Technical Installation Record for Execution of INS\_00000540616: CRQ000000459215 - DCC TIP - Content Server 7.3 Code Installation in Primary Server - us1sxlx00196

Version 2.0

Approval

Signature blocks are within the document for approval of the Technical Installation Record.

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# Introduction

This plan serves as the primary guide and record for the installation of **Documentum Content Server v7.3** on Linux systems and includes:

* The context for the system being installed.
* A high-level overview of the process.
* Detailed instructions to perform the installation.
* The approach to verify that the outcome of the installation.
* Annotations to confirm the successful completion of installation and verification steps (as required in the TIP).
* Evidence that is required to document the execution of the installation process which may include screen shots captured in this document or links/references to other documents produced during the installation.

When initially approved this Technical Installation Plan contains context, background and instructions only. Once executed it will be re-named with new ID and contain installation evidence and become a Technical Installation Record

## Definitions

The following terms could be used in this Technical Installation Plan:

Table 1 - Definitions

| Term | Definition |
| --- | --- |
| Application Layer | The layer that supports the use of the application. |
| Content Server | Documentum terminology for the Repository server. |
| D2 | D2 is content management configuration layer from OpenText. |
| DAR | Documentum Archive format. |
| Database Layer | The layer that stores the data of the application. |
| Development | The environment to be built for research and development. |
| Docbase | A Documentum database. |
| Documentum CC or DCC | Documentum Competency Center, support and deployment of Documentum based systems. Part of R&D IT SDS |
| EIS | End User & Infrastructure Services |
| FTI | Full Text Indexing (see xPlore) |
| GDC | Global Data Centre (Upper Merion, USA) |
| HTTPS | Secure protocol for communications between client and web servers |
| ITCP | IT Continuity Plan |
| NAS | Network Attached Storage |
| PDF | Portable Document format. |
| Production | The environment to be deployed for use by the business. |
| Render | A process where the original format (i.e. Microsoft Word) is copied into a PDF format. |
| Repository | See docbase. |
| RHEL | Red Hat Enterprise Linux |
| SAN | Storage Area Network. A method of storing data in a central storage unit located on a dedicated fibre network. |
| SDS | System Delivery & Support, part of R&D IT |
| SSL | Secure Sockets Layer is the standard security technology for establishing an encrypted link between a web server and a client browser. This link ensures that all data passed between the web server and browsers remain private and integral. |
| SSV | OpenText Submission Store & View Module |
| Test | The environment to be built for testing. |
| TIP | Technical Installation Plan. |
| UAT | User Acceptance Testing environment (see also Val) |
| Val | The environment to be built for Validation/User Acceptance testing. |
| WADS | GSK Web Application Development Standards |
| WAST | GSK Web Application Security Testing |
| xPlore | New generation full-text indexing and search engine for Documentum platform. |

# Context

Table 2 - Context

|  |  |
| --- | --- |
| **System ID** | ***P014556918*** |
| **System Name** | ***cdms d2 (prd)*** |
| **System Description** | ***CDMS LSQM Production Environment*** |
| **Relevant Technical Specifications** | N/A |
| **Technical Installation Plan** | INS00000540616 - Technical Installation Plan for Content Server v 7.3 |
| **TIR Approvers** | Please refer to CDMS Properties of this TIP for approver roles required for the TIR |

## Impact to Operations

Table 3 - Impact to Operations

|  |  |
| --- | --- |
| Required down time | 4 hours |
| Business Impact | There is no impact to operations since the system will remain on-line for the duration of the installation. |
| Risks / Mitigations | No risk |

## System Components

The following table summarises the collection of system components that may be installed using this TIP:

Table 4 - System Components

| Component | Description |
| --- | --- |
| Documentum Content Server v7.3 | Documentum Content Server v7.3 |

Note: The set of components actually installed during a particular execution will be identified in the Technical Installation Record (TIR).

## Final Environment

Not Applicable

## High-level Approach

The table below contains the overall sequence of actions required to complete the installation. Not all actions may be required for partial execution of this installation plan.

Table 5 - High-level Installation Steps

| # | Action | Comments |
| --- | --- | --- |
|  | [Record Information](#_Installation_Parameters) | All the relevant parameter values to be recorded for specific install being conducted. |
|  | Pre-Installation Instructions | In this section the initialization of environment is done. |
|  | Installation Steps – Documentum Software | In this section the Content Server software installation is done. |
|  | Installation Steps – Configure Connection Broker | In this section the Connection Broker Configuration steps are done. |
|  | Installation Steps – Install LDAP Authentication | In this section the LDAP Authentication configuration is done. |
|  | Post Installation Tasks | In this section the post implementation activities are done. |
|  | Installation Steps | To verify if the installation is successful. |

## TIP Use Instructions

The TIP may be executed hardcopy or electronically and should be used as follows;

Obtain a copy of the blank TIP (electronic / hardcopy as appropriate)

1. Assign new document Title and Assign new document ID
2. Gather information required for Table 9 - Installation Parameters from approved sources.
3. Delete or make as ‘not applicable’ the Approval page from the parent TIP
4. Update revision history to indicate this is version1 of Technical Installation Record
5. Follow the TIP preparation and execution instructions. Instruction cells that have been greyed out do not need to be completed.
6. If screenshot evidence is being captured, ensure that the Exhibit numbers are updated in the Reference / Comment section in the Installation instructions and recorded in **Appendix A.**
7. If Typescript evidence is being captured, ensure that files are given a unique Document ID and stored in the same repository as the TIR and recorded in **Appendix B**.
8. Once install has finished the installer must collate supporting evidence, record any anomaly / deviations in the required section and immediately sign the TIR (either wet signature or via electronic signature (installer only) at version 1). This is to create formal record of the execution at time of execution.
9. The TIR must then be reviewed and approved by the independent reviewer (and QRC if applicable), who should add any additional anomalies / deviations identified as appropriate and sign the TIR (for electronic documents this should be by versioning the document to version 2. Note that the installer does not have to approve the version 2 document).

# Installation Preparation

Table 6 - Preparation

|  |  |  |
| --- | --- | --- |
| **Name** | **Initials** | **Date** |
| ***Rajaraman Ganesan*** | ***RNG*** | ***06-Mar-2018*** |

The following table identifies the relevant pre-requisites to installation and their completion;

Table 7 – Installation Pre-Requisites

| # | Pre-Requisite | Rationale | Verified? | Comment |
| --- | --- | --- | --- | --- |
|  | Change Control Reference | Required for all controlled environments. |  | ID \_ CRQ000000459215\_ |
|  | Complete Table 9 - Installation Parameters | Required before installation can commence |  | NA |
|  | Common Environment Installation TIP completed and TIR approved. | Required before installation can commence |  | 2.6.4 or later |
|  | Installer has access to a suitable XWindows-equipped workstation. | Required before installation can commence |  | NA |

System components to be installed during this installation execution:

Table 8 - Installed Components

| **Installed?** | **Component** | **Comment** |
| --- | --- | --- |
|  | Documentum Content Server v7.3 | Documentum Content Server v7.3 installed on host us1sxlx00196. |

## Installation Parameters

Prior to installation, the installer(s) will complete all the relevant parameter values as defined in Table 9 - Installation Parameters.

Table 9 - Installation Parameters

| Step # | Description | Rationale | Parameter |
| --- | --- | --- | --- |
|  | Record the host details for the target system. IP address or full DNS Host name can be recorded. | All information is recorded | ***Target\_Host***  \_\_\_\_\_\_us1sxlx00196\_\_\_\_\_\_\_\_\_\_\_ |
|  | Fully qualified domain name of target host  e.g. UK1SALX00529.corpnet2.com | All information is recorded | ***Target\_Host\_FQDN***  **\_\_\_**us1sxlx00196.corpnet2.com**\_\_\_\_\_\_\_\_** |
|  | Record Installation Account details for the target system  e.g.  dmadmin  dm | All information is recorded | ***Installation\_Account***  **\_\_\_\_\_\_**dmadmin\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| ***Installation\_Group***  **\_\_\_\_\_\_\_\_\_\_**dm**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** |
|  | Record the personal MUDID of the person performing the installation | All information is recorded | ***Personal\_MUDID***  \_\_\_\_\_\_ pp693752 \_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
|  | Record filesystem directory details of the home directory of the Installation account  e.g. /opt/dmadmin | All information is recorded | ***Installation\_File\_System***  **\_\_\_\_\_\_**/opt/dmadmin**\_\_\_\_\_\_\_\_\_\_\_** |
|  | Record the fully-qualified domain name of the server hosting the DCC distributions repository  e.g. uk1sxlx00043.corpnet2.com | All information is recorded | ***Distribution\_Repository***  **\_\_\_\_\_**uk1sxlx00043.corpnet2.com**\_\_\_\_\_\_\_** |
|  | Record the folder path on ***<Distribution\_Repository>*** to source Content Server installation files.  e.g.  /dctm/dm001/dmadmin/tapes/DocPageServer/Linux/7.3 | All information is recorded | ***Distribution\_Repository\_Path***  **\_\_\_\_**/dctm/dm001/dmadmin/tapes/DocPageServer/Linux/7.3\_\_**\_\_** |
|  | Record the IP address of the workstation used to perform this installation | All information is recorded | ***Workstation\_Host***  \_\_\_\_\_\_\_\_ 10.142.89.186\_\_\_\_\_\_\_\_\_\_\_ |
|  | Note the Content Server version for this installation  e.g. 7.3 | All information is recorded | ***CS\_Version***  **\_\_\_\_\_\_\_\_\_\_\_\_**7.3**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** |
|  | Record the Content Server installation file.  e.g.  Content\_Server\_7.3\_linux64\_oracle.tar | All information is recorded | ***CS\_Version\_Install\_File***  **\_\_\_**Content\_Server\_7.3\_linux64\_oracle.tar**\_\_\_** |
|  | The name and associated Content Server file of the environment into which the Content Server code is to be installed.  If the code is to be installed under /opt/dmadmin/server73 then specify values:  73\_immsdev  .server73\_immsdev.csh | All information is recorded | ***Env\_Name***  **\_\_\_\_\_\_\_\_\_\_\_\_**73**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** |
| ***Env\_File***  **\_\_\_\_\_\_\_\_**.server73.csh**\_\_\_\_\_\_\_\_\_\_\_\_\_\_** |
|  | Record the pathname of the filesystem on which the installation is to be performed  e.g. /opt/dmadmin/server73\_immsdev | All information is recorded | ***Documentum\_Root***  **\_\_\_\_\_**/opt/dmadmin/server73**\_\_\_\_\_\_** |
|  | Record the name of the server hosting the Connection Broker, the name for the Connection Broker and port to be configured for this installation  e.g.  UK1SALX00529.corpnet2.com  dmdocbroker  1489 | All information is recorded | ***Docbroker\_Host***  **\_\_\_\_**us1sxlx00196.corpnet2.com**\_\_\_\_\_\_\_** |
| ***Docbroker\_Name***  **\_\_\_\_\_\_\_**dmdocbroker**\_\_\_\_\_\_\_\_\_\_\_\_** |
| ***Docbroker\_Port***  **\_\_\_\_\_\_\_\_**1489**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** |
|  | Details of the internal web application server are recorded  **Note:** Port numbers differ by content server version.  e.g.  7.3 = port 9680, 7.2 = port 9580, 7.1 = port 9480, 6.7 = port 9380, 6.6 = port 9280, 6.5 = port 9180, 5.3 = 9080 | All information is recorded | ***Admin\_Password***  \_\_Noted but not recorded\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| ***Appsvr\_Port***  **\_\_\_\_\_\_\_\_\_**9680**\_\_\_\_\_\_\_\_\_\_\_\_\_** |
|  | The names of the Oracle databases to be included in the local tnsnames.ora file.  e.g. USDEV736 | All information is recorded | ***DB\_Name***  \_\_\_\_\_\_USPRD085 \_\_\_\_\_\_\_\_\_\_\_\_ |
|  | Record the name of a temporary installation directory to be used for this TIP.  e.g.  /dctm/dm0/dmadmin/tmp/contentserver73 | All information is recorded | ***Install\_Temp***  **\_**/dctm/dm0/dmadmin/tmp/contentserver73**\_** |

# Installation Execution

Table 10 - Installers

|  |  |  |
| --- | --- | --- |
| **Name** | **Initials** | **Comment** |
| ***Priyanga Palani*** | ***PP*** | ***09-Mar-2018*** |

Table 11 - Timeframe

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Date**  **<dd-mmm-yyyy>** | **Time (24hr)**  **<00:00>** | **Time Zone** | **Name** |
| **Installation Started** | ***09-Mar-2018*** | ***13:20*** | ***IST*** | ***Priyanga Palani*** |
| **Installation Completed** | ***13-Mar-2018*** | ***15:15*** | ***IST*** | ***Priyanga Palani*** |

## Pre-Installation Instructions

Prior to installation, the installer(s) will complete all the steps below. Please note that these steps shall be completed sufficiently in advance of the planned installation date so as to allow time to remedy any issues detected during the execution of this section.

 Table 12 - Pre-Installation Instructions

| Step # | Instructions | Expected Result | Actual Result | Pass/ Fail | Reference/ Comment |
| --- | --- | --- | --- | --- | --- |
|  | Login to the ***<Target\_Host>*** server, as the ***<Personal\_MUDID>*** account. | Login successful.  Take a screenshot of this result and include the Exhibit in **APPENDIX A** | Login successful. | Pass | Exhibit Number: \_\_01\_\_ |
|  | Initiate a typescript. Use the following command:  script -f <typescript\_name>  where <typescript\_name> is the name given by the installer to the logging file | The typescript file opens successfully  The name of the typescript is recorded  \_\_ CRQ000000459215\_CS\_Code\_Pri\_09Mar2018.txt\_\_  Take a screenshot of this result and include the Exhibit in **APPENDIX A** | The typescript file opens successfully | Pass | Exhibit Number: \_02\_\_\_ |
|  | Login as ***<Installation\_Account>*** by issuing the following command:  super ***<Installation\_Account>***-shell  Enter your personal password when prompted. | Login successful. | Login successful. | Pass | Refer Appendix B Typescript Evidence |
|  | Verify the home directory is the ***<Installation\_File\_System>***.  Use the following command:  echo $HOME | The home directory matches the ***<Installation\_File\_System>***. | /opt/dmadmin | Pass | Refer Appendix B Typescript Evidence |
|  | Check server total memory by execute the following command:  free -g | The command reports that at least 8GB (8192MB) memory is configured | The command reports that more than 8GB (8192MB) memory is configured | Pass | Refer Appendix B Typescript Evidence |
|  | Check swap space by executing the following command:  cat /proc/swaps | The command reports that at least 8GB (8192MB) swap space is configured | The command reports that at more than 8GB (8192MB) swap space is configured | Pass | Refer Appendix B Typescript Evidence |
|  | Check sufficient disk space exists for installation. Use the following command:  df -h $HOME | The command reports that at least 40 GB space is free | The command reports that 20GB space is free | Pass | Refer Appendix B Typescript Evidence |
|  | Check there is adequate free disk space on /dctm/dm0. use the following command  df -h /dctm/dm0 | Available free space on /dctm/dm0 is >= 40GB | Available free space on /dctm/dm0 is >= 40GB | Pass | Refer Appendix B Typescript Evidence |
|  | Ensure directory tree /dctm/dm0/***<Installation\_Account>*** exists.  Change to directory /dctm/dm0. Use the following command  cd /dctm/dm0  Verify the existence of directory ***<Installation\_Account>***. Use the following command:  ls -lad ***<Installation\_Account>***  If directory ***<Installation\_Account>*** does not exist create it and verify its existence using the following commands:  mkdir ***<Installation\_Account>***  chmod 755 ***<Installation\_Account>***  ls -lad ***<Installation\_Account>*** | Directory /dctm/dm0/***<Installation\_Account>*** exists | Directory /dctm/dm0/dmadmin exists. | Pass | Refer Appendix B Typescript Evidence |
|  | Verify the ***<Installation\_Account>*** account is a member of ***<Installation\_Group>*** group  Use the following command:  id -a | ***<Installation\_Account>*** account is reported as a member of ***<Installation\_Group>*** group  gid=22300 (dm) groups=22300(dm), 1507(***<Installation\_Account>***) | dmadmin account is reported as a member of dm group | Pass | Refer Appendix B Typescript Evidence |
|  | Ensure service entries exist in /etc/services for the following entities. If any are absent, submit the necessary Self Service Menu requests to have them inserted, requesting service names and tcp port numbers from the table below  Check for the existence of each by issuing the following command:  grep ***<Service\_Name>*** /etc/services  Substitute Service\_Name value by referring to the following table:   |  |  | | --- | --- | | **<Service\_Name>** | **Port** | | dmdocbroker | ***<Docbroker\_Port>*** | | dmappsvr1 | ***<Appsvr\_Port>*** | | The services exist in /etc/services file using the specified port  The SSM/Remedy Nos. for any required services are recorded - enter “n/a if no request is necessary:  \_\_\_\_\_ UKIM20008915883\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | The services exist in /etc/services file using the specified port | Pass | Refer Appendix B Typescript Evidence |
|  | Raise a Remedy ticket to run the below command as root user to ensure the repository configuration does not fail on Red Hat Enterprise Linux 7.x  Log into the root account and run the following command:  ln -s /usr/lib64/libsasl2.so.3.0.0 /usr/lib64/libsasl2.so.2 | Remedy Nos. are recorded - enter “n/a if no request is necessary:  \_\_\_\_USIM10015964846\_\_\_\_\_ | Remedy Nos. is recorded and the link is created as required. | Pass | Refer Appendix B Typescript Evidence |
|  | Check password expiration settings for **<*Installation\_Account*>**. This is needed in order to Use command:  chage -l ***<Installation\_Account>***  Verify output from above command has neither of these values as **-1**:   * Minimum number of days between password change * Maximum number of days between password change   If either of these settings are set to -1, submit the necessary Remedy requests to Unix group to execute:  chage -m 0 -M 99999 -I -1 -E -1 ***<Installation\_Account>*** | Remedy Nos. are recorded - enter “n/a if no request is necessary:  \_\_\_\_\_ USIM10015965269 \_\_\_\_ | Password expiration settings for dmadmin is executed. | Pass | Refer Appendix B Typescript Evidence |
|  | Navigate to $HOME and rename the file .com.zerog.registry.xml if this exist.  Otherwise, mark this step as n/a and skip to step 4.1.15  Use the following command.  cd $HOME  mv .com.zerog.registry.xml .com.zerog.registry.xml\_backup\_<Installation\_Date>  Verify success using  ls –la .com.zerog.registry.xml\_backup\_<Installation\_Date> | The renamed file exist | .com.zerog.registry.xml File doesn’t exist | Pass | Refer Appendix B Typescript Evidence |
|  | Logout from the target system | The user is logged out | NA | NA | NA |

## Installation Steps – Documentum Software

The installer(s) will complete all the steps below

 Table 13 - Installation Steps – Documentum Software

| Step # | Instructions | Expected Result | Actual Result | Pass/ Fail | Reference/ Comment |
| --- | --- | --- | --- | --- | --- |
|  | If not already logged in, complete this step; otherwise skip to step 4.2.4 marking steps 4.2.1 to 4.2.3 and as “n/a”.  Login to the *<Target\_Host>* server, as the *<Personal\_MUDID>* account. | Login successful.  Take a screenshot of this result and include the Exhibit in APPENDIX A | NA | NA | Exhibit Number:  \_\_\_NA\_\_\_ |
|  | Open a typescript logging session  script -f <typescript\_name>  where <typescript\_name> is a suitable UNIX/Linux filename  **Note:** This step assumes that the installer is logged in on a suitable UNIX/Linux host to enable typescript recording to take place | File of name <typescript\_name> is created.  The name of the typescript is recorded:  \_\_\_\_\_\_\_\_\_\_NA\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Take a screenshot of this result and include the Exhibit in **APPENDIX A** | NA | NA | Exhibit Number: \_NA\_\_\_ |
|  | Login as ***<Installation\_Account>*** by issuing the following command:  super ***<Installation\_Account>***-shell  Enter your personal password when prompted. | Login as ***<Installation\_Account>*** successful. | NA | NA | NA |
|  | If necessary, execute the environment file. Use the following command:  use***\_<Env\_Name>***  Verify environment is set :  echo $DOCUMENTUM  **Note:** It is expected at this stage to see the message “Cannot locate Documentum hardcoded server environment variables”. Do NOT abort execution or report this as an a deviation | The script executes | The script executes | Pass | Refer Appendix B Typescript Evidence |
|  | Ensure that the directory $DOCUMENTUM exists. Use the following command:  ls -la $DOCUMENTUM  If it does not exist, create it using the following command:  mkdir -p $DOCUMENTUM  ls -lad $DOCUMENTUM | Directory $DOCUMENTUM exists | Directory $DOCUMENTUM exists | Pass | Refer Appendix B Typescript Evidence |
|  | Verify vpd.properties file exist using the following command::  ls -la vpd.properties  If the file exists, rename it. Use the following commands:  mv vpd.properties vpd.properties\_<ISO\_date>  where <ISO\_date> is today’s date in ISO format - .e.g 2009-02-16)  and verify success with the following command:  ls -la vpd.properties\* | File vpd.properties does not exist | File vpd.properties does not exist | Pass | Refer Appendix B Typescript Evidence |
|  | Set Xwindows environment to point to the desired installation workstation:  *On the desired installation workstation issue one of the following commands:*   * xhost +***<Target\_Host\_Full>*** * or if using Hummingbird, start the Exceed application   On ***<Target\_Host>*** issue the following command:  setenv DISPLAY ***<Workstation\_Host>***:0.0  Verify success using the following command:  echo $DISPLAY | The DISPLAY environment variable is set to ***<Workstation\_Host>*** | The DISPLAY environment variable is set to 10.142.89.186 | Pass | Refer Appendix B Typescript Evidence |
|  | Ensure an empty directory called ***<Install\_Temp>*** exists. Use the following command:  ls -lad ***<Install\_Temp>***  If it does exist, delete it using the following command:  /usr/bin/rm -fR ***<Install\_Temp>***  Create the directory using the following command:  mkdir -p ***<Install\_Temp>***  and change to that directory  cd ***<Install\_Temp>***  Verify success using the following command:  pwd | Directory ***<Install\_Temp>*** exists  The current directory is ***<Install\_Temp>*** | Directory /dctm/dm0/dmadmin/tmp/contentserver73 exists  The current directory is /dctm/dm0/dmadmin/tmp/contentserver73 | Pass | Refer Appendix B Typescript Evidence |
|  | Copy the file: ***<Distribution\_Repository>:<Distribution\_Server\_Path>***/***<CS\_Version\_Install\_File>***  to the current location using sftp. Use the following command: sftp ***<Personal\_MUDID>***@***<Distribution\_Repository>***  respond with password when prompted  cd ***<Distribution\_Server\_Path>***  get ***<CS\_Version\_Install\_File>***  quit  **Note:** If this is the first time account ***<Personal\_MUDID>*** has accessed the distribution server an additional question commencing “The authenticity of host…” will be asked. Verify the host specified is the required one and answer “yes” to continue or “no” to abort. | File ***<CS\_Version\_Install\_File>*** exists in the current directory | Content\_Server\_7.3\_linux64\_oracle.tar exists in the current directory | Pass | Refer Appendix B Typescript Evidence |
|  | Untar the file produced in the previous step. Use the following command: tar xvf ***<CS\_Version\_Install\_File>***  Use the following command: ls -la | Command executed. Extracted files listed in the current directory | Command executed. Extracted files listed in the current directory | Pass | Refer Appendix B Typescript Evidence |
|  | Delete the tarfile. Use the following commands:  rm -f ***<CS\_Version\_Install\_File>***  ls -la ***<CS\_Version\_Install\_File>*** | File ***<CS\_Version\_Install\_File>*** does not exist | Content\_Server\_7.3\_linux64\_oracle.tar does not exist | Pass | Refer Appendix B Typescript Evidence |
|  | Commence the Documentum installation using the following command:  ./serverSetup.bin  Respond as directed in steps 4.2.13 to 4.2.19. | The program commences execution without error | The program commences execution without error | Pass | Refer Appendix B Typescript Evidence |
|  | Ensure radio button “I accept the terms of the license agreement” is selected  Click on **Next** | The ‘Run script as root’ screen appears  The options are completed as specified | The ‘Run script as root’ screen appears  The options are completed as specified | Pass | Exhibit Number:  \_\_\_03\_\_\_ |
|  | Ensure radio button “Run dm\_root\_task manually” is selected  Click on **Next**  Note: Verify the dm\_root\_task script location is  **<Documentum\_Root>/**dba/dm\_root\_task | The ‘Application Server Credentials’ screen appears  The options are completed as specified | The ‘Application Server Credentials’ screen appears  The options are completed as specified | Pass | Exhibit Number:  \_\_\_04\_\_\_ |
|  | Enter ***<Admin\_Password***> in ‘Admin User Password’ input box  Re-enter ***<Admin\_Password***> in ‘Re-enter Password’ input box  Enter ***<Appsvr\_Port>*** in ‘Listen Port’ input box  Click on **Next** | Please enter the following required information about the application server  The options are completed as specified | Please enter the following required information about the application server  The options are completed as specified | Pass | Exhibit Number:  \_\_\_05 \_\_\_ |
|  | For “Installation summary”, verify version and location.  Click on **Install** and await installation progress screens for components to complete | The ‘Installation summary’ screen appears.  The options are completed as specified. | The ‘Installation summary’ screen appears.  The options are completed as specified. | Pass | Exhibit Number:  \_\_\_ 06\_\_\_ |
|  | When asked “Would you like to enter licenses now”, ensure radio button “No” is selected.  **Note:** This should only be “Yes” if you want to enable optional modules of Content Server.  Click on **Next** | The options are completed as specified. | The options are completed as specified. | Pass | Exhibit Number:  \_\_\_ 07\_\_\_ |
|  | Now the message as Content Server has been successfully installed to <***Documentum\_Root>*** will be displayed along with the message “Please run the dm\_root\_task as root before launching the configuration”  Click on **DONE.** | The ‘Congratulations!’ screen appears.  Take a screenshot of this result and include the Exhibit in **APPENDIX A** | The ‘Congratulations!’ screen appears. | Pass | Exhibit Number:  \_\_08\_\_ |
|  | View the Log file (Content\_Server\_Install\_<Date\_Time\_of\_Install>.log) for any errors.  Execute the following command:  cat logs/Content\_Server\_Install\_*<Date\_Time\_of\_Install>*.log | Log file successfully viewed. No visible errors in Log file.  Take a screenshot of this result and include the Exhibit in **APPENDIX A** | Log file successfully viewed. No visible errors in Log file. | Pass | Exhibit Number:  \_\_09\_\_  and Refer Appendix B Typescript Evidence |
|  | If necessary, execute the environment file. Use the following command:  use***\_<Env\_Name>***  Verify environment is set :  echo $DOCUMENTUM  **Note:** It is expected at this stage to see the message “Cannot locate Documentum hardcoded server environment variables”. Do NOT abort execution or report this as an a deviation | The script executes | The script executes | Pass | Refer Appendix B Typescript Evidence |

## Post Installation Steps

The installer(s) will complete all the steps below

 Table 14 - Post Installation Steps

| Step # | Instructions | Expected Result | Actual Result | Pass/ Fail | Reference/ Comment |
| --- | --- | --- | --- | --- | --- |
|  | If not already logged in, complete this step; otherwise skip to step 4.3.16, marking steps 4.3.1 to 4.3.3 and as “n/a”.  Login to the *<Target\_Host>* server, as the *<Personal\_MUDID>* account. | Login successful. | NA | NA | NA |
|  | Open a typescript logging session  script -f <typescript\_name>  where <typescript\_name> is a suitable UNIX/Linux filename  **Note:** This step assumes that the installer is logged in on a suitable UNIX/Linux host to enable typescript recording to take place | File of name <typescript\_name> is created.  The name of the typescript is recorded:  \_\_\_\_\_\_\_\_\_\_\_NA\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | NA | NA | NA |
|  | Login as ***<Installation\_Account>*** by issuing the following command:  super ***<Installation\_Account>***-shell  Enter your personal password when prompted. | Login as ***<Installation\_Account>*** successful. | NA | NA | NA |
|  | Submit a Remedy request to SDCS\_UNIX\_SVROPS to execute the following operations:  Change to directory $DM\_DBA  Run script dm\_root\_task  When prompted to enter the name of the ***<Installation\_Account>*** group enter:  dm  Notes:  If running as an upgrade the script will prompt: “Enter ‘o’ to overwrite, otherwise copy will be skipped” Instruct ACS that overwriting should occur  Ensure the translation of $DM\_DBA (/opt/***<Installation\_Account>***/server……/dba) is specified when supplying the instructions to SDCS\_UNIX\_SVROPS  Completion of this request is **not** necessary as a prerequisite for the remaining steps in the section to be executed. | The Remedy request is submitted  The Remedy ticket number is recorded:  \_\_\_ USIM10015970892\_\_\_\_\_\_\_\_\_\_ | The Remedy request is submitted. | Pass | Refer Appendix B Typescript Evidence |
|  | Re-execute the environment file. Use the following command:  use\_***<Env\_Name>***  Verify environment is set :  echo $PATH | The script executes without error | The script executes without error | Pass | Refer Appendix B Typescript Evidence |
|  | Change to directory /dctm/dm0/***<Installation\_Account>*** and ensure the following subdirectories exist:  log monitor restore ***<Env\_Name>*** ***<Env\_Name>***/share\_data ***<Env\_Name>***/share\_logs ***<Env\_Name>***/share\_temp ***<Env\_Name>***/appserver ***<Env\_Name>/***appserver/methodserver ***<Env\_Name>***/xhive ***<Env\_Name>***/xhive/data  Use the following commands: cd /dctm/dm0/***<Installation\_Account>***  ls -lad log ls -lad monitor ls -lad restore ls -lad ***<Env\_Name>*** ls -lad ***<Env\_Name>***/share\_data ls -lad ***<Env\_Name>***/share\_logs ls -lad ***<Env\_Name>***/share\_temp ls -lad ***<Env\_name>***/appserver ls -lad ***<Env\_name>***/appserver/methodserver  ls -lad ***<Env\_name>***/xhive  ls -lad ***<Env\_name>***/xhive/data  If any of the directories above do not exist, use the mkdir command to create those missing - e.g.:  mkdir -p monitor mkdir -p ***<Env\_Name>***/share\_data | The specified directories exist | The specified directories exist | Pass | Refer Appendix B Typescript Evidence |
|  | Change to directory $DM\_DBA and list the log directory entry.  Use the following commands:  cd $DM\_DBA ls -lad log  If log is listed as a link to /dctm/dm0/***<Installation\_Account>***/log then skip to step 4.3.9 recording step 4.3.8 as “n/a” | The specified directory entry is listed | The specified directory entry is listed | Pass | Refer Appendix B Typescript Evidence |
|  | Change to directory $DM\_DBA/log and list its contents.  Use the following commands:  cd $DM\_DBA/log ls -la  Move any existing contents to /dctm/dm0/***<Installation\_Account>***/log. Use the following command:  mv <filename> /dctm/dm0/***<Installation\_Account>***/log  where <filename> is the name of any file found using the ls command above  Delete directory log. Use the following commands:  cd $DM\_DBA rmdir log  Create a link called log pointing to /dctm/dm0/***<Installation\_Account>***/log. Use the following commands:  ln -s /dctm/dm0/***<Installation\_Account>***/log log ls -la log | Directory log is replaced by symlink to /dctm/dm0/***<Installation\_Account>***/log | Directory log is replaced by symlink to /dctm/dm0/dmadmin/log | Pass | Refer Appendix B Typescript Evidence |
|  | Change to directory $DOCUMENTUM\_SHARED and list the data directory entry.  Use the following command:  cd $DOCUMENTUM\_SHARED ls -lad data  If data is listed as a link to /dctm/dm0/***<Installation\_Account>***/***<Env\_Name>***/share\_data then skip to step 4.3.11 recording step 4.3.10 as “n/a” | The specified directory entry is listed | The specified directory entry is listed | Pass | Refer Appendix B Typescript Evidence |
|  | Change to directory $DOCUMENTUM\_SHARED/data and list its contents  Use the following commands:  cd $DOCUMENTUM\_SHARED/data ls -la  Move any existing contents to /dctm/dm0/***<Installation\_Account>***/***<Env\_Name>***/share\_data. Use the following command:  mv <filename> /dctm/dm0/***<Installation\_Account*>**/**<Env\_Name*>***/share\_data  where <filename> is the name of any file found using the ls command above  Delete the directory data. Use the following command:  cd **$DOCUMENTUM\_SHARED** rmdir data  Create link called data pointing to /dctm/dm0/***<Installation\_Account>***/share\_data. Use the following commands:  ln -s /dctm/dm0/***<Installation\_Account>****/****<Env\_Name>***/share\_data data ls -la data | Directory data is replaced by symlink to /dctm/dm0/***<Installation\_Account>***/share\_data | Directory data is replaced by symlink to /dctm/dm0/dmadmin/73/share\_data/ | Pass | Refer Appendix B Typescript Evidence |
|  | Change to directory $DOCUMENTUM\_SHARED and list the logs directory entry.  Use the following commands:  cd $DOCUMENTUM\_SHARED ls -lad logs  If logs is listed as a link to /dctm/dm0/***<Installation\_Account>***/***<Env\_Name>***/share\_logs then skip to step 4.3.13 recording step 4.3.12 as “n/a” | The specified directory entry is listed | The specified directory entry is listed | Pass | Refer Appendix B Typescript Evidence |
|  | Change to directory $DOCUMENTUM\_SHARED/logs and list its contents.  Use the following command:  cd $DOCUMENTUM\_SHARED/logs ls -la  Move any existing contents to /dctm/dm0/***<Installation\_Account>***/***<Env\_Name>***/share\_logs. Use the following command:  mv <filename> /dctm/dm0/***<Installation\_Account*>**/**<Env*\_Name>***/share\_logs  where <filename> is the name of any file found using the ls command above  Delete the directory **logs**. Use the following command:  cd $DOCUMENTUM\_SHARED rmdir logs  Create link called logs pointing to /dctm/dm0/***<Installation\_Account>***/***<Env\_Name>***/share\_logs. Use the following commands:  ln -s /dctm/dm0/***<Installation\_Account>****/****<Env\_Name>***/share\_logs logs ls -la logs | Directory logs is replaced by symlink to /dctm/dm0/***<Installation\_Account>***/share\_logs | Directory logs is replaced by symlink to /dctm/dm0/dmadmin/73/share\_logs/ | Pass | Refer Appendix B Typescript Evidence |
|  | Change to directory $DOCUMENTUM\_SHARED and list the temp directory entry.  Use the following command:  cd $DOCUMENTUM\_SHARED ls -lad temp  If temp is listed as a link to /dctm/dm0/***<Installation\_Account>***/***<Env\_Name>***/share\_temp then skip to step 4.3.15 recording step 4.3.14 as “n/a” | The specified directory entry is listed | The specified directory entry is listed | Pass | Refer Appendix B Typescript Evidence |
|  | Change to directory $DOCUMENTUM\_SHARED/temp and list its contents.  Use the following command:  cd $DOCUMENTUM\_SHARED/temp ls -la  Move any existing contents to /dctm/dm0/***<Installation\_Account>***/***<Env\_Name>***/share\_temp. Use the following command:  mv <filename> /dctm/dm0/***<Installation\_Account>***/***<Env\_Name>***/share\_temp  where <filename> is the name of any file found using the ls command above  Delete the directory **temp**. Use the following command:  cd $DOCUMENTUM\_SHARED rmdir temp  Create link called temp pointing to /dctm/dm0/***<Installation\_Account>***/***<Env\_Name>***/share\_temp. Use the following commands:  ln -s /dctm/dm0/***<Installation\_Account>****/****<Env\_Name>***/share\_temp temp ls -la temp | Directory temp is replaced by symlink to /dctm/dm0/***<Installation\_Account>***/share\_temp | Directory temp is replaced by symlink to /dctm/dm0/dmadmin/73/share\_temp/ | Pass | Refer Appendix B Typescript Evidence |
|  | Ensure the directory $DOCUMENTUM/bin exists. Use the following command:  ls -lad $DOCUMENTUM/bin  If the bin directory does not exist, create it using the following command:  mkdir $DOCUMENTUM/bin  Verify success using the following command: ls -lad $DOCUMENTUM/bin | The specified directory exists | The specified directory exists | Pass | Refer Appendix B Typescript Evidence |
|  | Change to the directory created in the previous step. Use the following command: cd $DOCUMENTUM/bin  Copy the files check\_size.dmb, check\_size.sh, run\_check.sh, sessions and sessions.ebs from ***<Distribution\_Repository>:/***dctm/dm0/***<Installation\_Account>***/tapes/GSK/binutils  to the current location using sftp.  Use the following command: sftp ***<Personal\_MUDID>***@***<Distribution\_Repository>***  respond with password when prompted  cd /dctm/dm001/***<Installation\_Account>***/tapes/GSK/binutils  get check\_size.dmb  get check\_size.sh  get run\_check.sh  get sessions  get sessions.ebs  quit  Verify success using the following command: ls -la | Files check\_size.dmb, check\_size.sh, run\_check.sh, sessions and sessions.ebs exist in $DOCUMENTUM/bin | Files check\_size.dmb, check\_size.sh, run\_check.sh, sessions and sessions.ebs exist in $DOCUMENTUM/bin | Pass | Refer Appendix B Typescript Evidence |
|  | Create a local tnsnames.ora file.  Extract the required entries from the central tnsnames.ora file $ORACLE\_HOME/network/admin/tnsnames.ora  Use the following commands:  cd $TNS\_ADMIN  /bin/rm -f tnsnames.ora  grep -i ***<DB\_Name>*** $ORACLE\_HOME/network/admin/tnsnames.ora > tnsnames.ora  substitute in turn each entry recorded in step 3.1.15 for ***<DB\_Name>***, repeating the last command above as required.  Verify success using the command:  cat $TNS\_ADMIN/tnsnames.ora  Notes:  It is expected that the /bin/rm command will report being unable to find the file - the deletion step is merely precautionary and if it fails the TIP execution should continue | File tnsname.ora exists in directory $TNS\_ADMIN | File tnsname.ora exists in directory $TNS\_ADMIN | Pass | Refer Appendix B Typescript Evidence |

## Installation Steps – Configure Connection Broker

The installer(s) will complete all the steps below

 Table 15 - Installation Steps – Configure Connection Broker

| Step # | Instructions | Expected Result | Actual Result | Pass/ Fail | Reference/ Comment |
| --- | --- | --- | --- | --- | --- |
|  | 1. If ***<CS\_Version>***=7.3 then the JAVA\_OPTS value should be updated for http management interface using a suitable text editor, else mark this step as NA   cd $DOCUMENTUM\_SHARED/wildfly9.0.1/server  Edit the file startMethodServer.sh  Append the following just before the ending double quote of the line that is starting with JAVA\_OPTS=  -Djava.net.preferIPv4Stack=true  e.g.  JAVA\_OPTS="$USER\_MEM\_ARGS -Djboss.server.base.dir=$JBOSS\_BASE\_DIR -Djava.net.preferIPv4Stack=true"  Save and Exit the file.  Verify success using the below command  cat startMethodServer.sh | File update is successful. | File update is successful. | Pass | Refer Appendix B Typescript Evidence |
|  | Ensure the DISPLAY variable is set to value as in step Use the following command:  echo $DISPLAY  If the DISPLAY variable is not set as required, re-execute step 4.2.7 | The DISPLAY environment variable is set to ***<Workstation\_Host>*** | The DISPLAY environment variable is set to 10.142.89.186 | Pass | Refer Appendix B Typescript Evidence |
|  | Change to directory $DM\_HOME/install. Use the following command:  cd $DM\_HOME/install  Run the configuration program using the following command:  ./dm\_launch\_server\_config\_program.sh  and respond as directed in steps 4.4.3 to 4.4.10 | The configuration wizard completes without error | The configuration wizard completes without error | Pass | Refer Appendix B Typescript Evidence |
|  | Ensure radio button “Connection broker” is selected  Click on **Next** | The options are completed as specified | The options are completed as specified | Pass | Exhibit Number:  \_\_\_ 10\_\_\_ |
|  | Ensure box “Add a connection broker” is checked  Click on **Next** | The options are completed as specified | The options are completed as specified | Pass | Exhibit Number:  \_\_\_11 \_\_\_ |
|  | Ensure check box ‘Native and Secure’ is selected  Click on **Next** | The ‘Select Connection Mode for Connection Broker’ screen appears  The options are completed as specified | The ‘Select Connection Mode for Connection Broker’ screen appears  The options are completed as specified | Pass | Exhibit Number:  \_\_\_12 \_\_\_ |
|  | Ensure check box ‘Use certificates” is not selected  Click on **Next** | The options are completed as specified | The options are completed as specified | Pass | Exhibit Number:  \_\_\_ 13\_\_\_ |
|  | Ensure Connection Broker Name is ***<Docbroker\_Name>*** and Connection Broker Port is ***<Docbroker\_Port>***  Click on **Next** | The options are completed as specified | The options are completed as specified | Pass | Exhibit Number:  \_\_\_ 14\_\_\_ |
|  | Review summary.  Click on **Next** | The options are completed as specified | The options are completed as specified | Pass | Exhibit Number:  \_\_\_ 15\_\_\_ |
|  | Ensure check box ‘Finish configuration” is selected  Click on **Next** | The options are completed as specified.  Window closes. | The options are completed as specified.  Window closes. | Pass | Exhibit Number:  \_\_\_ 16\_\_\_ |
|  | Display the log file (install.log) for any errors.  Execute the following command:  cat logs/install.log | Log file successfully viewed. No visible errors in log file.  Take a screenshot of this result and include the Exhibit in **APPENDIX A** | Log file successfully viewed. No visible errors in log file. | Pass | Exhibit Number: \_17\_\_\_ |

## Installation Steps – Install LDAP Authentication

The installer(s) will complete all the steps below, if applicable.

 Table 16 - Installation Steps – Install LDAP Authentication

| Step # | Instructions | Expected Result | Actual Result | Pass/ Fail | Reference/ Comment |
| --- | --- | --- | --- | --- | --- |
|  | If not already logged in, complete this step; otherwise skip to step 4.5.4 marking steps 4.5.1 to 4.5.3 and as “n/a”.  Login to the *<Target\_Host>* server, as the *<Personal\_MUDID>* account. | Login successful. | NA | NA | NA |
|  | Open a typescript logging session  script -f <typescript\_name>  where <typescript\_name> is a suitable UNIX/Linux filename | File of name <typescript\_name> is created.  The name of the typescript is recorded:  \_\_\_\_\_\_\_\_\_NA\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | NA | NA | NA |
|  | Login as ***<Installation\_Account>*** by issuing the following command:  super ***<Installation\_Account>***-shell  Enter your personal password when prompted. | Login as ***<Installation\_Account>*** successful. | NA | NA | NA |
|  | Change to directory $DM\_DBA/secure/ldapdb  Use the following command:  cd $DM\_DBA/secure/ldapdb  verify success using the following command:  pwd | The current directory is /opt/***<Installation\_Account>***/server***<Env\_Name>***/dba/secure/ldapdb | The current directory is /opt/dmadmin/server73/dba/secure/ldapdb | Pass | Refer Appendix B Typescript Evidence |
|  | Copy the file: ***<Distribution\_Repository>:/***dctm/dm0/dmadmin/tapes/GCMS/1.1.0/LDAP/ldapdb65.tar to the current location using sftp. Use the following command: sftp ***<Personal\_MUDID>***@***<Distribution\_Repository>***  respond with password when prompted  cd /dctm/dm001/dmadmin/tapes/GCMS/1.1.0/LDAP  get ldapdb65.tar  quit  Verify success using the following command:  ls -la ldapdb65.tar | File ldapdb65.tar exists in the current directory | File ldapdb65.tar exists in the current directory | Pass | Refer Appendix B Typescript Evidence |
|  | Extract the files from the tape archive.  Use the following command:  tar xvf ldapdb65.tar  Verify success using the following command:  ls -la \*.db | The following files exist in the current directory:  cert8.db key3.db secmod.db  Take a screenshot of this result and include the Exhibit in **APPENDIX A** | The following files exist in the current directory:  cert8.db key3.db secmod.db | Pass | Exhibit Number: \_18\_\_\_ |
|  | Delete the tape archive  Use the following command:  /bin/rm -f ldapdb65.tar  Verify success using the following command:  ls -la ldapdb65.tar | File ldapdb65.tar does not exist in the current directory | File ldapdb65.tar does not exist in the current directory | Pass | Refer Appendix B Typescript Evidence |

## Post Installation Tasks

The installer(s) will complete all the steps below.

Table 17 - Post Installation Tasks

| Step # | Instructions | Expected Result | Actual Result | Pass/ Fail | Reference/ Comment |
| --- | --- | --- | --- | --- | --- |
|  | If not already logged in, complete this step; otherwise skip to step 4.6.4 marking steps 4.6.2 to 4.6.3 and as “n/a”.  Login to the *<Target\_Host>* server, as the *<Personal\_MUDID>* account. | Login successful. | NA | NA | NA |
|  | Open a typescript logging session  script -f <typescript\_name>  where <typescript\_name> is a suitable UNIX/Linux filename  **Note:** This step assumes that the installer is logged in on a suitable UNIX/Linux host to enable typescript recording to take place | File of name <typescript\_name> is created.  The name of the typescript is recorded:  \_\_\_\_\_\_NA\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | NA | NA | NA |
|  | Login as ***<Installation\_Account>*** by issuing the following command:  super ***<Installation\_Account>***-shell  Enter your personal password when prompted. | Login as ***<Installation\_Account>*** successful. | NA | NA | NA |
|  | If this 7.x environment will also need to connect to a pre-D7 broker (e.g. ukdmdvb1.ggr.co.uk), client or DFC instance in the future, the following addition is required to the java.security file to prevent “SSLException” errors. Mark this step as “n/a” if this step is not required.  Edit the $JAVA\_HOME/jre/lib/security/java.security file, appending the following to end of file:  #Workaround to support D7 environments making secure connections to pre-D7 servers  com.rsa.cryptoj.jsafe.fips140initialmode=NON\_FIPS140\_MODE  Verify by:  tail $JAVA\_HOME/jre/lib/security/java.security | java.security file updated. | java.security file updated | Pass | Refer Appendix B Typescript Evidence |
|  |  |  |  |  |  |
|  | Configure the application server logs  Shutdown the application server  Use the following command, depending on ***<CS\_Version>***:   |  |  | | --- | --- | | ***<CS\_Version>*** | **Command** | | 7.3 | $DOCUMENTUM\_SHARED/wildfly9.0.1/server/stopMethodServer.sh |   Wait for server to stop - this is verified by issuing the following command:  ps -ef | egrep MethodServer  until no processes are returned | No MethodServer processes are running | No MethodServer processes are running | Pass | Refer Appendix B Typescript Evidence |
|  | Move application server logs. Use the following command, depending on ***<CS\_Version>***:   |  |  | | --- | --- | | ***<CS\_Version>*** | **Command** | | 7.3 | cd $DOCUMENTUM\_SHARED/wildfly9.0.1/server/DctmServer\_MethodServer |   mv log /dctm/dm0/***<Installation\_Account>***/***<Env\_Name>***/appserver  ln -s /dctm/dm0/***<Installation\_Account>***/***<Env\_Name>***/appserver/log log  Verify success using the following command:  ls -la log | Symbolic link log exists in the current directory | Symbolic link log exists in the current directory | Pass | Refer Appendix B Typescript Evidence |
|  | Move application server logs. Use the following command, depending on ***<CS\_Version>***:   |  |  | | --- | --- | | ***<CS\_Version>*** | **Command** | | 7.3 | cd $DOCUMENTUM\_SHARED/wildfly9.0.1/server/DctmServer\_MethodServer |   mv logs /dctm/dm0/***<Installation\_Account>***/***<Env\_Name>***/appserver/methodserver  ln -s /dctm/dm0/***<Installation\_Account>***/***<Env\_Name>***/appserver/methodserver/logs logs  Verify success using the following command:  ls -la logs | Symbolic link logs exists in the current directory | Symbolic link logs exists in the current directory | Pass | Refer Appendix B Typescript Evidence |
|  | Move application server tmp directory. Use the following command, depending on ***<CS\_Version>***:   |  |  | | --- | --- | | ***<CS\_Version>*** | **Command** | | 7.3 | cd $DOCUMENTUM\_SHARED/wildfly9.0.1/server/DctmServer\_MethodServer |   mv tmp /dctm/dm0/***<Installation\_Account>***/***<Env\_Name>***/appserver  ln -s /dctm/dm0/***<Installation\_Account>***/***<Env\_Name>***/appserver/tmp tmp  Verify success using the following command:  ls -la tmp | Symbolic link log exists in the current directory | Symbolic link log exists in the current directory | Pass | Refer Appendix B Typescript Evidence |
|  | Update dmdocbroker.ini to fix errors related to agentexec. Use the following command:  Edit file: vi $DM\_DBA/dmdocbroker.ini  Manually add the following to the acs.properties:  host=***<Target\_Host>***  Verify success using the following command:  cat dmdocbroker.ini  e.g.: uk2salx00067 | dmdocbroker.ini updated as specified. | dmdocbroker.ini updated as specified. | Pass | Refer Appendix B Typescript Evidence |
|  | Execute this step, if you find any errors in repository logs which shows [DM\_DOCBROKER\_E\_NO\_DOCBROKERS]error:"No DocBrokers are configured".  Check the log file tail $DM\_DBA/log/<repository\_name>.log  Skip to step 4.6.11, if there are no errors and mark this step as N/A.  Ensure the dfc.properties in the $DOCUMENTUM\_shared\Config location has the Connection Broker information.  If there is no connection broker information in the dfc.properties file, then add it and restart both the connection broker and repository.  Using a suitable test editor open this file:  $DOCUMENTUM\_shared/Config/dfc.properties  Update the following entries with these values:  dfc.docbroker.host[0]=***<Docbroker\_Host>***  dfc.docbroker.port[0]=***<Docbroker\_Port>***  Shutdown the Docbroker:  $DM\_DBA/dm\_stop\_docbroker  Shutdown the Repository:  $DM\_DBA/dm\_shutdown\_<repository\_name>  Start the Repository:  $DM\_DBA/dm\_start\_<repository\_name>  Start the Docbroker:  $DM\_DBA/dm\_launch\_dmdocbroker | dfc.properties updated as specified. | NA | NA | NA |
|  | Update acs.properties file. Use the following command, depending on ***<CS\_Version>***:   |  |  | | --- | --- | | ***<CS\_Version>*** | **Command** | | 7.3 | cd $DOCUMENTUM\_SHARED/wildfly9.0.1/server/DctmServer\_MethodServer/deployments/ acs.ear/lib/configs.jar/config |   Edit file: vi acs.properties  Manually add the following to the acs.properties:  primary.content.store.root=***<Documentum\_Root>***/share/acsCache  Verify success using the following command:  cat acs.properties | acs.properties updated as specified. | acs.properties updated as specified. | Pass | Refer Appendix B Typescript Evidence |
|  | Restart the application server.Use the following command, depending on ***<CS\_Version>***:   |  |  | | --- | --- | | ***<CS\_Version>*** | **Command** | | 7.3 | nohup $DOCUMENTUM\_SHARED/wildfly9.0.1/server/startMethodServer.sh > /dctm/dm0/***<Installation\_Account>***/***<Env\_Name>***/appserver/log/startup.log & |   Notes.   * The above command does not return - it must be submitted as a background process so the trailing “&” is essential * Monitor the logfile specified in the above command and ensure that Wildfly 9.0.1 server is started without errors. | The application server starts execution  Take a screenshot of this result and include the Exhibit in **APPENDIX A** | The application server starts execution | Pass | Exhibit Number: \_\_\_\_\_\_19\_\_\_\_\_ |
|  | Delete temp directory ***<Install\_Temp>***  Use the following command:  /bin/rm -fR ***<Install\_Temp>***  Verify success using the following command:  ls -la ***<Install\_Temp>*** | The specified directory does not exist | The specified directory does not exist | Pass | Refer Appendix B Typescript Evidence |
|  | Remove all the files owned by ***<Installation\_Account>*** in /tmp  Execute the following command to find all files owned by ***<Installation\_Account>***  *cd /tmp*  *find . –user* ***<Installation\_Account>***  For each file/folder retrieved, execute the following command:  rm –fr *<File Name>*  **Note:** <File Name> values are install.dir\* and source\*tmp etc. | Files deleted successfully. | Files deleted successfully. | Pass | Refer Appendix B Typescript Evidence |
|  | If the installation is successful, ensure details of this server installation are recorded in the appropriate databases in accordance with prevailing AS Develop procedures | Administration procedures have been completed | Administration procedures have been completed | Pass | Refer Appendix B Typescript Evidence |
|  | Logout of the ***<Installation\_Account>*** account using the command  exit  and close the typescript file using the command  exit | The logout is successful and the typescript file is closed | The logout is successful and the typescript file is closed | Pass | Refer Appendix B Typescript Evidence |
|  |  |  |  |  |  |

## Back Out Plan

Should the above installation procedure fail, the installer(s) will need to complete all the steps below to return the system to its original configuration:

Table 18 - Back Out Plan

| Step # | Instructions | Expected Result | Actual Result | Pass/ Fail | Reference/ Comment |
| --- | --- | --- | --- | --- | --- |
|  | Submit a Remedy Request to Unix team instructing the following:   * + Change directory to $DM\_DBA   + Delete the following files: dm\_assume\_user dm\_change\_password\_local dm\_change\_password\_yp dm\_check\_password dm\_secure\_writer   Notes:  Await completion of the Remedy before continuing Backout Plan.  Ensure the translation of $DM\_DBA (/opt/***<Installation\_Account>***/server…./dba) is specified when supplying the instructions to Unix team. | **Record** Remedy Request No:  \_\_\_\_\_\_\_\_\_\_\_\_\_\_NA\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | NA | NA | NA |
|  | If not already logged in, complete this step; otherwise skip to step 4.7.5 marking steps 4.7.3 to 4.7.4 and as “n/a”.  Login to the *<Target\_Host>* server, as the *<Personal\_MUDID>* account. | Login successful.  Take a screenshot of this result and include the Exhibit in APPENDIX A | NA | NA | Exhibit Number: \_\_NA\_\_ |
|  | Open a typescript logging session  script -f <typescript\_name>  where <typescript\_name> is a suitable UNIX/Linux filename  **Note:** This step assumes that the installer is logged in on a suitable UNIX/Linux host to enable typescript recording to take place | File of name <typescript\_name> is created.  The name of the typescript is recorded:  \_\_\_\_\_\_\_\_\_NA\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | NA | NA | NA |
|  | Login as ***<Installation\_Account>*** by issuing the following command:  super ***<Installation\_Account>***-shell  Enter your personal password when prompted. | Login as ***<Installation\_Account>*** successful. | NA | NA | NA |
|  | If a Method Server, installed by this TIP, is running, shut it down. Use the following command:  Use the following command, depending on ***<CS\_Version>***:   |  |  | | --- | --- | | ***<CS\_Version>*** | **Command** | | 7.3 | $DOCUMENTUM\_SHARED/wildfly9.0.1/server/stopMethodServer.sh |   Wait for server to stop - this is verified by issuing the following command:  ps -ef | egrep MethodServer  until no processes are returned | Method Server is not running | NA | NA | NA |
|  | If a docbroker, installed by this TIP, is running, shut it down. Use the following command:  $DM\_DBA/dm\_stop\_docbroker | No docbroker is running | NA | NA | NA |
|  | Change directory to /opt/***<Installation\_Account>***. Use the following command:  cd /opt/***<Installation\_Account>***  Delete the directory: server***<Env\_Name>***  Delete the file (if exists): vpd.properties  Use the following commands:  /bin/rm -fR server***<Env\_name>***  /bin/rm -f vpd.properties  Verify success using the following command:  ls -lad server***<Env\_Name>***  ls -la vpd.properties | Directory server***<Env\_Name>*** and file vpd.properties are deleted | NA | NA | NA |
|  | Remove ***<Env\_Name>*** directories.  Use the following commands: cd /dctm/dm0/***<Installation\_Account>***  /bin/rm -fR ***Env\_Name>***  Verify success using the following command:  ls –lad /dctm/dm0/***<Installation\_Account>***/***Env\_Name>*** | Directory ***<Env\_Name>*** deleted | NA | NA | NA |
|  | If ***<Env\_Name>*** is the only Content Server version on this host, complete the following steps; otherwise mark as n/a.  Remove log, monitor and restore directories. Use the following commands: cd /dctm/dm0/***<Installation\_Account>***  /bin/rm -fR log monitor restore  Verify success using the following command:  ls -lad log ls -lad monitor ls -lad restore | Directories log, monitor and restore are deleted. | NA | NA | NA |
|  | Delete the file .com.zerog.registry.xml using the following commands:  cd $HOME  rm –f .com.zerog.registry.xml  Verify success using following command:  ls –la .com.zerog.registry.xml | File deleted successfully. | NA | NA | NA |

## Installation Verification

The installer(s) will complete all the steps below, to verify the installation is successful.

Table 19 – Installation Verification

| Step # | Instructions | Expected Result | Actual Result | Pass/ Fail | Reference/ Comment |
| --- | --- | --- | --- | --- | --- |
|  | If not already logged in, complete this step; otherwise skip to step 4.8.4 marking steps 4.8.1 to 4.8.3 and as “n/a”.  Login to the *<Target\_Host>* server, as the *<Personal\_MUDID>* account. | Login successful. | NA | NA | NA |
|  | Open a typescript logging session  script -f <typescript\_name>  where <typescript\_name> is a suitable UNIX/Linux filename | File of name <typescript\_name> is created.  The name of the typescript is recorded:  \_\_\_\_\_\_\_\_\_\_\_NA\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | NA | NA | NA |
|  | Login as ***<Installation\_Account>*** by issuing the following command:  super ***<Installation\_Account>***-shell  Enter your personal password when prompted. | Login as ***<Installation\_Account>*** successful. | NA | NA | NA |
|  | Test the environment integrity. Issue the following command:  use***\_<Env\_Name>***  Verify success with the following commands:  echo $DOCUMENTUM | The source command completes without request for further input or the output of unexpected error messages  The DOCUMENTUM environment variable is set to the expected value  e.g. /opt/dmadmin/server73  e.g. /opt/dmadmin/xplore15    Take a screenshot of this result and include the Exhibit in **APPENDIX A** | The source command completes without request for further input or the output of unexpected error messages  The DOCUMENTUM environment variable is set to the expected value  /opt/dmadmin/server73 | Pass | Exhibit Number: \_20\_\_ |
|  | Logout of the ***<Installation\_Account>*** account using the command  exit  and close the typescript file using the command  exit | The logout is successful and the typescript file is closed | The logout is successful and the typescript file is closed | Pass | Refer Appendix B Typescript Evidence |

## Execution Anomalies and Deviations

The table below contains any anomalies or deviations identified as part of the installation by the installer(s)

Table 20 - Anomalies and Deviations

| Step # | Description | Impact | Corrective and Preventative Action(s) | Reference |
| --- | --- | --- | --- | --- |
| NA | NA | NA | NA | NA |

## Execution Approval

|  |  |
| --- | --- |
| Name | Job Title and Role |
| The installer is signing to confirm that this document has been prepared in accordance with an approved document management process and that content is consistent with the process described in SOP-IT-0294 Perform Technical Installation [1].  The signatory has completed all entries in the document at time of signing. | |
| Installed by:  **Priyanga Palani** | Installer |

# Installation Review

## Reviewer Anomalies and Deviations

The table below contains any anomalies or deviations identified as part of the installation review by independent person(s)

Table 21 - Reviewer Anomalies and Deviations

| Step # | Description | Impact | Corrective and Preventative Action(s) | Reference |
| --- | --- | --- | --- | --- |
| NA | NA | NA | NA | NA |

## Conclusion

Table 22 - Conclusion

|  |  |
| --- | --- |
| **Installation Outcome** | This installation was successful  This installation failed |
| **Comments** |  |

## Review Approval

|  |  |
| --- | --- |
| Name | Job Title and Role |
| The Independent Technical Reviewer is signing to verify that they have checked that the installation was performed correctly and that all required evidence is present in this TIR and/or attached to the change record. In addition, this will indicate that that the documents have been checked for technical accuracy and completeness. | |
| Approved by:  **Neil X Stewart** | Independent Technical Reviewer |
| IT QRC are signing to confirm compliance with applicable IT policies, standards and procedures. | |
| Approved by:  **Radha Krishna Hari** | IT QRC |

# References

Table 23 - References

| No. | Identifier | Title |
| --- | --- | --- |
|  | SOP-IT-0294 | Perform Technical Installation |

# Revision History

Table 24 - Revision History

| Date | Version | Author | Reason For Revision |
| --- | --- | --- | --- |
| 20-Jul-2017 | 1.0 | Vigneshram Rengarajan | This is the first issue of this document. |

# Revision History (TIR)

Table 25 - Revision History

| Date | Version | Author | Reason For Revision |
| --- | --- | --- | --- |
| 13-Mar-2018 | 1.0 | Priyanga Palani | This is the first issue of this document. |
| 22-Mar-2018 | 2.0 | Priyanga Palani | This is for Technical Lead & IT QRC review and approval |

1. - Screen Shot Evidence

Below are any screen shots or other evidence that was collected during the process (of installation or verification).

|  |  |  |  |
| --- | --- | --- | --- |
| **Exhibit Number:** | **01** | **TIP section and step number:** | **4.1.1** |
| **Installation Iteration:** | **01** | **Installer Initials;** | **PP** |
| **Installation Date:** | **09-Mar-2018** |  |  |
| **Screen Shot** | | | |
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| --- | --- | --- | --- |
| **Exhibit Number:** | **02** | **TIP section and step number:** | **4.1.2** |
| **Installation Iteration:** | **01** | **Installer Initials;** | **PP** |
| **Installation Date:** | **09-Mar-2018** |  |  |
| **Screen Shot** | | | |
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| --- | --- | --- | --- |
| **Exhibit Number:** | **03** | **TIP section and step number:** | **4.2.13** |
| **Installation Iteration:** | **01** | **Installer Initials;** | **PP** |
| **Installation Date:** | **12-Mar-2018** |  |  |
| **Screen Shot** | | | |
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| --- | --- | --- | --- |
| **Exhibit Number:** | **04** | **TIP section and step number:** | **4.2.14** |
| **Installation Iteration:** | **01** | **Installer Initials;** | **PP** |
| **Installation Date:** | **12-Mar-2018** |  |  |
| **Screen Shot** | | | |
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| --- | --- | --- | --- |
| **Exhibit Number:** | **05** | **TIP section and step number:** | **4.2.15** |
| **Installation Iteration:** | **01** | **Installer Initials;** | **PP** |
| **Installation Date:** | **12-Mar-2018** |  |  |
| **Screen Shot** | | | |
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| --- | --- | --- | --- |
| **Exhibit Number:** | **06** | **TIP section and step number:** | **4.2.16** |
| **Installation Iteration:** | **01** | **Installer Initials;** | **PP** |
| **Installation Date:** | **12-Mar-2018** |  |  |
| **Screen Shot** | | | |
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| --- | --- | --- | --- |
| **Exhibit Number:** | **07** | **TIP section and step number:** | **4.2.17** |
| **Installation Iteration:** | **01** | **Installer Initials;** | **PP** |
| **Installation Date:** | **12-Mar-2018** |  |  |
| **Screen Shot** | | | |
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| --- | --- | --- | --- |
| **Exhibit Number:** | **08** | **TIP section and step number:** | **4.2.18** |
| **Installation Iteration:** | **01** | **Installer Initials;** | **PP** |
| **Installation Date:** | **12-Mar-2018** |  |  |
| **Screen Shot** | | | |
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| --- | --- | --- | --- |
| **Exhibit Number:** | **09** | **TIP section and step number:** | **4.2.19** |
| **Installation Iteration:** | **01** | **Installer Initials;** | **PP** |
| **Installation Date:** | **12-Mar-2018** |  |  |
| **Screen Shot** | | | |
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| --- | --- | --- | --- |
| **Exhibit Number:** | **10** | **TIP section and step number:** | **4.4.4** |
| **Installation Iteration:** | **01** | **Installer Initials;** | **PP** |
| **Installation Date:** | **12-Mar-2018** |  |  |
| **Screen Shot** | | | |
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| --- | --- | --- | --- |
| **Exhibit Number:** | **11** | **TIP section and step number:** | **4.4.5** |
| **Installation Iteration:** | **01** | **Installer Initials;** | **PP** |
| **Installation Date:** | **12-Mar-2018** |  |  |
| **Screen Shot** | | | |
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| --- | --- | --- | --- |
| **Exhibit Number:** | **12** | **TIP section and step number:** | **4.4.6** |
| **Installation Iteration:** | **01** | **Installer Initials;** | **PP** |
| **Installation Date:** | **12-Mar-2018** |  |  |
| **Screen Shot** | | | |
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| --- | --- | --- | --- |
| **Exhibit Number:** | **13** | **TIP section and step number:** | **4.4.7** |
| **Installation Iteration:** | **01** | **Installer Initials;** | **PP** |
| **Installation Date:** | **12-Mar-2018** |  |  |
| **Screen Shot** | | | |
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| --- | --- | --- | --- |
| **Exhibit Number:** | **14** | **TIP section and step number:** | **4.4.8** |
| **Installation Iteration:** | **01** | **Installer Initials;** | **PP** |
| **Installation Date:** | **12-Mar-2018** |  |  |
| **Screen Shot** | | | |
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| --- | --- | --- | --- |
| **Exhibit Number:** | **15** | **TIP section and step number:** | **4.4.9** |
| **Installation Iteration:** | **01** | **Installer Initials;** | **PP** |
| **Installation Date:** | **12-Mar-2018** |  |  |
| **Screen Shot** | | | |
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| --- | --- | --- | --- |
| **Exhibit Number:** | **16** | **TIP section and step number:** | **4.4.10** |
| **Installation Iteration:** | **01** | **Installer Initials;** | **PP** |
| **Installation Date:** | **12-Mar-2018** |  |  |
| **Screen Shot** | | | |
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| --- | --- | --- | --- |
| **Exhibit Number:** | **17** | **TIP section and step number:** | **4.4.11** |
| **Installation Iteration:** | **01** | **Installer Initials;** | **PP** |
| **Installation Date:** | **12-Mar-2018** |  |  |
| **Screen Shot** | | | |
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| --- | --- | --- | --- |
| **Exhibit Number:** | **18** | **TIP section and step number:** | **4.5.6** |
| **Installation Iteration:** | **01** | **Installer Initials;** | **PP** |
| **Installation Date:** | **12-Mar-2018** |  |  |
| **Screen Shot** | | | |
|  | | | |
| **Exhibit Number:** | **19** | **TIP section and step number:** | **4.6.12** |
| **Installation Iteration:** | **01** | **Installer Initials;** | **PP** |
| **Installation Date:** | **12-Mar-2018** |  |  |
| **Screen Shot** | | | |
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| --- | --- | --- | --- |
| **Exhibit Number:** | **20** | **TIP section and step number:** | **4.8.4** |
| **Installation Iteration:** | **01** | **Installer Initials;** | **PP** |
| **Installation Date:** | **12-Mar-2018** |  |  |
| **Screen Shot** | | | |
|  | | | |

1. - Typescript Evidence

Below are any links to typescript files or other evidence that was collected during the process (of installation or verification).

|  |  |  |  |
| --- | --- | --- | --- |
| **Exhibit Number:** | **NA** | **TIP section and step number:** | **4.1 – 4.6 & 4.8** |
| **Installation Iteration:** | **01** | **Installer Initials;** |  |
| **Installation Date:** | **13-Mar-2018** |  |  |
| **Typescript File Location/Document ID** | | | |
| **Filename *: Typescript Evidence - Content Server 7.3 Code Installation in content server Primary - us1sxlx00196.doc***  **Consolidated Typescript / Evidence Script in CDMS:**  Please login into CDMS Application and navigate to below path:  ***GSK >> Corporate >> CBS >> AS >> DOCUMENTUM CC >> CM HOSTING >> TIP Results and TIR***  Document Name:  ***REC\_00000617654*** | | | |