Installation Plan

This document describes the plan for implementing the [SYSTEM] public access, Documentum-based system in the National Computing Center (NCC). This plan is designed to accomplish the installation and configuration of the [SYSTEM] application in RTP. A secondary goal of this plan is to minimize the impact of the installation of the [SYSTEM] application on the RPAS and RMS systems, currently utilizing the Documentum architecture in the NCC. This document should be used as a checklist for the [SYSTEM] team and NTSD technical staff during the installation of [SYSTEM]. The implementation of the [SYSTEM] application consists of four main steps:

1. Configuring the [SYSTEM] DocBase within Documentum,
2. Installing the PDF content for [SYSTEM] and the supporting Oracle index information
3. Installing and configuring the [SYSTEM] Java application.
4. Verifying RPAS and RMS Functionality.

During these three steps, the implementation team will focus on minimizing the performance impact on RPAS and RMS, while ensuring that the [SYSTEM] content is available, complete, and intact and that the application is functioning correctly.

The following steps outline the plan for implementing [SYSTEM]. These steps will be sequential, starting with 1 and ending with 4, unless otherwise noted below.

1. Install and Configure [SYSTEM] DocBase.
   1. Verify installation of [SYSTEM] schema in the Oracle environment at RTP. This step will consist of coordinating to create the [SYSTEM] schema on the Dale server. This step will also include ensuring that the user accounts on Dale and the Documentum server (Smoky) are consistent.
   2. Install [SYSTEM] DocBase and DocBroker on Smoky machine. The [SYSTEM] implementation team will provide installation scripts 5 business days prior to installation for review. The [SYSTEM] implementation team also will bring the installation scripts for the [SYSTEM] DocBase and DocBroker with them to RTP to ensure the correct scripts are used. The [SYSTEM] implementation team will verify that the location of the filestore for the [SYSTEM] DocBase is on the disk array on Smoky.
   3. Modify default jobs installed during DocBase installation. The RPAS team has indicated that several Documentum jobs are improperly configured by default when installing a new DocBase. The default frequency of these jobs causes unnecessary Oracle processing to occur. The frequency of these jobs will be lowered to alleviate performance bottlenecks and minimize Oracle activity. The following is the list of jobs that will be configured:

dm\_ContentWarning dm\_DBWarning dm\_FulltextMgr

dm\_DMClean dm\_DMFilescan dm\_LogPurge

dm\_StateOfDocBase dm\_AuditMgt dm\_QueueMgt

dm\_RenditionMgt dm\_VersionMgt dm\_SwapInfo

dm\_UpdateStats dm\_ContentReplication dm\_FileReport

dm\_DistOperations dm\_DMArchive dm\_WfmsTimer

dm\_UserRename dm\_GroupRename

dm\_UserChgHomeDb dm\_FederationUpdate

dm\_FederationExport dm\_FederationCopy

dm\_FederationImport dm\_FederationStatus

dm\_ACLReplication dm\_ACLRepl\_

dm\_GwmTask\_Alert dm\_GwmClean

* 1. Verify that that the [SYSTEM] DocBroker (currently slated for port 1490) correctly recognizes the [SYSTEM] DocBase.
  2. Verify that the RPAS and RMS DocBrokers function properly subsequent to the installation of the [SYSTEM] DocBroker and DocBase. This will include verifying that the DocBroker services are running correctly on Smoky. Additionally, the [SYSTEM] implementation team will coordinate with representatives from the RPAS and RMS technical teams to gain temporary access to those applications. The [SYSTEM] implementation team will work with the RPAS and RMS representatives to identify a testing scenario for verifying that the application is functioning properly.

1. Import [SYSTEM] documents and data into [SYSTEM] DocBase.
   1. Replace RPAS Renderer workstation (Mojave) (direct connection to Smoky) with [SYSTEM] application server in NCC. The [SYSTEM] implementation team will bring a Windows 2000 workstation-hereafter Upload Workstation-containing ~75GB of PDF content for [SYSTEM], an Oracle dump file containing the SDMS index information to be used with [SYSTEM], and an upload tool that will facilitate the upload of the PDF content into the [SYSTEM] DocBase.
   2. Verify DQL connection to [SYSTEM] DocBase on Smoky from [SYSTEM] Upload Workstation. Once the Upload Workstation is connected to Smoky, the [SYSTEM] implementation team will verify that the upload tool on the machine can connect to the [SYSTEM] DocBase.
   3. Move Oracle dump file containing SDMS index information onto Dale. The [SYSTEM] implementation team will determine the most appropriate place to execute the import of the Oracle dump file of SDMS data into the [SYSTEM] schema. (Note: the Mojave network connection does not have connectivity to the Dale Oracle server, making this step necessary.)
   4. Import Oracle dump file of SDMS index information into the [SYSTEM] schema on Dale. The SDMS index information will be used as supporting data within the [SYSTEM] application. The dump file is approximately 300MB.
   5. Verify import of index information. Once the import process has been completed, the [SYSTEM] implementation team will verify that the import was successful by running index data QA scripts against the [SYSTEM] schema. The index data QA scripts will be SQL queries designed to verify that all of the SDMS index data is available in the [SYSTEM] schema. The [SYSTEM] implementation team will forward these scripts 5 business days prior to arriving. Once the index data QA scripts have been executed and the data verified, the [SYSTEM] implementation team will communicate the status of the import.
   6. Register the Oracle tables, which were uploaded to the [SYSTEM] Schema during the import, with Documentum. The [SYSTEM] implementation team will forward the registration scripts to RTP 5 business days prior to arriving in RTP.
   7. Import [SYSTEM] PDF content into [SYSTEM] DocBase (~75GB). The upload tool on the Upload Workstation will connect to the [SYSTEM] DocBase and upload the approximately 50,000 PDF documents (~75GB) into the [SYSTEM] DocBase. A log file is updated with each successful document that is uploaded. The [SYSTEM] implementation team plans to monitor the upload process for a majority of the approximately 24 hours of processing time required to upload the entire set of documents. The [SYSTEM] implementation team will coordinate with NTSD personnel to follow security guidelines around access to the NCC during the monitoring period.
   8. Test and monitor RPAS and RMS performance during upload process. As part of the monitoring of the [SYSTEM] content upload, the [SYSTEM] implementation team will periodically login to the RPAS and RMS applications and verify functionality and performance. The [SYSTEM] implementation team will coordinate with the technical representatives of RPAS and RMS to identify a test scenario which will measure functionality and performance. The scenarios will be performance prior to the upload to set performance metrics. During the upload, the [SYSTEM] implementation team will maintain contact with the RPAS and RMS teams during regular business hours. If performance issues are identified, the [SYSTEM] implementation team will communicate them to the RPAS and RMS representatives in a timely fashion. The [SYSTEM] team will work with the RPAS and RMS teams to identify a resolution to any issues that arise.
   9. Verify successful upload of PDF content into [SYSTEM] DocBase. Once the upload has been completed, the [SYSTEM] implementation team will verify that the content was successfully uploaded. The [SYSTEM] implementation team will perform several PDF QA scripts within the [SYSTEM] DocBase. The PDF QA scripts will include running searches within the DocBase, manually verifying the existence of a subset of PDF images from the Upload Workstation exists in the DocBase, and updating the full text index within Documentum and running several full text searches. The [SYSTEM] implementation team will forward the PDF QA scripts 5 business days prior to arriving.
   10. Disconnect Upload Workstation from Smoky. Once the PDF content has been verified, the [SYSTEM] team will remove the Upload Workstation from the direct connection to Smoky.

* 1. Reconnect Mojave to Smoky and verify functionality. Once the Upload Workstation is disconnected, the [SYSTEM] implementation team will verify that the Mojave rendering station is fully operational.

1. Install and Configure [SYSTEM] application. (Note: The first two sub-steps in this task can be performed simultaneously with the upload of the PDF content, as it will occur on a separate machine from the upload process.)
   1. Install Apache web server and Tomcat application server on the [SYSTEM] application server in NCC. The [SYSTEM] implementation team will coordinate to install the Apache web server and the Tomcat application server on the machine. Note: The [SYSTEM] implementation team is coordinating to have this step occur prior to the [SYSTEM] implementation team arriving in RTP.
   2. Install java application files on [SYSTEM] application server. The [SYSTEM] implementation team will coordinate with the Apache/Tomcat administrator to install the [SYSTEM] application on the application server. This will include copying over the necessary application files, as well as ensuring that Apache and Tomcat are configured correctly. (Note: At this point, the [SYSTEM] implementation team must stop and wait for the completion of Step 2, Import [SYSTEM] documents and data into [SYSTEM] DocBase, before proceeding with the remaining sub-steps in this task or with Step 4.)
   3. Test [SYSTEM] application functionality on [SYSTEM] application server. Once the [SYSTEM] application has been installed and the connections to the [SYSTEM] DocBase have been established, the [SYSTEM] implementation team will run through a small set of test scripts to verify that the [SYSTEM] content has been uploaded successfully.
   4. Open ports (currently 1490 and 1496) on firewall for communication between [SYSTEM] application server and [SYSTEM] DocBroker and DocBase on Smoky. Note that the approval for the ports may not be complete prior to the [SYSTEM] implementation. If that occurs, as discussed on the conference call, the [SYSTEM] application will remain behind the EPA firewall until the port approval is complete. Once complete, the [SYSTEM] implementation team will coordinate with NTSD personnel to move the [SYSTEM] application server outside the firewall.
2. Verify RPAS and RMS functionality
   1. The [SYSTEM] team will perform the test scenarios identified in 1(e) and 2(h) to verify that RPAS is functioning properly. If issues are identified, the [SYSTEM] implementation team will coordinate with the RPAS team to determine a resolution.
   2. The [SYSTEM] team will perform the test scenarios identified in 1(e) and 2(h) to verify that RMS is functioning properly. If issues are identified, the [SYSTEM] implementation team will coordinate with the RMS team to determine a resolution.

Timeframe

**Day 1:**

9:00am: [SYSTEM] implementation team arrives at NCC.

9:30am-12n: Perform Step 1.

12n-10pm: Perform Step 2(a) through 2(h).

Perform Steps 3(a) and 3(b).

**Day 2:**

9:00am- approx. 2pm: Complete Steps 2(h) through 2(k).

2pm – 5pm (or later): Complete Steps 3(c), 4(a) and 4(b). Complete Step 3(d) if possible.