

# New Technical Features Overview

Sage X3 2022 R2 & R3

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Sage



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# Sage X3 Notification Server for Workflow Email

# What is Meladx

Historically (V6) Sage X3 used a basic application called meladx at the runtime level to relay workflow email messages to an SMTP server. The application can be found in \X3ERP12\Runtime\bin\ directory

```
D:\Sage\X3ERP12\Folders\SEED\tmp\M2200025666.txt - Notepad++
File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?
M2200025666.txt
1 From: admin@sagex3.local
2 To: admin@sagex3.local
3 Subject: Purchase order no.: POGB0120052 to be signed
4
5 Purchase order modification No.POGB0120052
6 Buyer : ADMIN (Administrateur système)
7 Creation author : ADMIN (Administrateur système)
8 Company : GB10 (GB Discrete)
9 Site : GB012 (Bike & Toys Products)
10
11 Supplier : GB015 Cycle World
12 Tax incl. amount : 3 320.78 GBP
13
14 To sign, click on :
15 http://x3erpvl2sqlvm:8124/sdata/x3/erp/X3ERP12\_SEED/\$service/sign?chrono=2200025666-VAL&key=R5sA0dzP1G&language=BRI&directory=X3ERP12SEED
16 To refuse, click on :
17 http://x3erpvl2sqlvm:8124/sdata/x3/erp/X3ERP12\_SEED/\$service/sign?chrono=2200025666-REJ&key=R5sA0dzP1G&language=BRI&directory=X3ERP12SEED
18 To select the quick view on your desktop, click:
19 http://x3erpvl2sqlvm:8124/syracuse-main/html/main.html?url=%2Fsd%2Fdata%2F%2Ferp%2FX3ERP12\_SEED%2FTCWPOH\(%27USR04-2200025666%27\)%3Frepresentation%3DTCWPOHTOSIG.\$details
20 To select the quick view on your mobile device, click:
21 http://x3erpvl2sqlvm:8124/syracuse-tablet/dist/index.html?url=/sdata/x3/erp/X3ERP12\_SEED/TCWPOH\('USR04-2200025666'\)?representation=TCWPOHTOSIGM.\$details
22 To select the full view on your desktop, click:
23 http://x3erpvl2sqlvm:8124/syracuse-main/html/main.html?url=/trans/x3/erp/X3ERP12\_SEED/\$sessions?f=GESPOH/1/OBJPOH/M/POGB0120052
```

Email (From, To, Subject)

File name and location in the Folders\FolderName\tmp location

Email body generated by the workflow message

# What is Meladx

Once the text message had been relayed to the mail server by meladx.exe, there is an accompanying .tra (trace) file created

Parameters	
-v	Generate trace file
-s	Mail server
-r	Sender address

For example, you could manually call MELADX with the required parameters to send the email.

```
Command Prompt
(c) 2018 Microsoft Corporation. All rights reserved.

C:\Users\x3admin>cd /D D:\Sage\X3ERP12\Folders\SEED\tmp

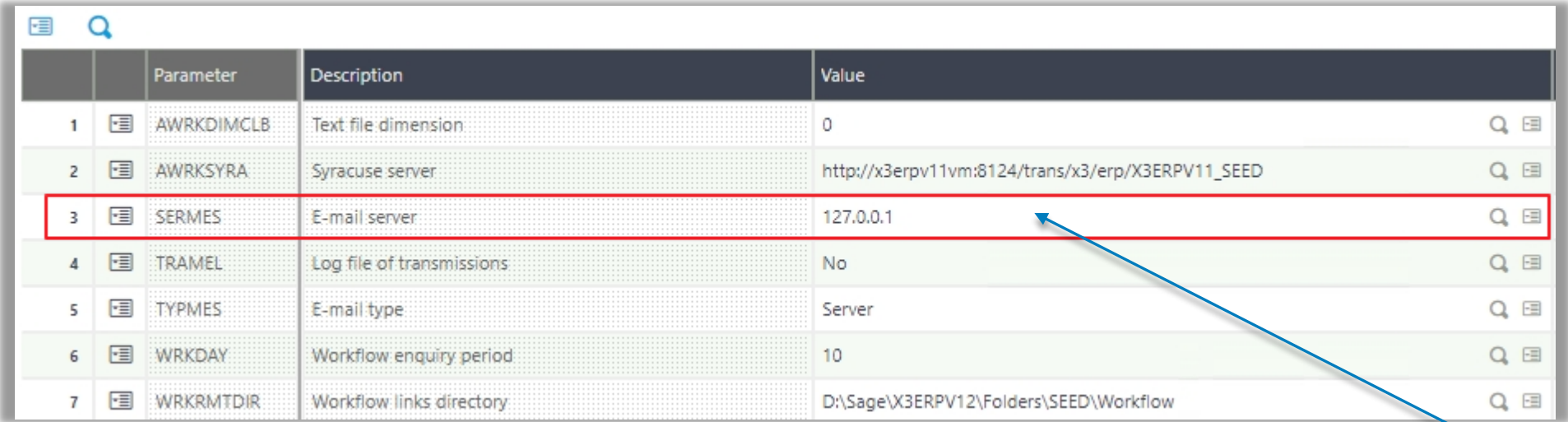
D:\Sage\X3ERP12\Folders\SEED\tmp>D:\Sage\X3ERP12\Runtime\bin\meladx -v
-s LOCALHOST -r admin@sagex3.local <"M2200025686.txt"> "M2200025686.tra"

D:\Sage\X3ERP12\Folders\SEED\tmp>
```

```
*D:\Sage\X3ERP12\Folders\SEED\tmp\M2200025686.tra - Notepad++
File Edit Search View Encoding Language Settings Tools Macro Run Plugins
new 1 x M2200025686.tra x
1 220 : X3ERP12SQLVM ESMTF
2 HELO X3ERP12SQLVM
3 250 : Hello.
4 MAIL FROM:<admin@sagex3.local>
5 250 : OK
6 RCPT TO:<admin@sagex3.local>
7 250 : OK
8 DATA
9 354 : OK, send.
10 From: admin@sagex3.local
11 To: admin@sagex3.local
12 Subject:=?utf-8?Q?Purchase order no.: POGB0120071 to be signed?=
13 Date: 16 Aug 2022 15:47:59 UT
14
15 ----- =_aaaaaaaaa0
16 Date: 16 Aug 2022 15:47:59 UT
17 Content-Type: text/plain; charset="utf-8"
18 Content-ID: <10192.1660664879.1@X3ERP12SQLVM>
19 Content-Transfer-Encoding: quoted-printable
20
21 Purchase order modification No.POGB0120071
22 Buyer : ADMIN (Administrateur syst=C3=A8me)
23 Creation author : ADMIN (Administrateur syst=C3=A8me)
24 Company : GB10 (GB Discrete)
25 Site : GB012 (Bike & Toys Products)
26
```

# Meladx Limitations

- There are no SMTP authentication options for the Meladx binary the only parameter available is SERMES which is used to define the address of the SMTP server.



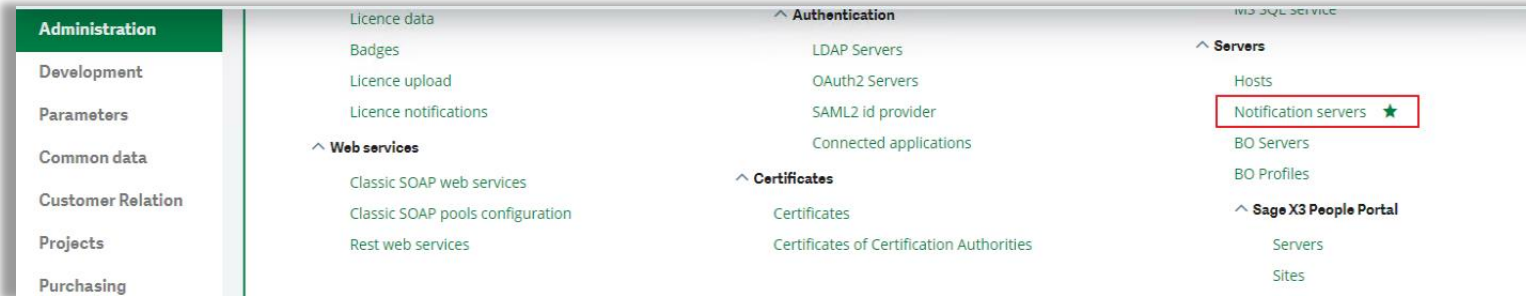
	Parameter	Description	Value
1	AWRKDIMCLB	Text file dimension	0
2	AWRKSYRA	Syracuse server	http://x3erpv11vm:8124/trans/x3/erp/X3ERP11_SEED
3	SERMES	E-mail server	127.0.0.1
4	TRAMEL	Log file of transmissions	No
5	TYPMES	E-mail type	Server
6	WRKDAY	Workflow enquiry period	10
7	WRKRMTDIR	Workflow links directory	D:\Sage\X3ERP12\Folders\SEED\Workflow

- Customers always had to use a third-party SMTP server to relay messages if authentication is a requirement.
- Customers need to authorize SMTP relay from the X3 mail server to the external mail server.
- Emails are always sent in plain text. There is no options of using HTML

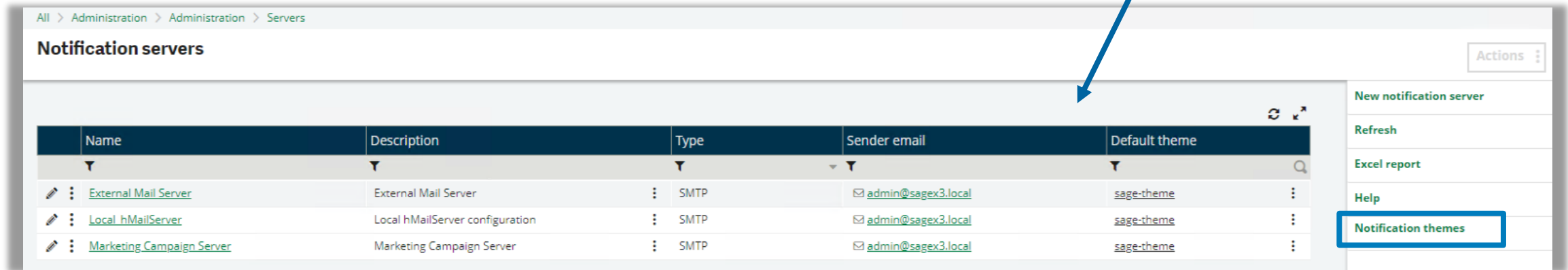
SERMES the only parameter available to define your mail server name

# Sage X3 Notification Server

Sage X3 has embedded the notification server function since PU9. It would be primarily utilized to send out notifications for defined events, like license expiry web service consumption and web service slow-down events. With the latest release, we can now utilize the notification server to dispatch workflow emails



There is the possibility of having multiple notification servers for different activities and to also define notification themes



The notification server uses the nodemailer open-source module for node.js as its underlying technology <https://nodemailer.com/about/>

# Using Workflow Email With Notification Server

With the release of Sage X3 2022 R3, we can now utilize the Sage X3 notification server to dispatch workflow emails instead of the old MELADX program.

This is optional and you can still use the MELADX included with the Sage X3 runtime if you prefer

You can define and configure the notification server Administration, Server, NotificationServers entity

## Features include

- Advanced authentication settings in the security section you can enable TLS connection and use certificates to secure your connection if your mail server supports this.
- Basic authentication options with username and password to connect to your SMTP server
- SMTP Pooled connection and timeout settings for the connection to your SMTP server.
- The message configuration section allows you to configure the **theme** you want to use with this notification server & the sender email address of mail dispatched from the server.

All > Administration > Administration > Servers

### Notification server

Information SMTP Server SMTP Connection Security SMTP Authentication SMTP Pooled connections SMTP Connection Timeouts Message configuration

**Information**

Name \* Local\_hMailServer Description Local hMailServer configuration Type SMTP

**SMTP Server**

Mail server \* localhost Port 25 Proxy

**SMTP Connection Security**

Security mode None CA certificates of mail server Client certificate

**SMTP Authentication**

Authentication No authentication User Password Confirm password

**SMTP Pooled connections**

Use pooled connection Maximum simultaneous connections 5 Message count limit by connection 100

**SMTP Connection Timeouts**

Connection timeout (sec) 120 Greeting timeout (sec) 30 Socket timeout (sec)

**Message configuration**

Sender email \* admin@sagex3.local Default theme sage-theme

Theme sage-theme

Save

Notification themes

Detail

Notification servers

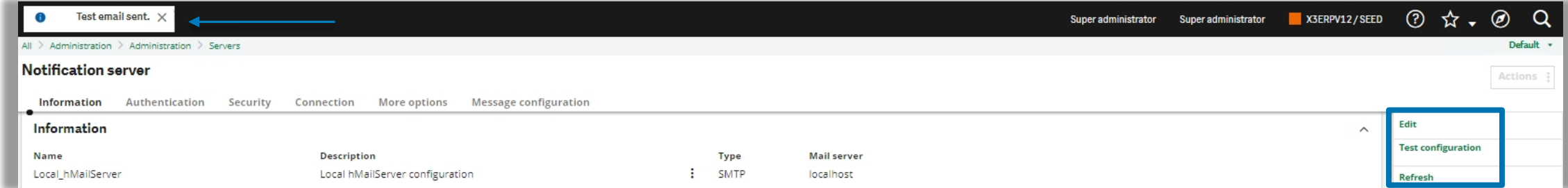
Help

Test configuration

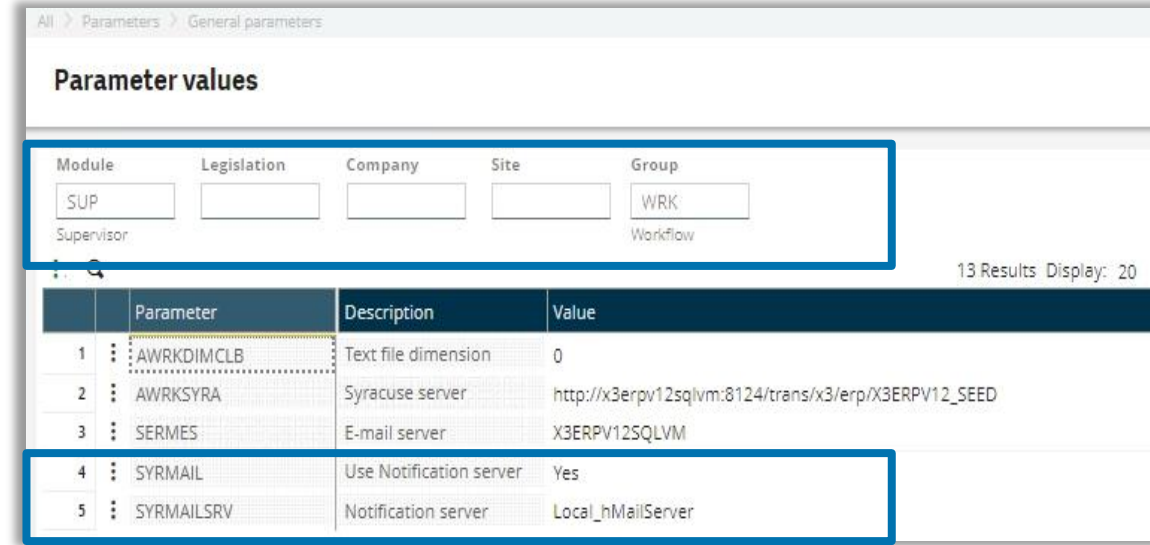


# Using Workflow Email With Notification Server

- Test the notification server **Administration, Administration, Server, Notification Servers**



- Set workflows to use the notification server **Parameters, General Parameters, Parameter values (ADPVAL)**



Set the parameters in the Supervisor (SUP) module workflow group (GRP).

**SYRMAIL** – Set Parameter to Yes to use notification server as opposed to MELADX for the particular endpoint. NO is the default value.

**SYRAMAILSRV** – Set to the name of your notification server, you can have multiple notification servers one for workflow and another for other notifications.

# Summary

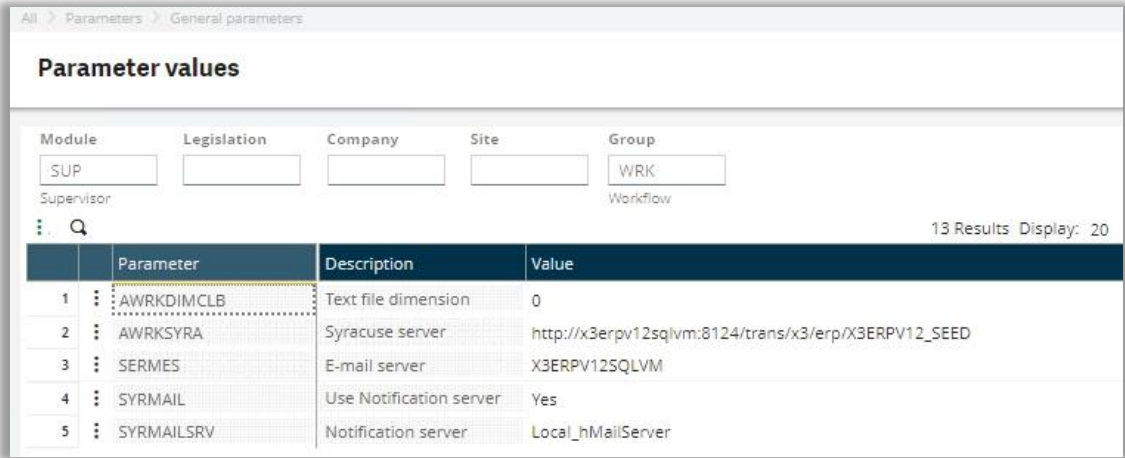
- Reviewed the existing MELADX
- How we can use notification servers as a replacement
- The advanced authentication features available
- How to switch workflow to start using the notification servers.

# HTML Workflow Notifications

# HTML Workflow Notifications

With the introduction of the notification server for workflow email, we can also send HTML formatted emails

## 1. Set the general parameter setting (ADPVAL)



The screenshot shows the 'Parameter values' table in SAP. The table is filtered by Module 'SUP' and Group 'WRK'. It lists five parameters related to notification servers.

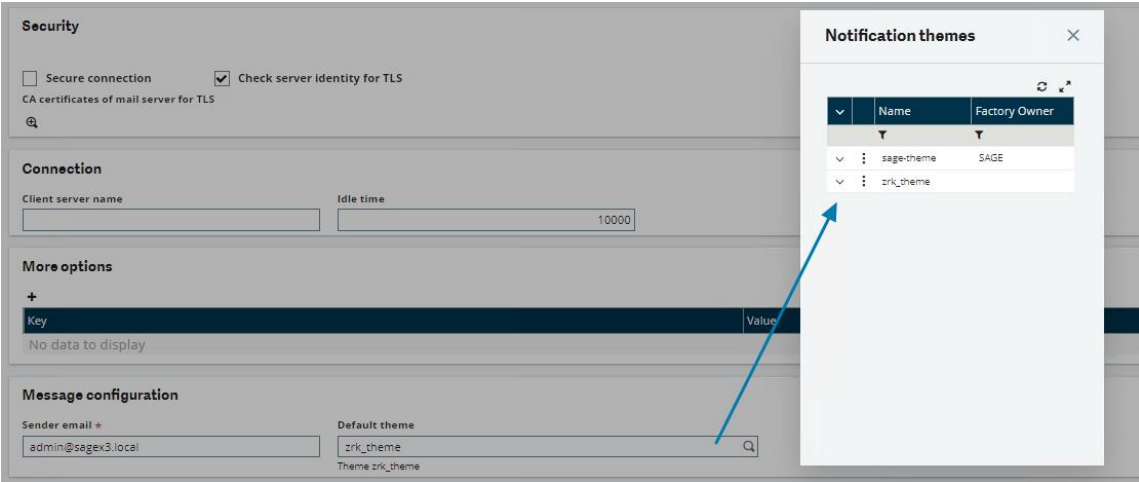
Parameter	Description	Value
AWRKDIMCLB	Text file dimension	0
AWRKSYRA	Syracuse server	http://x3erpv12sqlvm:8124/trans/x3/erp/X3ERP12_SEED
SERMES	E-mail server	X3ERP12SQLVM
SYRMAIL	Use Notification server	Yes
SYRMAILSRV	Notification server	Local_hMailServer

Set the parameters in the Supervisor (SUP) module workflow group (GRP).

**SYRMAIL** – Set Parameter to Yes to use notification server as opposed to MELADX

**SYRMAILSRV** – Set to the name of your notification server, you can have multiple notification servers one for workflow and another for other notifications.

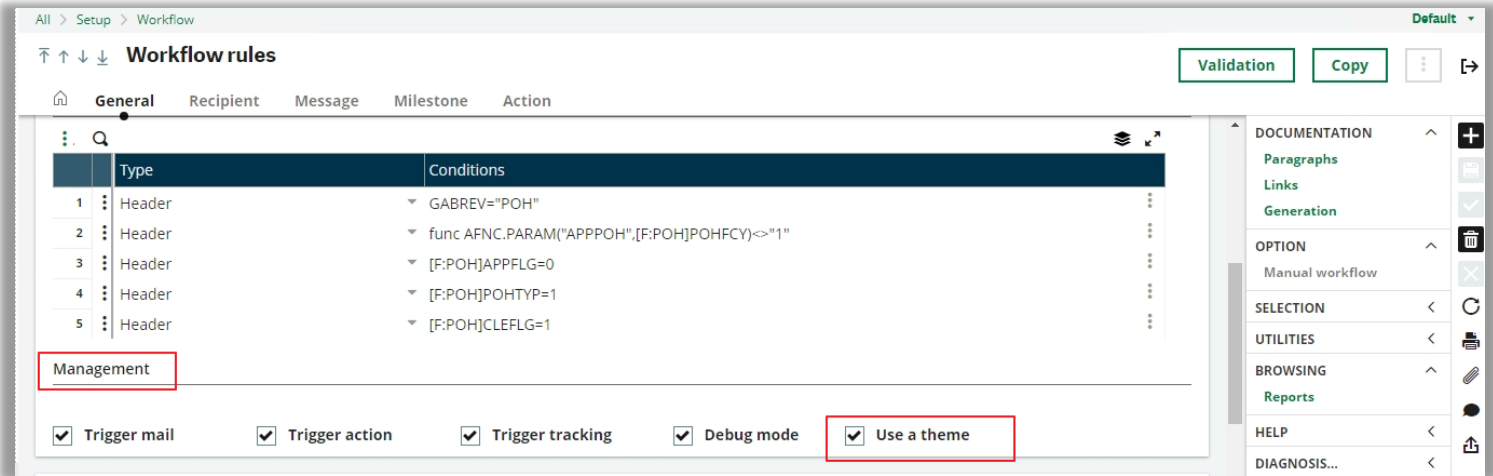
## 2. Enable an HTML theme for the notification server, this is selected in the notification server settings. Sage X3 is shipped with one SAGE Factory theme called sage-theme **Administration, Administration, Server, Notification Servers**



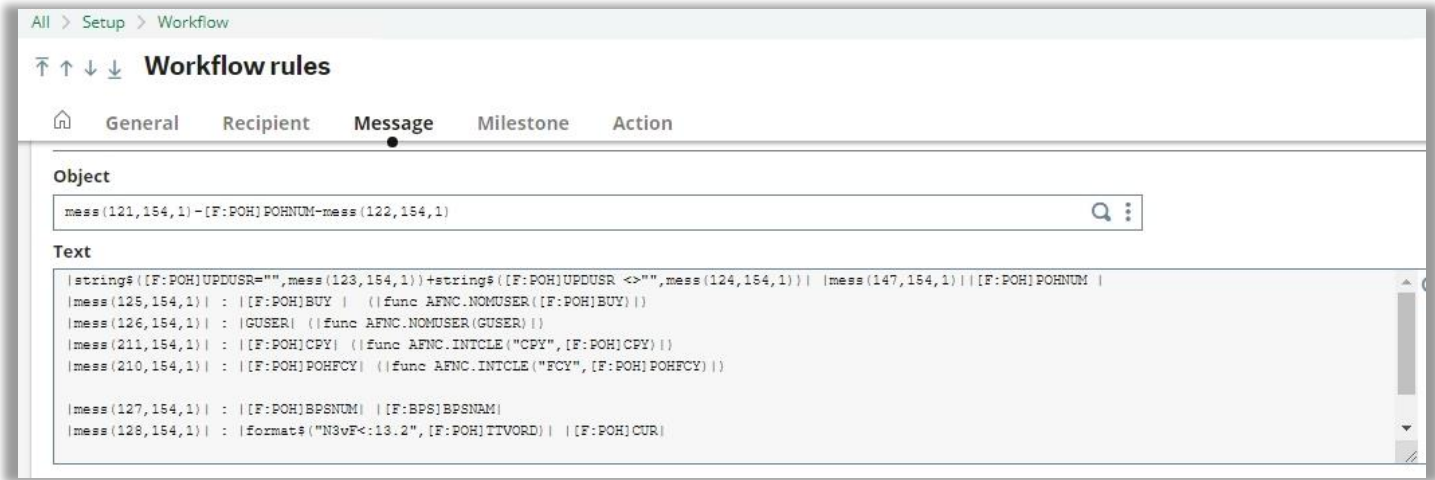
The screenshot shows the 'Notification themes' configuration window. It displays a table of themes with columns for Name and Factory Owner. Two themes are listed: 'sage-theme' and 'zrk\_theme', both owned by 'SAGE'. A blue arrow points from the 'zrk\_theme' entry in the table to the 'Default theme' field in the 'Message configuration' section below, which is set to 'zrk\_theme'.

Name	Factory Owner
sage-theme	SAGE
zrk_theme	SAGE

# HTML Workflow Notifications



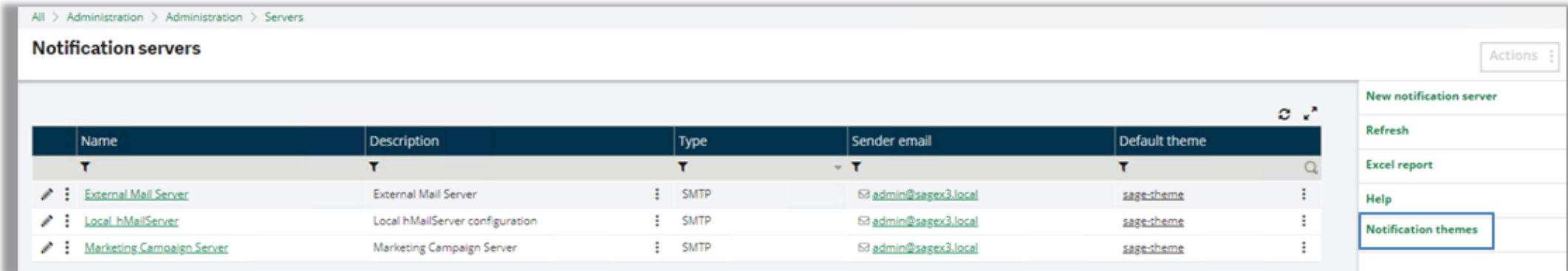
3. In the workflow rule setup (parameters, workflow, workflow rules) GESAWA we need to select the option 'use a theme' this then picks up the theme set at the notification server level and uses this as the container for the workflow messages.



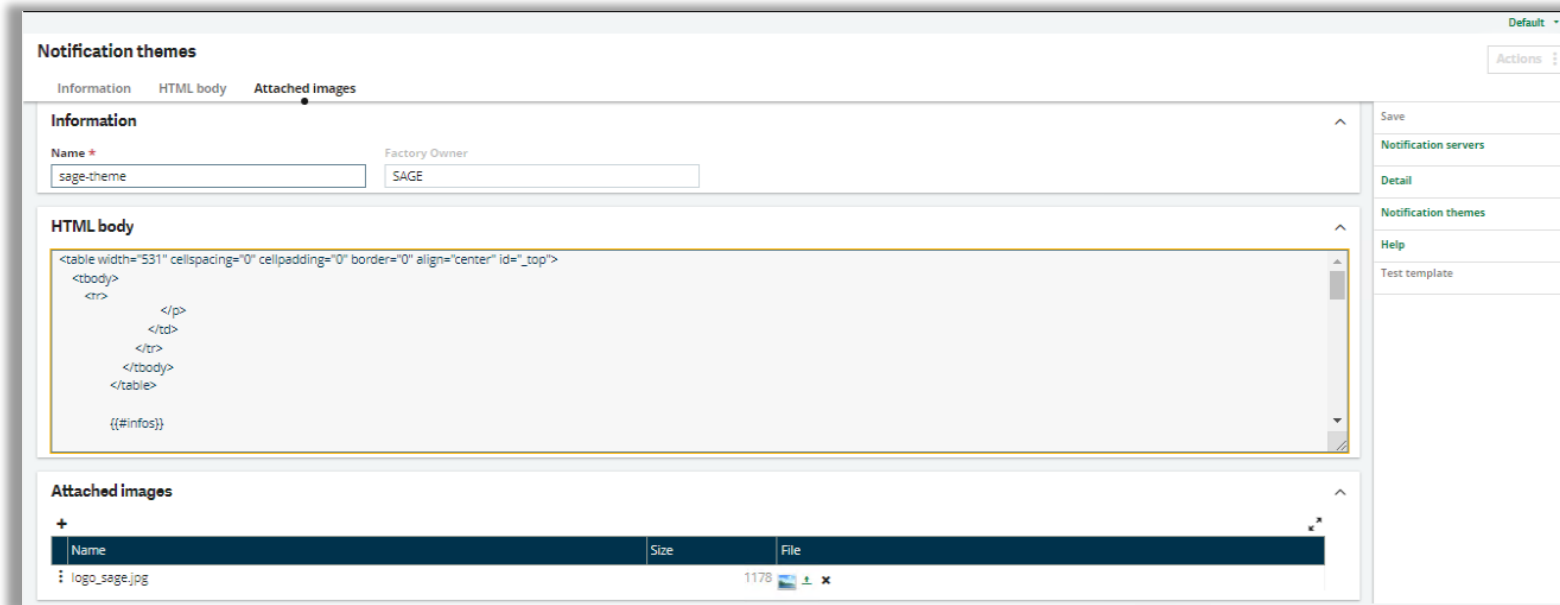
One advantage is that there is no need to modify the workflow message setup if you are switching from using plain text notifications

# Workflow Notification Themes

You can create a theme for each of your notification servers. Using the notification themes function which is accessed from the right menu in the notification server entity



Name	Description	Type	Sender email	Default theme
External Mail Server	External Mail Server	SMTP	admin@sage3.local	sage-theme
Local hMailServer	Local hMailServer configuration	SMTP	admin@sage3.local	sage-theme
Marketing Campaign Server	Marketing Campaign Server	SMTP	admin@sage3.local	sage-theme



**Notification themes**

Information HTML body Attached Images

**Information**

Name \* Factory Owner




sage-theme SAGE

**HTML body**

```
<table width="531" cellspacing="0" cellpadding="0" border="0" align="center" id="_top">
<tbody>
<tr>
</tr>
</tbody>
</table>

{{#infos}}
```

**Attached images**

Name	Size	File
logo_sage.jpg	1178	  

In the notification themes function, you can insert your template HTML body there is no fully-fledged editor so you may need to use an external application to create to form the body of your email.

You can also upload images to be used embedded in the template

We are expecting further enhancements to the theme designer in subsequent releases.

# Workflow Notification Themes

```

{{title}} {{#subtitle}}
{{subtitle}}{/subtitle}}

{{#infos}} {{/infos}}

{{#content}}
{{{content}}}
{{/content}}

{{#signature}}
{{signature}}
{{/signature}} {{#link}}
> {{link.label}}
{{/link}}

{{info.date.label}}
{{info.date.value}}

{{info.time.label}}
{{info.time.value}}

```

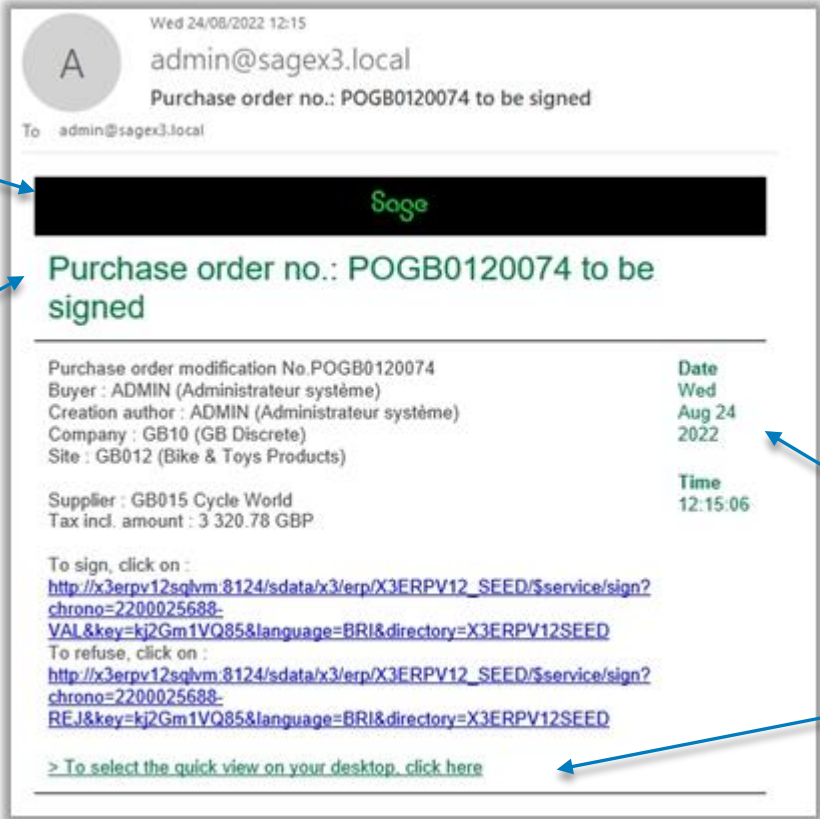
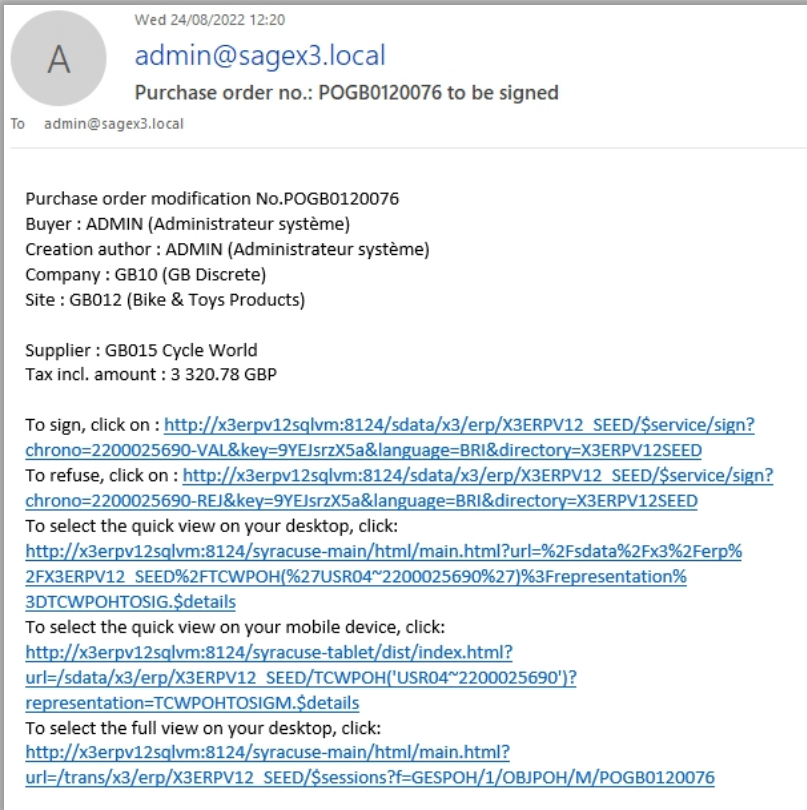
- The themes use HTML and mustache format tags, mustache tags begin with two opening braces ({{) and end with two closing braces (}}) and contain a variable, that will be populated with data from the workflow message.
- Because of the use of this format there is no need to modify your workflow message, the same message can be utilised for HTML & Plain text emails.
- You can also have conditions for example {{#link}} {{link.label}} {{/link}} so Link label will be visible if data is passed to the link.label variable.

Tag name that can be used in the template	Contents
content	The body content of the mail.
signature	The name of the signer.
title	The title of the email.
subtitle	A subtitle for the mail.
link.href	The link reference if the email includes a link.
link.label	The link reference if the email includes a link.
date.label	The current date (localized string).
date.value	The current date value.
time.label	The current time (localized string).
time.value	The current time value

More detailed info on mustache (logic-less templates) can be found on <https://mustache.github.io/mustache.5.html>

# HTML Workflow Notifications

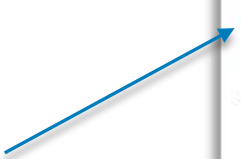
This is an example of a purchase order request email received without a theme applied and with the standard factory sage-theme applied.



Embedded Image



HTML Format body



Raw text from the workflow



Time variables



<href> style link






# Advantages of Notification Server for Workflow Email

- SMTP Authentication options enable a secure connection to the customer's email server
- No need for a local mail server to relay messages from Sage X3
- Ability to use HTML utilizing themes in workflow emails
- You can imbed images in the theme that will be sent with the email
- Text and formulae setup remains the same in the Workflow setup so you can seamlessly switch to HTML without the need to modify the workflow message content.
- You can also switch back to plain text if the need arises



# Troubleshooting the Notification Server

An issue that we came across in our internal testing was we found that when using Mozilla thunderbird as your email client the signature links were not clickable, and the image was not displayed correctly. We expect this to be a setting in thunderbird as in outlook the same message is correctly formed.



## Purchase order no.: POGB0120069 to be signed


---

Purchase order modification No.POGB0120069	<b>Date</b>
Buyer : ADMIN (Administrateur système)	Thu Sep 29 2022
Creation author : ADMIN (Administrateur système)	
Company : GB10 (GB Discrete)	<b>Time</b>
Site : GB012 (Bike & Toys Products)	15:03:30

Supplier : GB015 Cycle World  
Tax incl. amount : 3 320.78 GBP

To sign, click on : [http://x3erpv12sqlvm:8124/sdata/x3/erp/X3ERPv12\\_SEED/\\$service/sign?chrono=2200025683-VAL&key=qAIWR4nHkF&language=BRI&directory=X3ERPv12SEED](http://x3erpv12sqlvm:8124/sdata/x3/erp/X3ERPv12_SEED/$service/sign?chrono=2200025683-VAL&key=qAIWR4nHkF&language=BRI&directory=X3ERPv12SEED)  
To refuse, click on : [http://x3erpv12sqlvm:8124/sdata/x3/erp/X3ERPv12\\_SEED/\\$service/sign?chrono=2200025683-REJ&key=qAIWR4nHkF&language=BRI&directory=X3ERPv12SEED](http://x3erpv12sqlvm:8124/sdata/x3/erp/X3ERPv12_SEED/$service/sign?chrono=2200025683-REJ&key=qAIWR4nHkF&language=BRI&directory=X3ERPv12SEED)

> [To select the quick view on your desktop, click here](#)



## Purchase order no.: POGB0120069 to be signed

---

Purchase order modification No.POGB0120069	<b>Date</b>
Buyer : ADMIN (Administrateur système)	Thu Sep 29 2022
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Site : GB012 (Bike & Toys Products)	15:03:30

Supplier : GB015 Cycle World  
Tax incl. amount : 3 320.78 GBP

To sign, click on : [http://x3erpv12sqlvm:8124/sdata/x3/erp/X3ERPv12\\_SEED/\\$service/sign?chrono=2200025683-VAL&key=qAIWR4nHkF&language=BRI&directory=X3ERPv12SEED](http://x3erpv12sqlvm:8124/sdata/x3/erp/X3ERPv12_SEED/$service/sign?chrono=2200025683-VAL&key=qAIWR4nHkF&language=BRI&directory=X3ERPv12SEED)  
To refuse, click on : [http://x3erpv12sqlvm:8124/sdata/x3/erp/X3ERPv12\\_SEED/\\$service/sign?chrono=2200025683-REJ&key=qAIWR4nHkF&language=BRI&directory=X3ERPv12SEED](http://x3erpv12sqlvm:8124/sdata/x3/erp/X3ERPv12_SEED/$service/sign?chrono=2200025683-REJ&key=qAIWR4nHkF&language=BRI&directory=X3ERPv12SEED)

> [To select the quick view on your desktop, click here](#)

# Troubleshooting the Notification Server

The notification server settings and notification themes are all stored in new collections in Mongo DB

The screenshot shows the MongoDB Shell interface with the 'NotificationTheme' collection selected in the left sidebar. The command `1 db.getCollection("NotificationTheme").find({})` is entered in the shell. The 'Raw Shell Output' pane displays a document with the following structure:

Key	Value	Type
(1) { "_id": "c31f5f2c-e975-4914-a2d2-58a57adc6cba" }	{ 12 fields }	Document
_id	c31f5f2c-e975-4914-a2d2-58a57adc6cba	String
_createDate	2021-04-23T16:13:57.193Z	Date
_createUser	anonymous	String
_endpoint	null	Null
_factory	true	Bool
_factoryOwner	SAGE	String
_tick	null	Null
_updateDate	2022-09-27T10:36:07.966Z	Date
_updateUser	anonymous	String
html	<table width="531" cellspacing="0" cellpadding="0" border=	String
images	[ 1 elements ]	Array
name	sage-theme	String
(2) { "_id": "eb8519af-f030-47b3-866e-5aef150c28dc" }	{ 10 fields }	Document

The screenshot shows the MongoDB Shell interface with the 'NotificationServer' collection selected in the left sidebar. The command `1 db.getCollection("NotificationServer").find({})` is entered in the shell. The 'Raw Shell Output' pane displays a document with the following structure:

Key	Value	Type
_id	1d023fa2-e1f5-43cf-bd79-b7b176571837	String
_createDate	2021-04-23T21:13:56.708Z	Date
_createUser	admin	String
_endpoint	null	Null
_tick	null	Null
_updateDate	2022-09-27T15:06:25.056Z	Date
_updateUser	admin	String
authentication	none	String
code	Local_hMailServer	String

NotificationEmailTest – This collection contains a log of all the test emails sent

NotificationServer – Collection contains the definitions of the Notification Servers

NotificationTheme – Collection contains the definition of the notification server theme including the HTML

# Summary

- Using HTML notifications for Workflow
- Themes and how they use templates
- Compared a plain text email with one using a theme
- Advantages of notification servers
- Troubleshooting the notification servers

# Using SADFSQ protocol opposed to Apache for Sage X3

# Using SADFSQ Protocol opposed to Apache

Sage X3 uses an Apache HTTP server to transfer static files from the Sage X3 application server to the Sage X3 Web presentation layer (Syracuse). From 2022 R2, Apache is no longer needed. Static files can now be transferred using the native application protocol known as SADFSQ.

Some examples of static files are exports from grids, local exports to excel and transferring files from storage areas.

## Advantages of using SADFSQ

- SADFSQ is already used for internal communications; the print server embeds SADFSQ to transfer reports.
- No need to deploy the separate Apache web server component, which simplifies the Sage X3 deployment
- Using SADFSQ reduces the potential for security vulnerabilities in the third-party component like the Apache log4j vulnerability (CVE-2021-44228) seen in November 2021
- Internal testing showed no performance degradation when using the SADFSQ Protocol

# Prerequisite to Switch to the SADFSQ Protocol

The feature is available from Sage X3 version 2022 R2

- Syracuse 12.15
- Runtime & ADXAdmin 94.1.17
- Console 2.54

Legacy components cannot be used with the native SADFSQ Protocol, so they should be decommissioned before switching protocols.

Java Web (VT) Web Server – used for the old ADC (typically hand-held RF terminals)

The screenshot shows the 'Sage X3 Webservice and ADC Server' interface. On the left, a tree view displays 'ADCSRV on x3erpv12sqlvm [ID : ADCSRV]' and 'X3 ERP V12 on x3erpv12sqlvm - [ID:X3ERP12]' with a 'SEED' folder. On the right, a 'Publications' table is visible.

Solution identifier	Solution label	Published folders	Locked
X3ERP12	X3 ERP V12 on x3erpv12sqlvm	SEED	No

- Java Bridge component is a deprecated component. However, it can still be installed to support legacy outgoing web services (SOAP)

The screenshot shows the 'Sage X3 Java Bridge Server' interface. On the left, a tree view displays 'JAVASRV on x3erpv12sqlvm [ID : JAVASRV]' and 'X3 ERP V12 on x3erpv12sqlvm - [ID:X3ERP12]'. On the right, a 'Publications' table is visible.

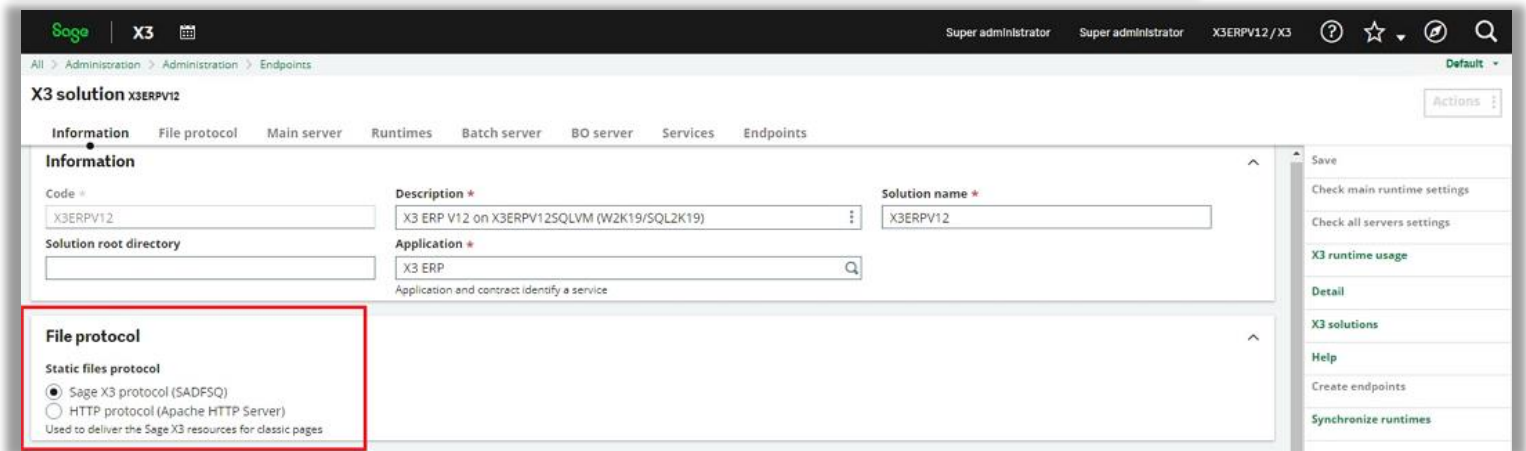
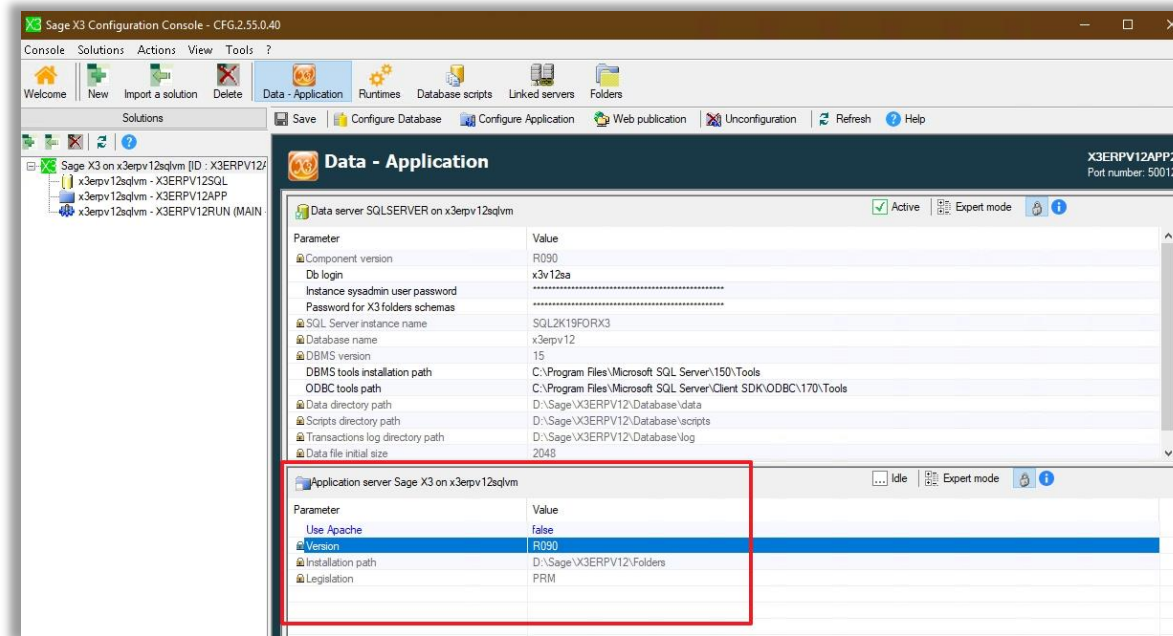
Solution identifier	Solution label	Published folders	Locked
X3ERP12	X3 ERP V12 on x3erpv12sqlvm	SEED	No



# Using SADFSQ in a New Installation

With all new installations, the recommendation is not to deploy Apache

1. When configuring the application, set the use Apache flag to 'False'. This will be the default on a new installation
2. Save and Configure the application; the console will not look for the Apache HTTP server installation and will no longer create the Apache service
3. Set the solution file protocol to X3 Protocol (SADFSQ) to use the native Sage X3 protocol



# Legacy components and switching to use SADFSQ

Once you meet the prerequisites, the following steps can be performed to switch to the native SADFSQ Protocol

1. Backup your solution/environment by way of an environment snapshot
2. Unpublish/unconfigure VT Web server from Sage X3
3. Unpublish/unconfigure Java Bridge Server from Sage X3
4. Uninstall/ Remove windows services
5. Switch console parameter to 'false' and configure the application
6. Switch solution settings in Sage X3 to use SADFSQ

# Decommission VT Web Server From Sage X3

## Sage Management Console

1. Navigate to the ADC Server module in the Sage X3 management console
2. Select the solution and view the published folders
3. Deselect the folders
4. Apply publication
5. Select X3 solution identifier and unpublish the solution
6. Unconfigure the ADC Server
7. Remove the ADC Server from

The top screenshot shows the Sage X3 Configuration Console with the 'Publications' view. The 'Solutions' list on the left includes 'Sage X3 Print Server' and 'Sage X3 Webservice and ADC Server'. The 'Publications' table shows the following data:

Solution identifier	Solution label	Published folders	Locked
X3ERP V12	X3 ERP V12 on x3erpv12sqlvm	SEED	No

The 'Folders to publish' section shows the following data:

Folder	Selected
SEED	<input checked="" type="checkbox"/>
X3	<input type="checkbox"/>

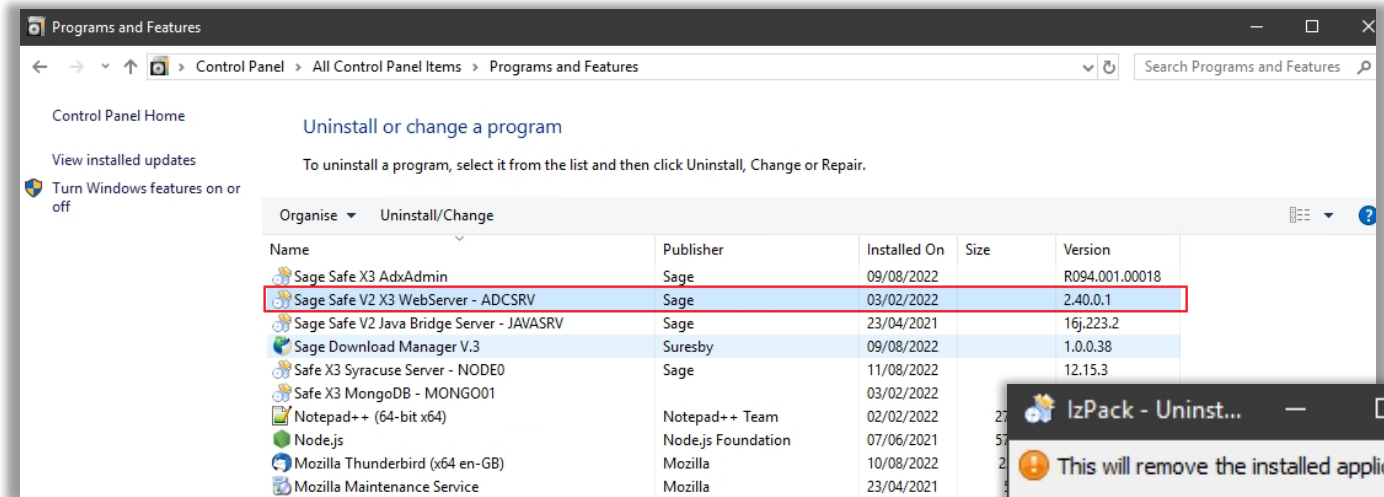
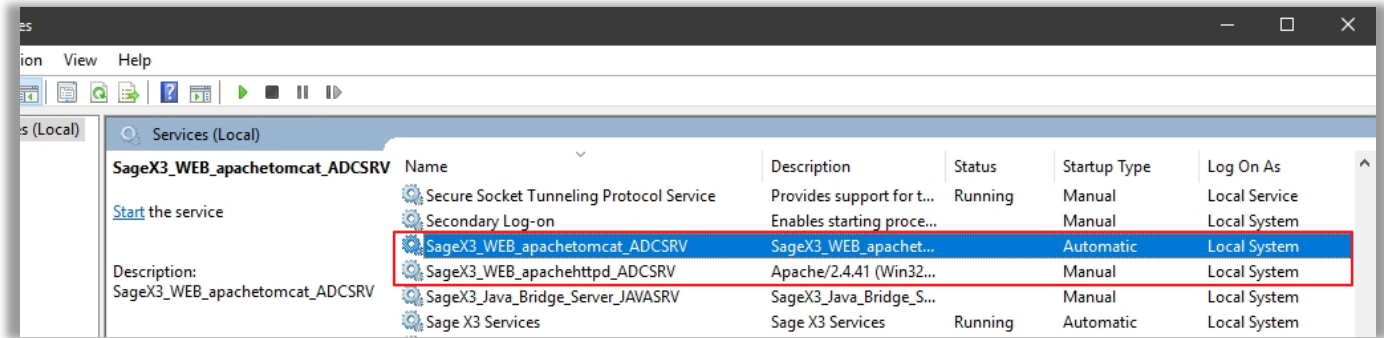
The bottom screenshot shows the Sage X3 Configuration Console with the 'Configuration' view. The 'Solutions' list on the left includes 'Sage X3 Business Intelligence Ser', 'Sage X3 Java Bridge Server', 'Sage X3 AdxAdmin Administration S', 'Sage X3 Documentation Server (V6', and 'x3erpv12sqlvm'. The 'Configuration' view shows the following data:

Parameter	Value
all.host.wrapperport	15003
all.host.webserver.passphrase	.....
all.tomcat.tomcatserverport	28940
all.tomcat.tomcathttpport	28980

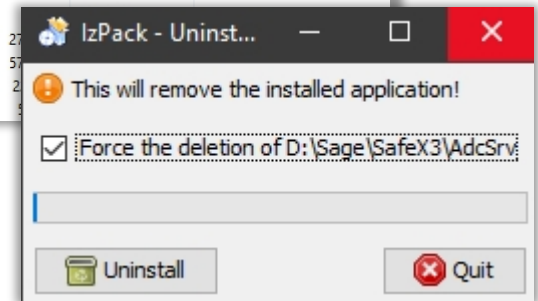
# Decommission VT Web Server From Sage X3

## Windows Steps

1. After the decommission in the Sage X3 management console the services for the Web server will be removed.
2. In the windows control panel uninstall the component
3. The 'WEB' entry in the adxinstalls will also now be removed.



```
<module name="ADCSRVR" family="WEB" type="">
  <all.host.installdatapath>D:\Sage\SafeX3\AdcSrv
  <all.host.installtoolspath>D:\Sage\SafeX3\AdcSrv
  <component.web.adxadminpath>D:\Sage\SafeX3\AdcSrv
  <component.web.installstatus>active</component.web.installstatus>
  <component.web.path>D:\Sage\SafeX3\AdcSrv</component.web.path>
  <component.web.platform>WIN64</component.web.platform>
  <component.web.servername>x3erpv12sqlvm</component.web.servername>
  <component.web.version>V170</component.web.version>
  <web.adxadmin.port>50000</web.adxadmin.port>
  <web.http.port>28880</web.http.port>
</module>
```



# Decommission components (Java Bridge Server)

## Steps in Sage Management Console

1. Navigate to the Java Bridge Server module in the Sage X3 management console
2. Select the solution identifier to load the published folders
3. Unpublish your folders from the Java Bridge Server
4. Apply the publication changes
5. Unpublish the solution from the Java bridge server
6. Unconfigure the Java Bridge Server
7. Delete the Java Bridge entry from the console

## Steps in Windows

6. Uninstall from the windows control panel

**Sage X3 Configuration Console - CFG.2.55.0.40**

Console Sage X3 Java Bridge Server Actions View Tools ?

Welcome Add Delete Configuration Services Publications

Solutions

- Sage X3 Print Server
- Sage X3 Webservice and ADC Server
- Sage X3 Business Intelligence Server
- Sage X3 Java Bridge Server** (1)

JAVASRV on x3erpv12sqlvm [ID : JAVASRV]

- X3 ERP V12 on x3erpv12sqlvm - [ID:X3ERP12]

Publications

Solution identifier	Solution label	Published folders	Locked
X3ERP12	X3 ERP V12 on x3erpv12sqlvm	SEED	No

2

3

Folders to publish

- SEED
- X3

4

5

6

7

**Sage X3 Configuration Console - CFG.2.55.0.40**

Console Sage X3 Java Bridge Server Actions View Tools ?

Welcome Add Delete Configuration Services Publications

Solutions

- Sage X3 Print Server
- Sage X3 Webservice and ADC Server
- Sage X3 Business Intelligence Server
- Sage X3 Java Bridge Server

Configure Unconfigure

**Configuration**

Sage X3 Java Bridge Server on x3erpv12

Parameter

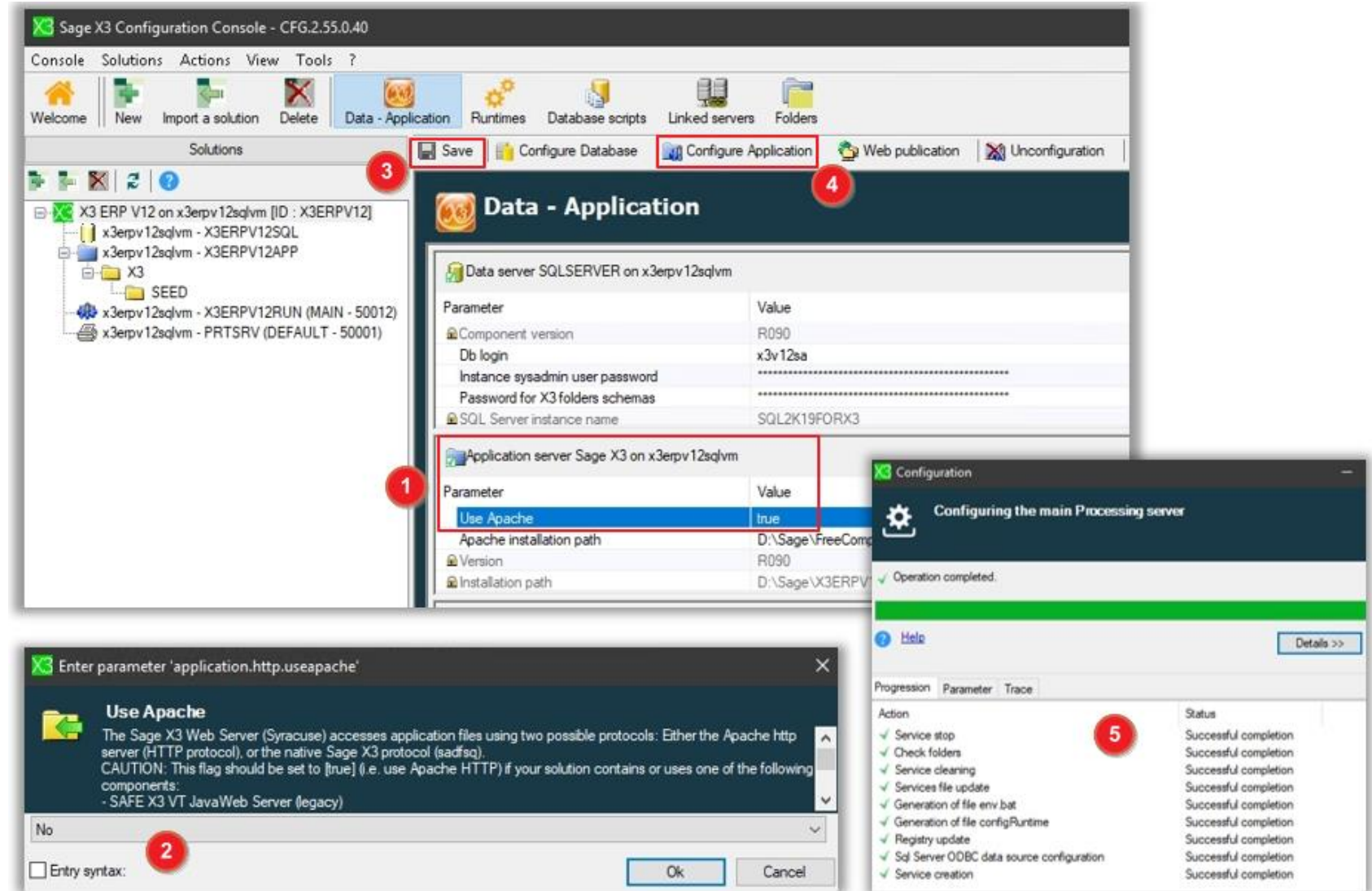
- all.jvm.jmxport
- runtime.service.wrapper.timeout
- runtime.service.wrapper.port
- runtime.service.httpport
- runtime.service.jetty.port

```
<module name="JAVASRV" family="SERVERJAVA" type="">
  <all.host.alias>JAVASRV</all.host.alias>
  <all.host.installdatapath>D:\Sage\SafeX3\JavaSrv\dat
  <all.host.installtoolspath>D:\Sage\SafeX3\JavaSrv\to
  <all.host.port>27160</all.host.port>
  <component.serverjava.adxadminpath>D:\Sage\SafeX3\Ja
  <component.serverjava.installstatus>active</componen
  <component.serverjava.path>D:\Sage\SafeX3\JavaSrv\to
  <component.serverjava.platform>WIN64</component.serv
  <component.serverjava.servername>x3erpv12sqlvm</comp
  <component.serverjava.version>V270</component.server
</module>
```

# Switching to use SADFSQ

## In the Sage X3 Management console

1. Log into the solution. As long as you have the required components, the 'Use Apache' parameter will be available in the application server section
  - Syracuse 12.15
  - Runtime & ADXAdmin 94.1.17
  - Console 2.54
2. Set the parameter to 'No' in the console. It will change the value to 'False.'
3. Save the configuration
4. Configure the application
5. Confirm all tasks are completed successfully



# Switching to use SADFSQ

## In Syracuse

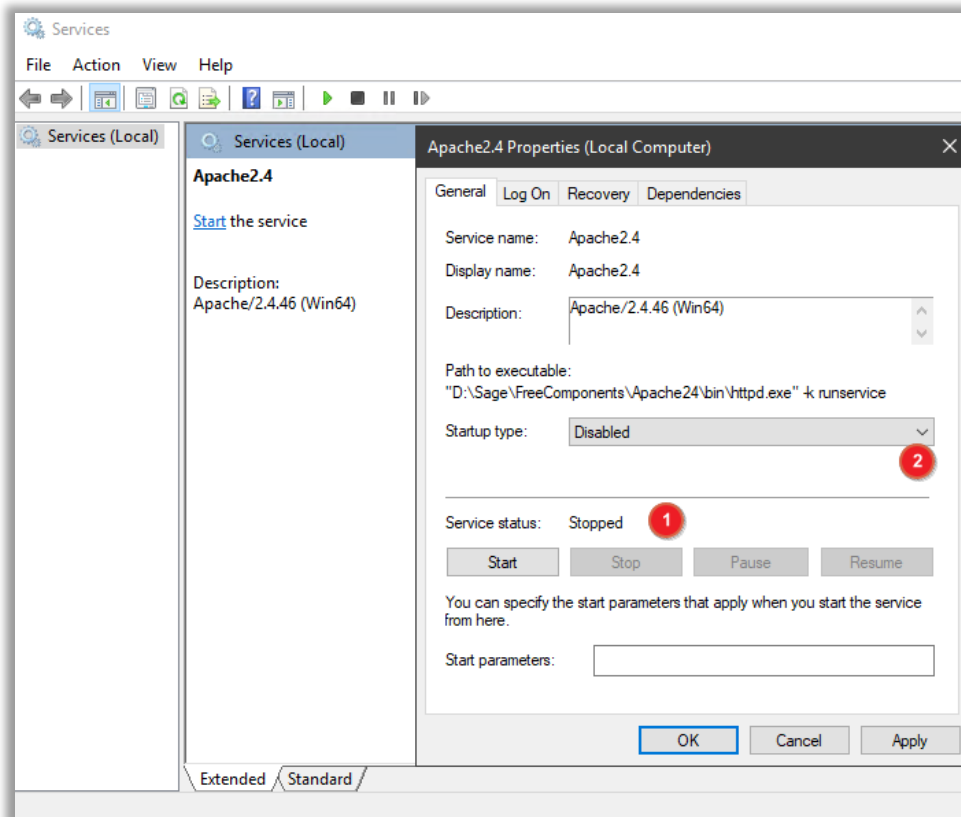
1. Navigate to the X3 solutions in Administration, Administration, Endpoints
2. Click edit on the page
3. Change the file protocol setting to use Sage X3 Protocol SADFSQ
4. Save the settings
5. Sage X3 is no longer using the Apache service so that we can disable this in windows
6. Test that you can access a classic page without any errors and download files
7. Finalize all other testing

The screenshot shows the 'X3 solution X3ERP12' configuration page in the 'Endpoints' section. The 'File protocol' section is highlighted with a red box and a red circle '3', showing the 'Sage X3 protocol (SADFSQ)' option selected. The 'Apache server' section is also visible, with the 'Web server host' set to 'x3erp12sqlvm' and 'Web server port' set to '8080'. A 'Save' button is highlighted with a red box and a red circle '4'. The breadcrumb navigation at the top reads 'All > Administration > Administration > Endpoints'.

Product	Description
ASS001	Server
ASS003	Fixed Assets Contract
ASS004	Supermicro
BMS001	3 Sprockets
BMS002	5 Sprockets
BMS003	7 Sprockets
BMS004	1 Chainset
BMS005	2 Chainsets
BMS007	Pump
BMS008	20" radius rim (subcontractor)

# Disabling Apache in windows

You can now disable the Apache service in windows, by launching the services.msc console, stop the service and set the startup type to disabled.



- Restart the server and complete your testing with the Apache service disabled.
- It is not recommended to uninstall Apache if the application was initially deployed using Apache
- If you do decide to remove the Apache binaries, the application server component will need to be removed and reinstalled, which is not recommended



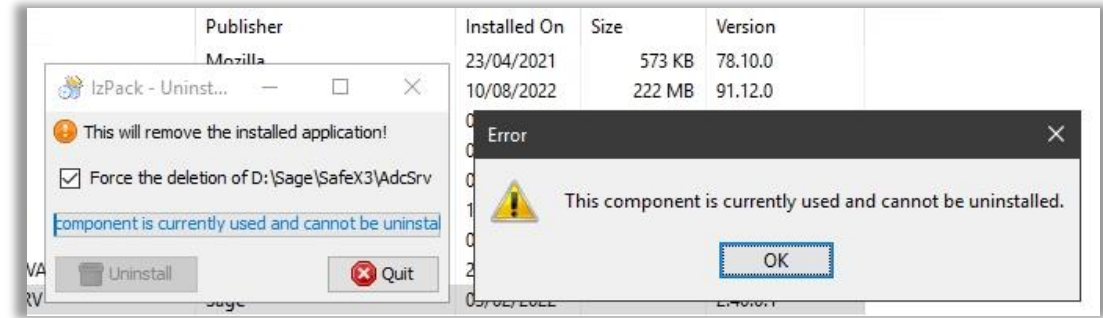
# Troubleshooting

## Errors during legacy component uninstall in Windows

When attempting to uninstall the legacy components from the windows control panel, the **Error “This component is currently used and cannot be uninstalled”** is displayed

This error occurs when the adxinstalls.xml file does not clear down after the un-configuration of the component

1. Navigate to the AdxAdmin\inst\ADXinstall.xml file
2. Backup the file
3. Delete the <module> to </module> section for the component you are uninstalling. For example, for the web server, delete the WEB section.
4. Save & Restart the AdxAdmin Service
5. You will now be able to uninstall the component

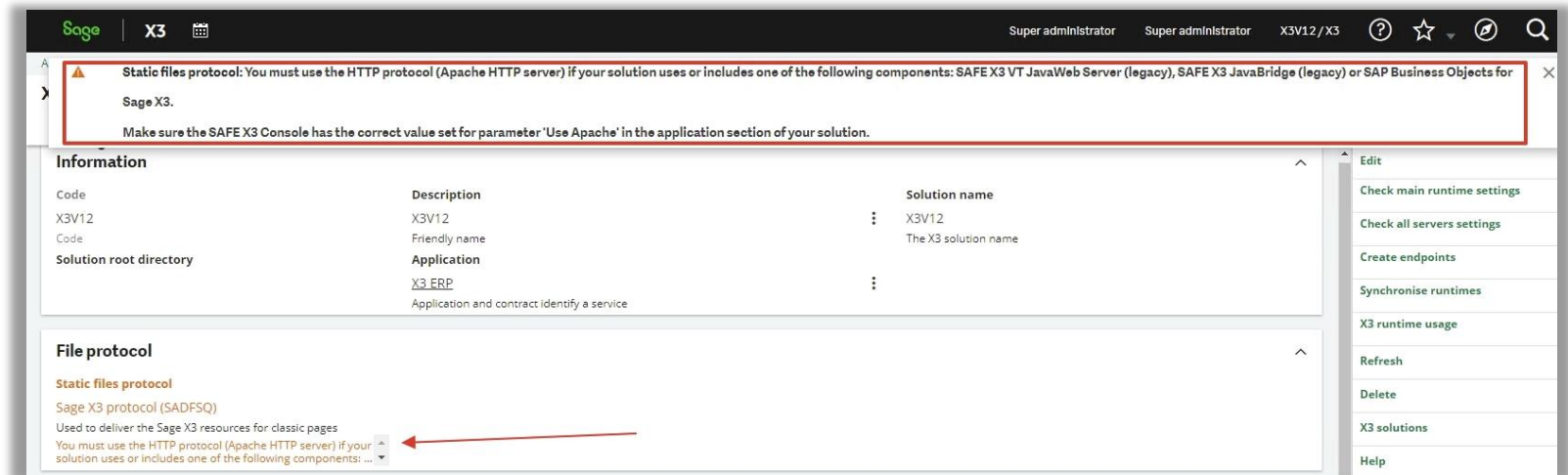
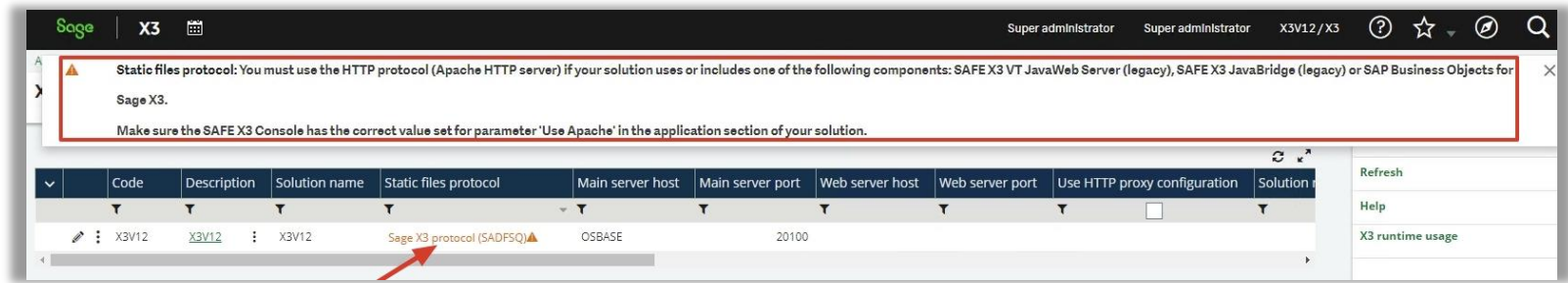


```
<module family="REPORT" name="PRTSRV" type="">
  <component.report.installstatus>update</component.report.installstatus>
  <component.report.path>D:\Sage\SafeX3\PrtSrv</component.report.path>
  <component.report.platform>WIN64</component.report.platform>
  <component.report.servername>x3erpv12sqlvm</component.report.servername>
  <component.report.version>2.25.0.27</component.report.version>
  <report.adxd.adxlan>FRA</report.adxd.adxlan>
  <report.service.adxsolsprof>DEFAULT</report.service.adxsolsprof>
  <report.service.printport>50001</report.service.printport>
</module>
<module family="WEB" name="ADCSRV" type="">
  <all.host.installdatapath>D:\Sage\SafeX3\AdcSrv\data</all.host.installdatapath>
  <all.host.installtoolspath>D:\Sage\SafeX3\AdcSrv\tool</all.host.installtoolspath>
  <component.web.adxadminpath>D:\Sage\SafeX3\AdcSrv\tool\TOOLS\ADXADMIN\adxadmin.cmd</component.web.adxadminpath>
  <component.web.installstatus>update</component.web.installstatus>
  <component.web.path>D:\Sage\SafeX3\AdcSrv</component.web.path>
  <component.web.platform>WIN64</component.web.platform>
  <component.web.servername>x3erpv12sqlvm</component.web.servername>
  <component.web.version>V170</component.web.version>
  <web.adxadmin.port>50000</web.adxadmin.port>
  <web.http.port>28880</web.http.port>
</module>
</install>
```

# Troubleshooting

## Syracuse display warning

When using the SADFSQ protocol with Syracuse 12.16.0.40 you will notice some warning messages in the solution itself and the solution list these messages can be ignored and are expected to be removed in Syracuse 12.17



# Summary

- Advantages of using SADFSQ
- We went through the prerequisites to switch to using SADFSQ
- Unpublishing & unconfiguring legacy components
- The steps in a new install
- Process to switch to the SADFSQ protocol in an existing install

# Useful Resources

Blog Post on switching to SADFSQ

[https://www.sagecity.com/us/sage\\_erp\\_x3/b/sageerp\\_x3\\_product\\_support\\_blog/posts/replacing-Apache-with-the-native-x3-application-protocol](https://www.sagecity.com/us/sage_erp_x3/b/sageerp_x3_product_support_blog/posts/replacing-Apache-with-the-native-x3-application-protocol)

Notification servers online help

<https://online-help.sageerpx3.com/erp/12/staticpost/notification-servers/>

Nodemailer – underlying technology used by Notification Server.

<https://github.com/nodemailer/nodemailer-smtp-transport/blob/master/README.md>

Information about mustache templates

<https://www.elated.com/easy-html-templates-with-mustache/>

# Questions

# Thank you!

