Custom App Cloning Guide

Guaranteed Rate

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# Overview

The cloning process makes it easy to create a new custom application for onboarding a new department or business unit. This clone is based on an existing application in SNOW called “GR CSM Template”. This application module can be found in the SNOW filter navigator as “GR CSM Template Module”.

In a nutshell, the way the clone work is:

1. Start with an update set containing the entire GR CSM Template application
2. Configure the parameters in the case\_based\_clone\_app.js NodeJS script to specify values for the new application that will be created.
3. Use NodeJS to execute the script – this will clone the template application, and create a new update set containing everything for the new application.
4. Use SNOW to import and commit the new update set, then the application is ready for any additional customizations that are required.

**Important**: Don’t make changes to the names or naming conventions in the template, as this will cause incompatibilities when replacing tokens from the template to your new application.

Feel free to add or modify business rules, notifications, UI policies, etc. to configure the template application so that it behaves the way you want. New clones will use the functionality that is currently defined in the GR CSM Template application.

# Environment Configuration

* Download and install NodeJS (<https://nodejs.org/en/download/>)
* Download the clone utility from the GitHub repository ([https://github.com/HypaLink/CustomAppCloneUtility.git](https://nam12.safelinks.protection.outlook.com/?url=https%3A%2F%2Fgithub.com%2FHypaLink%2FCustomAppCloneUtility.git&data=04%7C01%7Cjoseph.gabriel%40norimaconsulting.com%7C1aa350215a554437490a08d989a00732%7C49dec575f3c045a6a77c3793a14f4785%7C0%7C0%7C637692142683641480%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C1000&sdata=XF07097qJelRTrjcpdcact6xJ7di3oh6KQFieQQgKk8%3D&reserved=0))
  + After downloading the clone utility, you will need to install the npm packages.
  + From a command prompt, navigate to the clone utility folder. (or type “cmd” and press enter in the url bar from the correct Windows Explorer folder)
  + From the command prompt, run the following command  
    **npm install**

# Step-by-Step Example

## Step 1. Obtain the template application update set as an XML file

The latest version of the template (as of this writing) is included in the Git Hub repository as **GR CSM Template.xml**  (this is the version v1.1.1)

If this version is not correct, you can download the template fresh from SNOW:

1. Navigate to the application record in SNOW. The template may be different between SNOW environments, so consult with your team lead to determine exactly which SNOW instance should be used. This example uses the DEV environment:  
   <https://guaranteedratedev.service-now.com/nav_to.do?uri=sys_app.do?sys_id=7f5f0b37c9cd945fce0f66d4abe63411>
2. Use the Application picker to select the correct scope:  
   Icon

   Description automatically generated
3. Click the related link “Publish to Update Set...”
4. Accept the defaults, and click Publish
5. Once completed, you will be redirected to the new update set that was exported from the template.
6. Export the update set to an XML file by clicking the Export to XML related link.
7. Save the XML file in the clone utility folder.
8. Note: if the file name changes from GR CSM Template.xml, you will need to modify the **case\_based\_clone\_app.js** file to update the “source\_update\_set\_file” parameter setting appropriately.

## Step 2. Configure the parameters for your new application

The following parameter values should be set in the script, “case\_based\_clone\_app.js”.

:

|  |  |
| --- | --- |
| **target\_scope** | Must begin with x\_gur\_ to be consistent with GR's assigned scope id. **This cannot be the same as an existing application scope**.  *Example: x\_gur\_los* |
| **target\_app\_name** | Must begin with "Rate - " to help easily distinguish these apps from SN or 3rd party apps in the SNOW application picker.  *Example: Rate - Appraisal* |
| **target\_module\_name** | This is the Display Name that appears in the SNOW filter navigator menu.  *Example: Loan Officer Support* |
| **target\_task\_table** | The **suffix** portion of the primary task table's system name. **Should be Singular and should NOT include the target scope.** The generated name will automatically prepend the scope. E.G. x\_gur\_origination\_task  **Recommended value is**: “**case**”, unless special need arises.  *Example: case* |
| **target\_task\_table\_name** | The Display Name of the primary task table. Should be **Singular**  *Example: Appraisal Case* |
| **target\_number\_prefix** | The numbering prefix for the primary task table.  *Example: APR* |
| **source\_update\_set\_file** | The file name of update set file that should be used as source for cloning  *Example: GR CSM Template.xml* |

**Important:** Do not modify the other settings in the script.

## Step 3. Execute the Clone script

After your parameters have been configured, execute the NodeJS script to perform the clone and generate a new Update Set.

1. From the command prompt, inside the clone utility folder, run the following command:  
   node case\_based\_clone\_app.js
2. If successful, the console should output a long list of SYS ID values as they are being replaced.

## Step 4. Import and Commit the new Update set

Once clone is complete, you will import the new update set to create your new application in SNOW.

1. After clone is completed, locate the new update set that is generated in the clone utility folder.
2. From SNOW, navigate to “Retrieved Update Sets” and click the “Import Update Set from XML” related link.
3. Click the Browse… button to open the file dialog. Select the new update set (e.g. Rate - XYZ Demo Custom Application.xml) and click Open
4. Click the Upload button to load the update set into SNOW.
5. Once the update set is loaded, you can preview and commit the update set like normal.

**Note**: You may encounter a preview problem with “Could not find a record in sys\_app\_category for column category referenced in this update”. In this case, from the Preview window, click “Accept Remote Update” to accept this conflict.

This is a file that is referencing an OOB application category that is missing. This can be safely ignored.

# Possible Improvements

* Configure the script so that it is parameter-based, instead of having the configuration values entirely contained inside the script. This way it could possibly be automated through a user-interface.