**Correspondence Tracking System (CTS) Application - Deployment Guide**

**CTS 1.0.0**

**For Appian Software Version: 16.2+ and MySQL Database**

# Full Deployment (Clean Installation)

**Required Environment Configurations (maintenance window and downtime required)**

* None

**Required Plugins**

* Advanced Document Templating (v1.0.4)
* Appian Object Information Retriever (v.2.5.1)
* CSV Parser Plug-in (v1.6.2)
* Content Expressions (v1.0.7)
* Generate Gregorian Calendar (1.0.0)
* Group Functions (v3.1.0)
* People Functions (v1.1)
* Personalization Utilities (v3.3.2)
* Process Sizing Smart Services (v.1.2.0)
* User Profile Picture Utilities (1.0.0)
* Export SQL and Report Data to EXCEL – V2 (v3.2)
* For Cloud environments:
  + Appian Health Check Data Collection Plugin (Cloud) (v.4.8.0)
  + Download DataSubset (Cloud) (v.1.2.1)
* For On-Premise environments:
  + Appian Health Check Data Collection Plugin (On-Premise) (v.4.8.0)
  + Download DataSubset (On-Premise) (v.2.0.0)

**Required Application Packages**

* Appian Common Objects 7.5 Release 2\_Artifacts.zip
* Appian Common Objects 7.5 Release 2\_Rules and Constants.zip
* AF Common Objects.zip
* Acceleration Framework Common Objects.zip
* CTS.zip
* Correspondence Tracking System.zip
* CTS Admin Console Settings.zip

**Required Database Scripts**

* MySQL
  + AF Release 1.0.0 Create DB.sql
  + CTS Release 1.0.0 Create DB.sql
  + CTS Release 1.0.0 Insert Reference Data.sql

**Required Users**

* Service account of Basic User user type that is not tied to a specific person
  + Example Username: CTS.System
  + Password: <<Password to be specified by deployment manager>>
    - User account will be prompted to change password upon initial login, so set the password to anything initially
  + First Name: CTS
  + Last Name: System
  + E-mail Address: <<Insert valid email address for user/group maintaining service account>>

**Required Images**

* None

**Configuration Steps**

1. Deploy Plugins:
   1. For Cloud environments: Create an Appian Technical Support case on Appian Forum to request the following: (this step should be accomplished ahead of time, prior to the deployment window)
      1. Deploy the required plugins listed above
   2. For On-Premise environments: Copy required plugins listed above into <<APPIAN\_INSTALL>>/\_admin/plugins folder of your Appian instance
2. Import **Appian Common Objects 7.5 Release 2\_Artifacts.zip**
3. Import **Appian Common Objects 7.5 Release 2\_Rules and Constants.zip**
4. Create Table structure utilizing the database appropriate scripts (in the following order):
   1. For MySQL database:
      1. **AF Release 1.0.0 Create DB.sql**
      2. **CTS Release 1.0.0 Create DB.sql**
      3. **CTS Release 1.0.0 Insert Reference Data.sql**
   2. For non-MySQL databases:
      1. Convert the following scripts to SQL syntax, Oracle syntax, etc. and run in the following order:
         1. **AF Release 1.0.0 Create DB.sql**
         2. **CTS Release 1.0.0 Create DB.sql**
         3. **CTS Release 1.0.0 Insert Reference Data.sql**
5. Import **AF Common Objects.zip**
6. Import **Acceleration Framework Common Objects.zip**
7. Import **CTS.zip**
8. Import **Correspondence Tracking System.zip**
9. Manually set the appropriate values for the environment specific values:
   1. Navigate to Rules > CTS > Constants > Users and Groups
      1. Set **CTS\_USR\_SYSTEM\_ADMIN** = CTS.System (Required User referenced above)
   2. Navigate to Rules > CTS > Utility
      1. Set **CTS\_RULE\_Utility\_setDocCheckInExpiration** = <<Expiration time to be specified by deployment manager>>
         1. By default, set to 72 hours
      2. Set **CTS\_RULE\_Utility\_setRelatedActionExpiration** = <<Expiration time to be specified by deployment manager>>
         1. By default, set to 10 minutes
      3. Set **CTS\_RULE\_Utility\_setTempoActionExpiration** = <<Expiration time to be specified by deployment manager>>
         1. By default, set to 4 hours
10. Navigate to the People tab
    1. Search for the **CTS Appian Administrators** group
       1. Add the following service account(s) to the group:
          1. CTS.System (Required User referenced above)
11. Navigate to the System tab
    1. Under Administration Pages on the left hand pane, navigate to the Internationalization directory > Internationalization Settings
       1. Set the **Primary Time Zone** to <<Platform specific time zone>>
          1. Recommended: (UTC-05:00) Eastern Time (America/New\_York)
    2. Under Administration Pages on the left hand pane, navigate to the Process Calendar directory > Set Working Time
       1. Set the **Time Zone** to <<Platform specific time zone>>
          1. Recommended: (UTC-05:00) Eastern Time (America/New\_York)
12. Navigate to the Appian Administration Console
    1. Import **CTS Admin Console Settings.zip**

# Revert Changes (Back Out Plan)

The following steps will be taken if the deployment into the target environment needs to be reverted:

* Notify stakeholders of the deployment rollback
* For Cloud environments: Snapshots will be taken on a daily basis.  The deployment team will need to coordinate with Appian Support to revert to the last snapshot.
  + Create an Appian Support case with instructions to revert back to a prior snapshot.  Include the following information:
    - Target Environment to revert
    - Snapshot Date to revert to
* For On-Premise environments: Immediately prior to beginning deployment, backup the existing Appian installation:
  + Properly shutdown Appian and ensure the engines are checkpointed upon shutdown and any scheduled processes are disabled during the deployment window
  + Backup the Appian installation on all web servers, app servers, and engine servers
    - Create a copy of the entire <<APPIAN\_INSTALL>> directory of your Appian instance and rename it to clearly denote it as a backup copy (e.g. “<<APPIAN\_INSTALL>>\_<<CURRENT\_DATETIME>>\_bkup”)
    - Backup the Apache directory on the web server(s)
    - Backup any fileshare documents (for multiple JBoss instances sharing a fileshare). If not using fileshare, backup the \_admin and other data directories
    - Backup the primary and business databases
  + Properly start Appian and begin full deployment procedure outlined above
  + Revert to this backup copy by:
    - Properly shutdown Appian
    - Rename the entire <<APPIAN\_INSTALL>> directory of your Appian instance on all web servers, app servers, and engine servers to clearly denote it as a failed attempted deployment copy (e.g. “<<APPIAN\_INSTALL>>\_<<CURRENT\_DATETIME>>\_failed”
    - Rename the backup copy to the original <<APPIAN\_INSTALL>> directory name on all web servers, app servers, and engine servers
    - If using a fileshare for multiple JBoss servers, replace the contents with the backup taken in the previous step
    - Restore the Appian Primary database with the backup taken
    - Restore the Appian Business database with the backup taken