**Summa CHO 803 sp2 Upgrade SHS\_OH**

Here is your project number and Hours 10457541

Raj added the billable task code for this project on 3-23-2020

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 10457541 | SHS\_OH Billable Upgrades | NS | Consultant | 116 |
| Database Administrator | 68 |
| Technology Consultant | 116 |

Posted 24hrs for week ending 5-16-2020

Delivery Dates CHO 8.03 SP2 Upgrade Event

* Server Readiness May 11 – 15, 2020 – Todd McConnell
* PROD Upgrade 8.03 SP2 Upgrade dates: June 9 - 11, 2020

DSS - June 9, 2020 Pavan An

HI UI – June 9, 2020 – Jim DeFrances

HQ – June 10 - 11, 2020 –Pavan An

QMI – June 10, 20202 – Jim DeFrances

CWx SS TEL: Jim DeFrances

TRS review mtg with Renee and Duane and client team: 3-16-2020

**Current 8.02 Spx Servers:**

SHWP-DSSAP007 – APP - 10.174.9.86

SHWP-DSSDB001 – DB - 10.174.9.73

SHWP-DSSAP002 – HIUI – 10.174.9.75

SHWP-DSSHQ002 – BOE – 10.174.9.87

HHRR – SDSS

Datamode ID 3

New DSS App Server - SHWP-DSSAP008 IP:10.116.69.73 NAT 10.174.9.92

New DSS DB Server - SHWP-DSSDB004 IP:10.116.69.65

**Login acct credentials** – shsntd1\dss-support

Password - R@tb3rt

Microsoft SQL Server 2016 (SP2) (KB4052908) - 13.0.5026.0 Enterprise Edition (64-bit)

No New BOE Server needed as its currently got SAP 4.5 Sp2 HF1 installed

Mongo DB is currently 3.4.6 - will raise to 3.6.6 during the upgr event

Submit Cerner DBA request to re org the drive letter layout with the clients DBA team as well as Re-org the DSS DB. – Done and assigned by Amit –

Submit TEL related requests – Jim D assigned

* Submit DBA Request – complete –
* Review current drive mapping and DBA upgrade tasks  **Kalyan**
* Review 8.02 environment for DB Reorg planning  **Sudev** (In co-ordination with Kalyan as this can run for multiple windows).

SF Replication – TEL needs to submit request – Jim D

Submit IP – RDP and Artifactory request – Jim D??

Submit Interface Discoveries – Jim D?

Client most likely to install SQL 2016 on DB server - provide them the Collation setting

Client to install SSIS on the App server - no need for us to run the step in chef

Client will also install 32 bit excel and word using their key so we can skip that in chef cookbook as well.

**DBA Discussions: 3-26-2020:**

\*\* I need to Provide Matthew at Summa the steps to putting day end on hold – screen shots etc – Done

We have done the analysis for DSS Re-org and migration tasks and below are the details

1. **DSS Re-org**

* Time needed – 15-16 hours
* Can be split into 2 windows of 8 hours each and can be performed after Dayend completion each.
* Need Dates for Re-org
* Scheduled for Apr 14 and Apr 15

1. **Drive layout and DB Migration tasks discussion for the upgrade.**

* Attached is the proposed drive structure for the target server as per Cerner standards.
* If local backups are needed then we need local backup drives (T,U and V). If not then we a temporary drive on target server for migration and copying of DB backup files.
* Would prefer Cerner DBA doing the backup and restore tasks since Re-org will add new files and they need to be re-adjusted and placed in correct drives on target.
* SSAS DB and SSIS packages exists. Cerner DBA can migrate them.
* Can see replication setup with SF on DSS server. Need resource for repointing the replication to new server.
* Who does the SQL install? If client then SQL should be installed with D drive as root directory and SSAS service should be installed on S drive. – Denny good with the info we have provided…….
* Lots of linked servers are present. Need to analyze and check if necessary firewall requests are needed. – part of upgr planning and vision dwg

6 of SMS Databases – is included in the drive layout – tnx, and other smsph –

Cerner built Custom Universe – needs repointed to new DSS DB Server for 8.03 sp2 upgr – Gordon worked on this before - Custom Denials universe outside of their top level folder – see emails from 8.02 sp2

**4-28-2020 Planning Call:**

New server NAT’s – Jim D im’d him 4-28-2020? 4-29 reply - nope - i have a lot of work to do on summa - was going to send out a bunch of stuff tomorrow

Contact David Kent to review WAN for Artifactory process – No Worries

Provide Cerner Solution media – To Matthew Pyle – Done 4-29

Provide the artifactory url and IP address – 64.46.207.134 – done same email as media – 4-29

New 8.03 db server will have the correct paths for the Drive Letters –

**4-29-2020**

IM chat with Amit -

[8:29 AM] Kulkarni,Amit

does the server readiness event on CHO check for SSAS root directory?

[8:29 AM] Kulkarni,Amit

its installed on D instead of S drive

Who does the SQL install? If client, then SQL should be installed with D drive as root directory and SSAS service should be installed on S drive. Denny from Summa will do SQL install – and Todd informed Denny to match collation settings as on current server.

Emailed Denny 4-29-2020

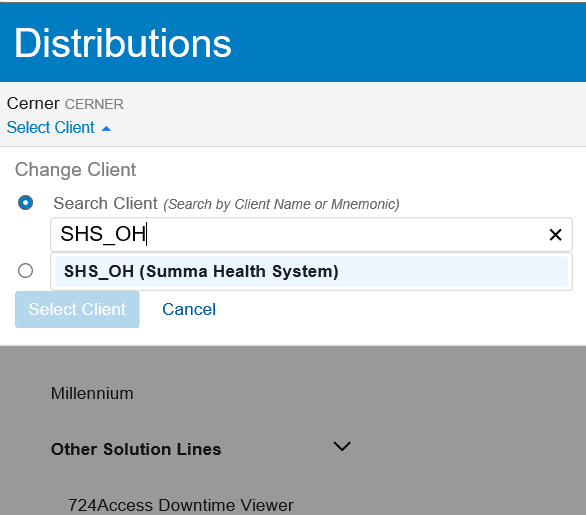
Media Download

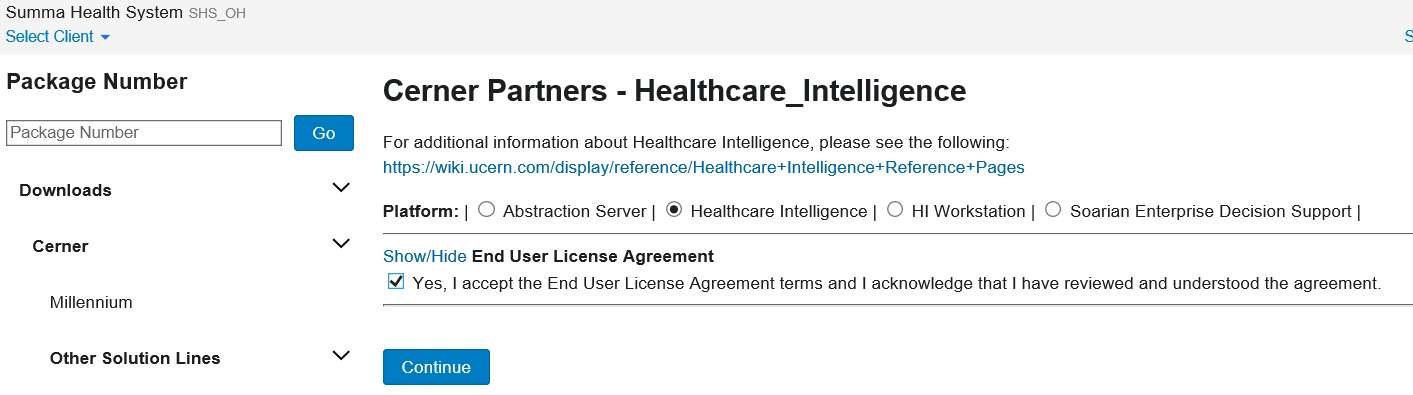
Before sending check scsweb for correct pkg SSEDS or HI and take screen shots of path for client: - Email sent 4-29-2020

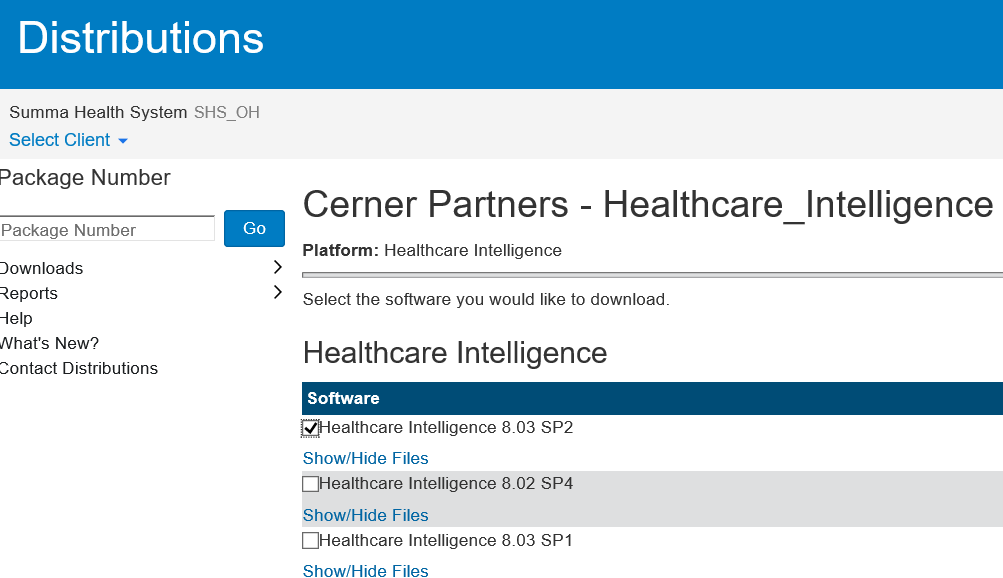
Summa Team,

To download the Cerner Solution 8.03 sp2 media please follow the prompts in bold below once you have reached the distribution site (I have included screen shots of how to access and download media).  As always once downloaded please copy/place the media on a network or server drive that the installers can access.

[https://distributions.cerner.com](https://nam01.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdistributions.cerner.com&data=02%7C01%7CTodd.McConnell%40cerner.com%7C9f48e4fa41624fab3a3d08d7ec331001%7Cfbc493a80d244454a815f4ca58e8c09d%7C0%7C0%7C637237576455420972&sdata=1r%2BghSYatnReqftGWr5fMGhKYEN7HLPIPLS8%2Bcm0llM%3D&reserved=0) for clients to download.  **Healthcare intelligence** can be found under **Downloads** – **Cerner** – **Other Solution Lines** – **Healthcare Intelligence**.  You will reach a landing page where you select the **Healthcare Intelligence** and check the box for agreement to the licensing terms.  The next page will show the software items for download from there you download 8.03 SP2 Package.







**5-5-2020 Planning Call:**

New 803 sp2 DSS App Server – SHWP-DSSAP008 IP:10.116.69.73 NAT 10.174.9.92

New 803 sp2 DSS DB Server - SHWP-DSSDB004 IP:10.116.69.65        NAT 10.174.9.93

Server domain health.summa.inet

**Login acct credentials** – shsntd1\dss-support

Password - R@tb3rt

Get new Server names from EVTL – Jim D evtl shows as Cox

NAT’d IP Information: from Titus

10.116.69.73  > 10.174.9.92

10.116.66.108  > 10.174.9.75 What is this NAT for? 2012 server SHWP-DSSAP002 – HIUI Server

10.116.69.65  > 10.174.9.93

Test Artifactory access – client tested access from ws 5-5-2020 I tested it from DB server and could download chef client.

<http://prod-artifactory.asp.cernerworks.com/artifactory/>

64.46.207.134

Added site to Trusted Sites and was able to connect

DSS App server – E: drive needs to be renamed to F: - emailed the client on Server Readiness thread 5-5-2020 – Done 5-8-2020 also Cerner software on F: now as well

Need SQL 2016 Key for SSIS install on App Server – 5-7-2020 checked and SSIS is already installed on app srv – 5-7-2020 emailed Matthew for the key so I can enter it for chef script - If you need Management Studio or something of that sort installed on one of your App servers – the Summa DBA Team can do that for you. We are not giving the License key to anyone. As David has stated, your database server has the instance and all necessary modules installed and no further work should be necessary there.

Setup chef to skip SQL SSIS and remove key value prompt from the json file – check Faith 802 sp4 setup – server for how to set to skip -

[1:39 PM] A N,Pavan

You should remove it from recipe

[1:39 PM] A N,Pavan

Just comment out the like featuring SSIS

[1:40 PM] McConnell,Todd

just recipe nothing needed in json

[1:40 PM] A N,Pavan

Correct

Email Dave Kent re: WAN include 2 source IP’s – sent email 5-7-2020 – 5-8-2020 No you should be fine. Fire away

**Mon May 11, 2020**

**Perform CHO Server Preparation steps with Firewalls UAC and etc -**

**DSS APP server Readiness**

**CHO**

1. Complete the following section: **[6200] Artifactory Firewall Request**
2. Install the Chef Client:

<https://prod-artifactory.asp.cernerworks.com/artifactory/ext-third-party-distributions-production-local/chef/chef-client/14.7.17/chef-client-14.7.17-windows-x64.msi>

1. Extract the self-extracting exe of the cookbooks onto the C: drive:

[https://prod-artifactory.asp.cernerworks.com/artifactory/hi-chef-production-local/server\_role\_cookbooks/hi\_role\_dss\_app\_server/hi\_role\_dss\_app\_server\_0136.exe downloaded 0164](https://prod-artifactory.asp.cernerworks.com/artifactory/hi-chef-production-local/server_role_cookbooks/hi_role_dss_app_server/hi_role_dss_app_server_0136.exe%20downloaded%200164)

Removed this from json file

"cerner\_ms\_sql\_server": {

"productkey": "<Product key for Sql server integration service for Cho install>",

"version": "2016"

},

Registered company name for sap\_crystal reports – Summa

smtpRelay.health.summa.inet

To skip SQL SSIS because client installed and would not give out product key – edited DSS app server recipe – default

# cerner\_ms\_sql\_server

#include\_recipe 'cerner\_ms\_sql\_server::default'

Ofc professional plus is installed already – so I rem that out of cookbook as well

# MS Office Professional plus 2016 32 bit (excel,word)

#include\_recipe 'ms\_office::default'

1. Update the environment file and fill-in the missing information

|  |
| --- |
| **For 8.03 base and 8.03 SP1:** |
| hi\_8\_03\_base\_cho.json |

1. Open a Windows Command Shell session.
2. At the prompt, navigate to c:\chef, type the following, and then press ‘Enter’:

|  |
| --- |
| **For 8.03 base and 8.03 SP1:** |
| chef-client -z -E hi\_8\_03\_base\_cho -o recipe[cerner\_common] --no-listen  chef-client -l info -L %SystemDrive%/chef/client.log -z -E hi\_8\_03\_base\_cho -o hi\_role\_dss\_app\_server::default --no-listen |

Starting chef – 11am – 11:37am failed on MS Visual Studio C++ 2017 Redistributable – 14.10.25017 install – control panel had a newer version so I uninstalled it and restarted chef – server reboot now – looks like it installed needed vers Visual Studio – 11:57am – reboot again -12:08pm – reboot again - 12:25pm another reboot – chef done on app server –

need to do adoptopenjdk section of HABI server prep guide – last section needs revisited

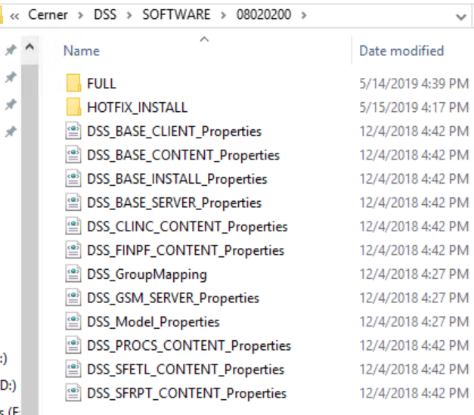
This section needs completed yet – post EMT – Tomcat9 is not starting so I can’t configure it yet

## Update Java[jvm.dll] path in Tomcat

**SKIP THIS STEP FOR DSS in RHO server. DSS in RHO server do not have Tomcat.**

1. To change the Tomcat jvm.dll path, navigate to Tomcat’s bin folder (ex **C:\Program Files\Apache Software Foundation\Tomcat 9.0\bin**).
2. As shown in the screen image below:
   1. Execute **Tomcat9w.exe** (or **Tomcat8w.exe** depending on the version of Tomcat) to launch the Apache Tomcat Properties dialog.
   2. Select the **Java** tab and update the Java Virtual Machine field to point at AdoptOpenJDK:
      1. JVM path example: **C:\Program Files\AdoptOpenJDK\jre-8.0.222.10-hotspot\bin\server\jvm.dll**

Current pkgs:



Copy out older version of BIAUD file - 01.02.0000\_0037  is the one that works

3pm – emailed the client to see how to get the files across to server as I cant connect to one drive per msg below:

3:11pm - Hi Todd – Place the files in my ShareFile link: [https://summahealth.sharefile.com/r-rd6e1114f18e4b63b](https://nam01.safelinks.protection.outlook.com/?url=https%3A%2F%2Fsummahealth.sharefile.com%2Fr-rd6e1114f18e4b63b&data=02%7C01%7CTodd.McConnell%40Cerner.com%7C14ee5a06b9f64d4d2cbc08d7f5df1b1d%7Cfbc493a80d244454a815f4ca58e8c09d%7C0%7C1%7C637248210902869868&sdata=h4mcRZRzkkFRZjCHMVl75HqQcDoedTKCktL7AwBlvCc%3D&reserved=0)

I’ll drop them on the server.

Matthew

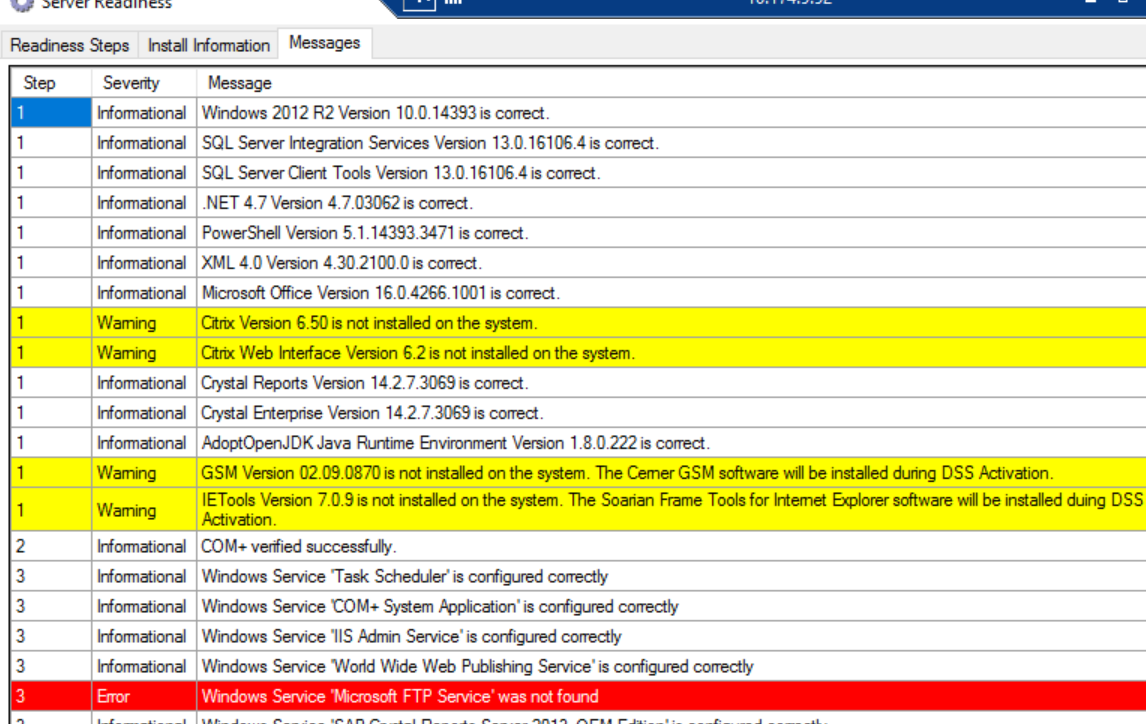
| **Reference** | **Section** |
| --- | --- |
| **7111** | APP Server: Deliver DSS Software |
| **7120** | Deliver DSS Hot Fixes |
| **7130** | Install DSS Software Utilities |
| **7230** | DSS Server Migration – copied DSS\_ADSearchPaths xml file |
| **7235** | DSS APP Server: Copy/Move Datasources File |
| **7320** | DSS APP Server: DSS Server Configuration |
| **7330** | DSS Server Readiness |
| **7340** | DSS Server Activation |
| **No Reference** | Reboot Server |

Server Readiness – 5-12-2020

Installed FTP Service manually

Fixed Opt out setting under Performance

Rebooted



**DSS Activation –**

**Step 13 Error**

[4:27 PM] McConnell,Todd

what about this msg in activation then - The local account 'WinNT://SHWP-DSSAP008/ndwSSSD' is being activated...The password does not meet the password policy requirements. Check the minimum password length, password complexity and password history requirements.

​

[4:27 PM] McConnell,Todd

oh thats the ftp acct threw me with the hhrr piece

​

[4:28 PM] Gao,Gordon

seems like the same error we saw a few weeks back, try manually creating it first

**Resolution created acct manually in Computer Management - Local Users ndwSSSD Ndwintf991212**

**Step 26 Error – Activate BI Security Database –**

**Error in Activation.DatabaseDriver():: Ex: Error in Activation.RunCreateDBFile():: Ex: The specified node cannot be inserted as the valid child of this node, because the specified node is the wrong type.**

**InnerEx:**

**InnerEx:**

**Posted on Teams HI Issues – if no response tonight then -**

**Open Remedy and email Accelerate Team for assistance on this one - INC000027220096**

It seems the data and log directory value for Audit and BiSec database in configuration utility should be changed. There is no T and Q drive present in the present DB server. Looks like these are all older DB servers value. Please save the configuration with correct values and rerun activation again

**Asked Amit and he said to use K: and I:**

**Ran activation from step 26**

**Next error is step 49**

**Task "BI Auditing Install" failed:**

**Exit Code: 1603**

**Error Message:**

**Emailed Sudipta back to have another look – 7:09am working on it msg received but still 7:57 no login to server session – 8am session finally taken**

**Resolution -** The prompts and properties value was still holding the older DB’s BiAud info. This has been fixed now and Please resume activation from the failed step 49

**No EMT on current 8.02 environment**

**DSS DB Server Readiness**

**CHO**

1. Complete the following section: **[6200] Artifactory Firewall Request**
2. Install the Chef Client:

<https://prod-artifactory.asp.cernerworks.com/artifactory/ext-third-party-distributions-production-local/chef/chef-client/14.7.17/chef-client-14.7.17-windows-x64.msi>

1. Extract the self-extracting exe of the cookbooks onto the C: drive:

<https://prod-artifactory.asp.cernerworks.com/artifactory/hi-chef-production-local/server_role_cookbooks/hi_role_dss_db_server/hi_role_dss_db_server_0017.exe>

1. Update the environment file and fill-in the missing information

|  |
| --- |
| **For 8.03 base and 8.03 SP1:** |
| hi\_8\_03\_base\_cho.json |

1. Open a Windows Command Shell session.
2. At the prompt, navigate to c:\chef, type the following, and then press ‘Enter’:

|  |
| --- |
| **For 8.03 base and 8.03 SP1:** |
| chef-client -z -E hi\_8\_03\_base\_cho -o recipe[cerner\_common] --no-listen  chef-client -l info -L %SystemDrive%/chef/client.log -z -E hi\_8\_03\_base\_cho -o hi\_role\_dss\_db\_server::default --no-listen |

1:41pm – chef started – reboot 1:45pm – chef complete

| **Reference** | **Section** |
| --- | --- |
| **7112** | DSS DB Server: Deliver DSS Software |
| **7120** | Deliver DSS Hot Fixes |
| **7130** | Install DSS Software Utilities |
| **7140** | Server Identification |
| **7322** | DSS DB Server: Create Environment Variable |
| **7330** | DSS Server Readiness |
| **7340** | DSS Server Activation – see notes below |
| **7342** | DSS DB Server: DSS Standalone Database Server Activation |
| **7850** | DSS Server Validation – see notes below |
| **No Reference** | Reboot Server |

\\SHWP-DSSAP008\D$\Program Files\Cerner\DSS\RUNTIME\PROPERTIES

Readiness Error Step 1 - .NET 4.7 Version is incorrect. The current version is 4.8.03761, expected version to be between 4.7 and 4.7.\*.

Igonoring per past experience the .NET versions are backward compatible and you deprecate the .NET if you try to uninstall newer versions.

Server Activation –

Step 6 - Error updating the Distributed Transaction Coordinator :Cannot stop MSDTC service on computer '.'.

Resolution – Re ran step and it passed

Step 9 –

The number of dependent services does not match definition for Windows service 'SQL Server (MSSQLServer)': currently 2, should be 1

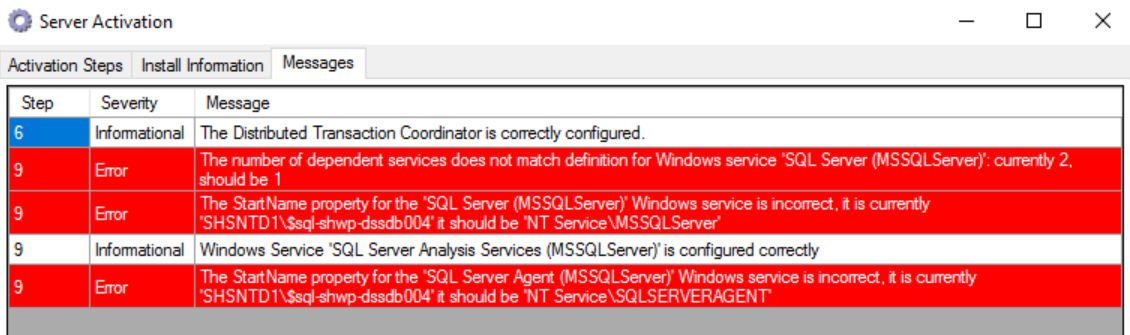
Resolution -

The StartName property for the 'SQL Server (MSSQLServer)' Windows service is incorrect, it is currently 'SHSNTD1\$sql-shwp-dssdb004' it should be 'NT Service\MSSQLServer'

Resolution – ask the client to set back to SQL default name

The StartName property for the 'SQL Server Agent (MSSQLServer)' Windows service is incorrect, it is currently 'SHSNTD1\$sql-shwp-dssdb004' it should be 'NT Service\SQLSERVERAGENT'

Resolution – ask the client to set back to SQL default name (refused see below)

I think it should be ok if Summa has installed extra features and that shows up as dependencies for SQL server. You can skip that error

9am - Emailed Amit for guidance before sending email to the client - I think it should be ok if Summa has installed extra features and that shows up as dependencies for SQL server. You can skip that error

10:49am - Emailed client – Denny to set accts to default – replied with - The Summa standard is to use a secured domain account to start services and there is no reason to change this. The old server was setup this way and the Cerner application worked just fine.

Resolution left the steps failed and saved email string!

DB Server Validation –

Step 5 errored – same msgs regarding sql svcs accts and dependencies – ignored per clients email on activation errors.

Rebooted DB server

Enable https on SHWP-DSSAP008 – IIS Default website set Bindings for https port 443 using the certificate avail on server

5-13-2020 Server Readiness tasks are complete for DSS APP and DSS DB servers -

5-13-2020 Sent client email string update

5-13-2020 Sent Cerner email string update

**5-20-2020**

Setup a test SF replication DB on the DSS DB Server – send info to Tom and Devin – cc Renee and Jim D, Pavan

Manually create the SFRPLTEST database and then run the following scripts – for permissioning – Done 2pm

New 803 sp2 DSS App Server – SHWP-DSSAP008 IP:10.116.69.73 NAT 10.174.9.92

New 803 sp2 DSS DB Server - SHWP-DSSDB004 IP:10.116.69.65        NAT 10.174.9.93

**Login acct credentials** – shsntd1\dss-support

Password - R@tb3rt

Ran these scripts for Devin and Tom

use master

if not exists (select name from sys.syslogins      where name = 'SFReplUser')      CREATE LOGIN SFReplUser WITH PASSwORD = 'Rep!2oo8', CHECK\_POLICY=OFF;

use [SFRPLTEST]

 if not exists (select name from sys.sysusers      where name = 'SFReplUser')      CREATE USER SFReplUser;      exec sp\_addrolemember N'db\_owner', N'SFReplUser'

use master

if not exists (select name from sys.syslogins      where name = 'SRFLinkUser')      CREATE LOGIN SRFLinkUser WITH PASSwORD = 'U$srfL1nk', CHECK\_POLICY=OFF;

use master

if not exists (select name from sys.syslogins      where name = 'SFReplUser')      CREATE LOGIN SFReplUser WITH PASSwORD = 'Rep!2oo8', CHECK\_POLICY=OFF;

use SFRPLTEST

if not exists (select name from sys.sysusers      where name = 'SFReplUser')      CREATE USER SFReplUser;      exec sp\_addrolemember N'db\_owner', N'SFReplUser'

  if not exists (select name from sys.sysusers      where name = 'SRFLinkUser')      CREATE USER SRFLinkUser;      exec sp\_addrolemember 'db\_datareader', 'SRFLinkUser'      exec sp\_addrolemember 'db\_owner', 'SRFLinkUser'

New 8.03 db server will have the correct paths for the Drive Letters –

Hi Todd,

Here is what Amit created  -

|  |  |  |  |
| --- | --- | --- | --- |
| **Drive Name** | **Drive Letter** | **Size** | **Comments** |
| Local Disk | C: | 100 GB |  |
| SQL Install | D: | 50 GB |  |
| Temp DB Reorg - 1 | G: | 400 GB |  |
| Temp DB Reorg - 2 | H: | 400 GB |  |
| Translog | I: | 700 GB |  |
| Detail Data - 1 | K: | 800 GB |  |
| Detail Data - 2 | L: | 800 GB |  |
| Detail Data - 3 | O: | 800 GB |  |
| Detail Data - 4 | P: | 800 GB |  |
| Summary Data - 1 | M: | 180 GB |  |
| Summary Data - 2 | N: | 180 GB |  |
| Cubes | S: | 40 GB |  |
| Backup-1 | T: | 300 GB | If local backup is needed |
| Backup-2 | U: | 300 GB | If local backup is needed |
| Backup-3 | V: | 300 GB | If local backup is needed |

[12:57 PM] McConnell,Todd

Gordon do you know if we need to apply the DSSBI Pkg hotfix for CHO?

[12:57 PM] McConnell,ToddD **DSSBI Package (LDAPS):**

[12:58 PM] Gao,Gordon

they mentioned this fix is by request only

[12:58 PM] McConnell,Todd

so no need during upgrades to run it

[12:58 PM] Gao,Gordon

no

Hi Todd,

We have an issue that you might be able to help us with. Summa is retiring old domain controllers. Last time this happened, authentication to Cerner apps stopped working until we edited a config file and changed the named servers used for domain controllers.

The big question we have is where is this config file located and what is the name of the file? They are decommissioning these old DCs Saturday so we need to locate this file ASAP. Any help you can provide would be appreciated.

Crozer did this in March according to Gordon – the hardcoded domain controllers are listed in the krb5 file

[11:51 AM] Gao,Gordon

dss wasn't brought up as an issue last time

​

[11:51 AM] Gao,Gordon

i asked him to restart tomcat and SIA on BO

​

[11:51 AM] McConnell,Todd

ok tx

​

[11:52 AM] Gao,Gordon

if dss is inaccessible though it doesn't hurt to try a reboot

[11:57 AM] Gao,Gordon

ok i found the ticket from Crozer, they rebooted DSS too

​

[11:57 AM] Gao,Gordon

Crozer changed domain controllers. We do not hardcode the DC into DSS.  They rebooted the servers and the connection was made.

Check BOE server SHWP-DSSHQ002 – BOE – 10.174.9.87 – krb5.ini file and bsclogin for domain controller lists –

