Purge condition: the printout is not in 'execution' mode status is completed.

Time before deleting print job status with error - Time before automatically deleting statuses of print jobs with errors, expressed in minutes. Default value: 15 minutes. Condition for purging a status: the printout is not in 'execution' mode after more than the delay expressed here, with errors.

Expert mode in the console

Elasticsearch Support
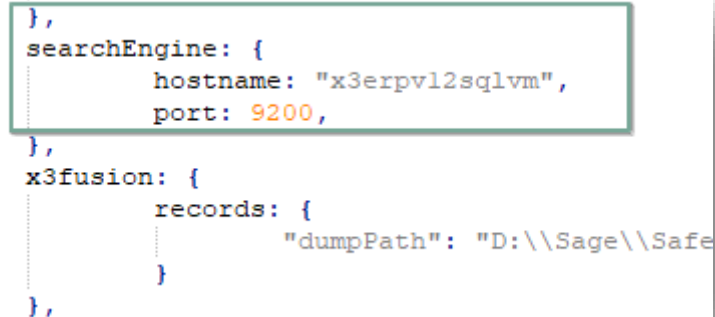
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Elasticsearch

Previously we have only been able to use on-premise Elasticsearch component versions 6 and 7 without secure connections.

Documented in the prerequisites Prerequisites overview (sageerpx3.com)

Elasticsearch	1.5.*	2.4
	6.4 since Syracuse 11.17 in V11.0.14	6.4 since Syracuse 12.3 in release 2019 R3/V12.0.18
	6.8 since Syracuse 11.20 in V11.0.16	6.8 since Syracuse 12.6 in release 2020 R1/V12.0.21
	7.16 since Syracuse 11.24 in Sage X3 Warehousing V11.0.10/Sage X3 V11.0.19	7.16 since Syracuse 12.9 in release 2020 R4/V12.0.24

In earlier versions, the connection configuration was completed from the Syracuse nodelocal.js file by adding a search engine element containing the hostname and the configured port.

```
        },
searchEngine: {
        hostname: "x3erpvl2sqlvm",
        port: 9200,
},
x3fusion: {
        records: {
                "dumpPath": "D:\\Sage\\Safe
        }
},
```

This configuration method will no longer be supported from 2023R2

Elasticsearch

We can now use secure connections to Elasticsearch so we can utilize the Elastic Cloud offering. Support for version **8** has also been introduced.

In **Administration > Usage > Search,** A new function has been added in Syracuse to manage the connection.
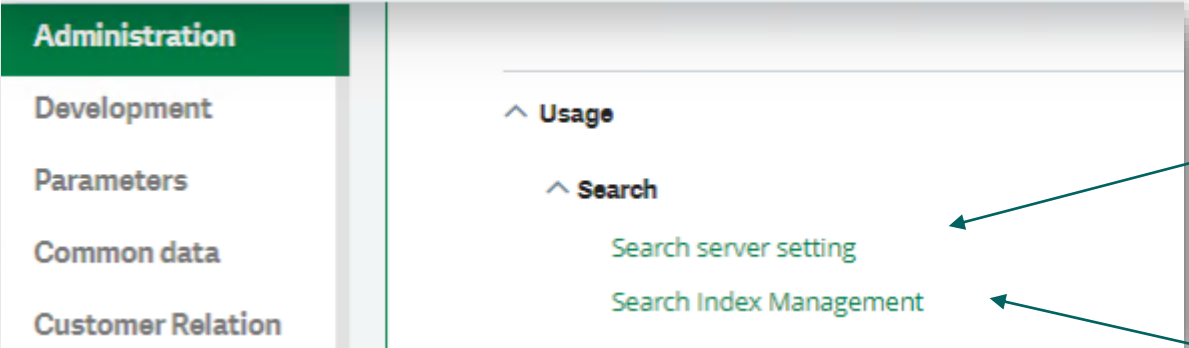
Allows you to configure your connection to the Elasticsearch on-premise or cloud instance.

Search Index management is used to configure the index update settings.

Elastic 8.0: A new era of speed, scale, relevance, and simplicity | Elastic Blog

Elasticsearch Configuration Settings

Select the Elasticsearch version

Connection mode- Option to use on-premise or Elastic Cloud

Security enables you to secure a connection if this has been setup in your Elastic search installation.
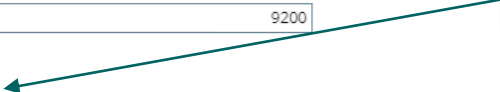
To secure connection using certificates and configure the credentials for the secure connections

Timeout Setting & the option to set a prefix for the Index

https://www.elastic.co/guide/en/elasticsearch/reference/master/secure-cluster.html

SQL Server Secured

SQL Server Connection Encryption

Encrypting the runtime connection to the SQL Server is now a possibility with the introduction of connection encryption and trust server certificate parameters in the console.

Connection Encryption -
Specifies whether connections use TLS encryption over the network.

Trust Server Certificate - set to no, the server certificate will be validated. Setting to yes will bypass walking the certificate chain to validate trust.

Main runtime x3erpv12sqlvm	
Parameter	Value
🔒 Version	R096.001.00206
🔒 Installation path	D:\Sage\X3V12\runtime
pwsh[.exe] executable fullpath	C:\Program Files\PowerShell\7\pwsh.exe
Connection Encryption	No
Trust server certificate	No
Sage X3 service port number	20100
User login for the Sage X3 service	x3run
User account password	••

SQL Server Connection Encryption

The steps to create a certificate will be documented in the console help and a script will also be provided to simplify the steps which you will be able to download from the console.

Keep in mind that there is configuration that needs to be completed with the SQL server like setting permissions for the service to access certificates & and settings to protocols.
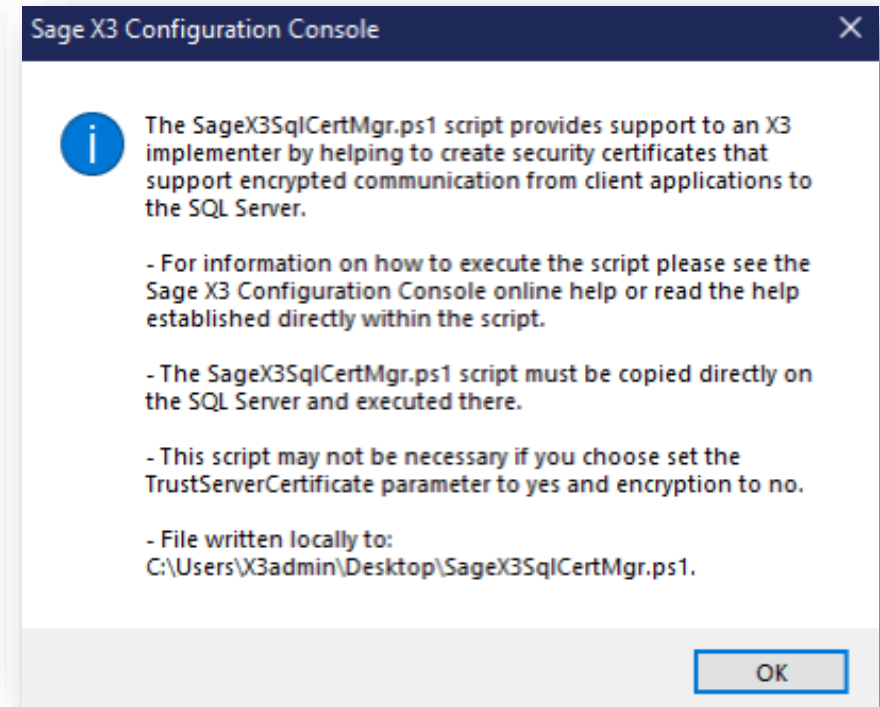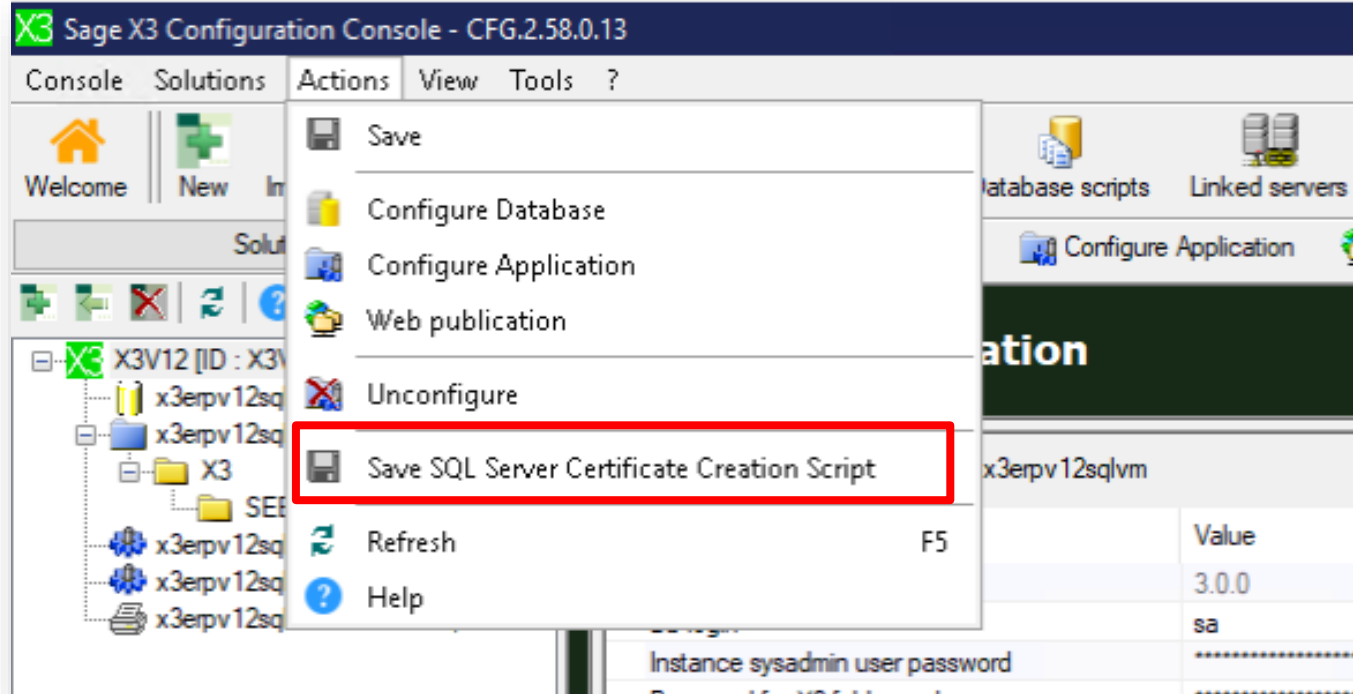
Other Changes

Other Changes

- Term Multithreading in the console screens and help has been replaced with parallelized because the tables are imported in parallel rather than using multithreading.

- Parallelized options are now also available when your Runtime is hosted on Linux for exporting and importing data.

- Runtime now requires the SQL PowerShell module version 22.1.1, previously only supported version 21

Appendices

Useful Links

Resource	Link
Sage X3 Release notes	All V12 release notes
Prerequisites information for V12	Prerequisites overview
Technical online help	Technical help
Microsoft Graph API Help & tools	Microsoft Graph APIs – Microsoft learn
SQL Connection Encryption	ODBC DSN and connection string – ODBC Driver for SQL Server | Microsoft Learn Using connection string keywords – SQL Server Native Client | Microsoft Learn

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Presentation in	Date	CET time	Duration (hours)	Session ID
🇬🇧	Thursday, November 30th	9 am	2	116123
🇬🇧	Thursday, November 30th	4 pm	2	116124
🇫🇷	Tuesday, December 5th	10 am	2	116125
🇪🇸	Thursday, December 21st	9h30 am	2	116126

Thank you!