

# BridgeGate NPI to PostgreSQL Accelerator

**CMS.gov**  
NPI Full Replacement



PostgreSQL

## Overview

Centers for Medicare and Medicaid Services (CMS) produces a Full Replacement Monthly NPI file. In this example we demonstrate how to use BridgeGate to automatically download the file from CMS and load it into a Postgres Table. Below is the URL and file that is downloaded and loaded into the Postgres table.

[https://download.cms.gov/nppes/NPI\\_Files.html](https://download.cms.gov/nppes/NPI_Files.html)

← → ↻ [https://download.cms.gov/nppes/NPI\\_Files.html](https://download.cms.gov/nppes/NPI_Files.html)

Detailed information about the NPI files is included in the Data Dissemination File - Readme file.

**If you have any questions contact CMS at [NPIFiles@cms.hhs.gov](mailto:NPIFiles@cms.hhs.gov).**

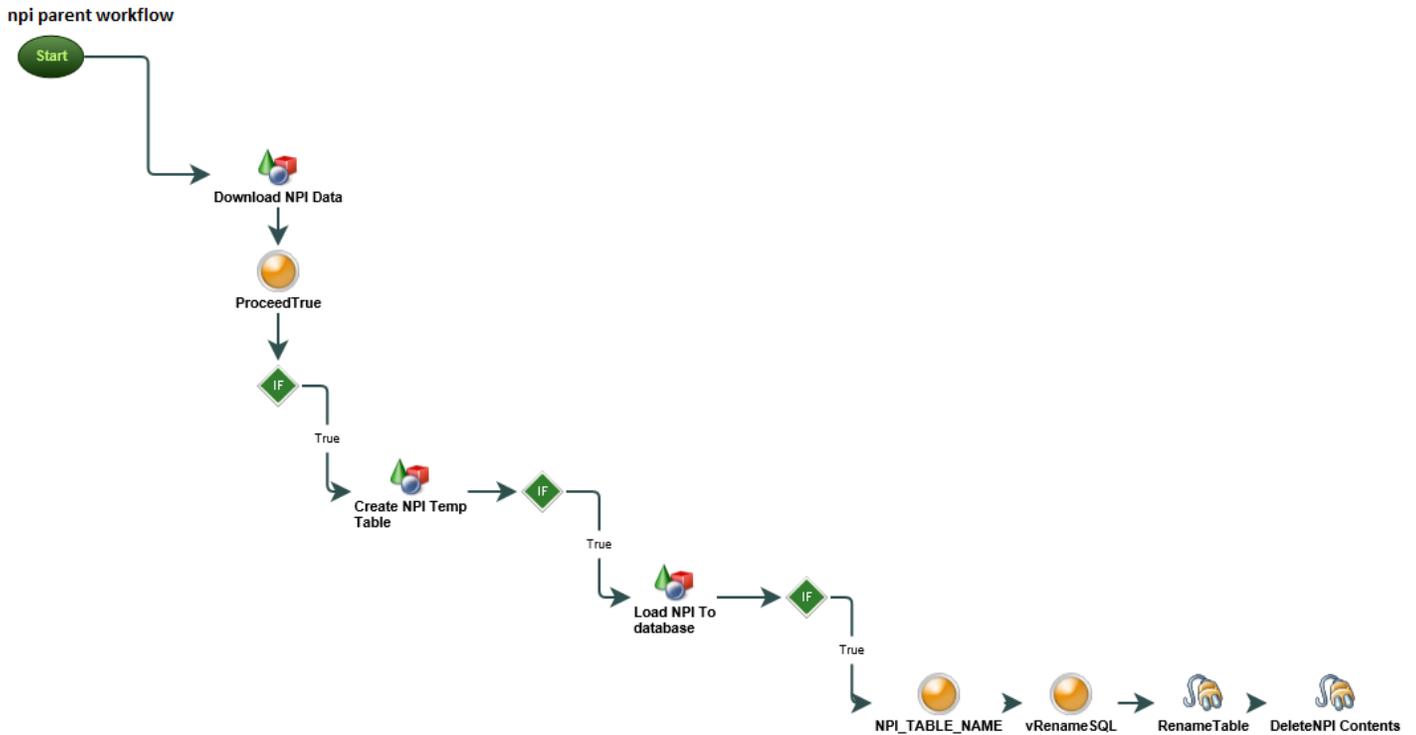
Please Note: Issuance of an NPI does not ensure or validate that the Health Care Provider is Licensed c

**Full Replacement Monthly NPI File**

[NPPES Data Dissemination \(May 08, 2023\)](#) - ZIP format (855.47 MB)

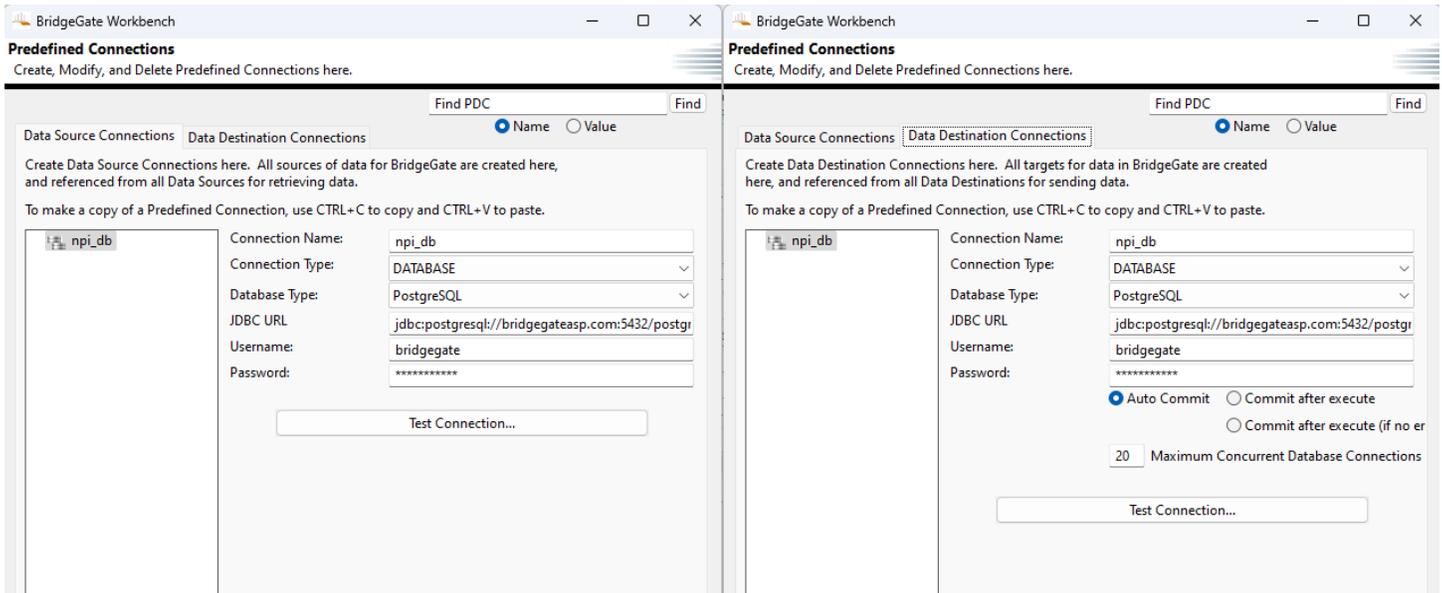
Beginning with the May 2008 file, the size of the .csv Header File increased because we added Author larger size, the .csv Header File can no longer be opened in Excel. Even so, the .csv Header File is sm be opened with a text editor capable of opening large files. Two examples are TextPad and UltraEdit.

**Workflow Process Overview:** The NPI Accelerator starting point is the npi parent workflow. This workflow kicks off all sub workflows to download the NPI file and load it into Postgres. The npi parent workflow can be processed manually through the Portal or you may create a Schedule to run it at a desired interval (monthly). The NPI Accelerator workflows process very large files thus it is not recommended to execute the workflows via the Workbench. All processing should be done on the Server.



**Prerequisite:** Once the NPI Accelerator has been downloaded and saved to a BridgeGate Account, add a Data Source and a Data Destination PDC Named: np\_i\_db to that Account.

The NPI Accelerator creates a Postgres temp table and inserts the data into the temp table. To do this it will require a Data Source and Data Destination PDC like below:

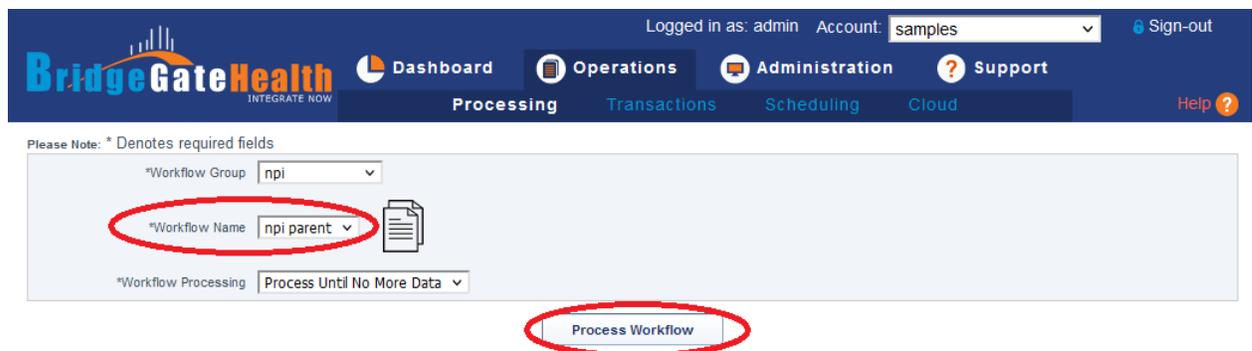


## NPI Accelerator Execution:

The np\_i parent workflow is the workflow that executes the full NPI process. It can be processed manually through the Portal or it may be executed via a Schedule.

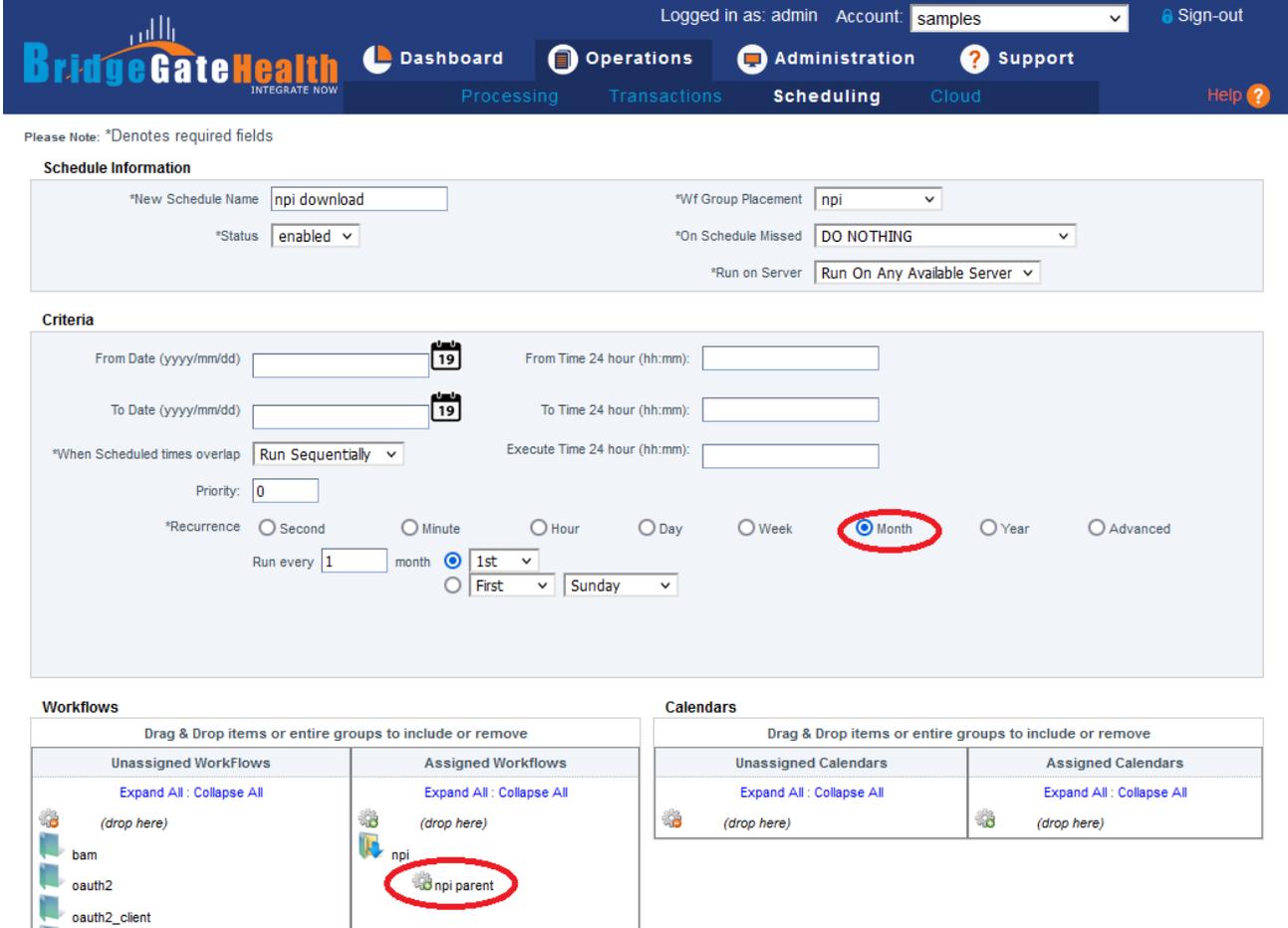
### Manual Process Execute via Portal:

To execute the NPI Accelerator manually, ensure all workflows/templates are exported to the server then log into the Portal and navigate to Operations/Processing/Execute, select the np\_i parent workflow the Process Workflow button.



# Schedule the npi parent workflow to execute:

To execute the NPI Accelerator via a Schedule, ensure all workflows/templates are exported to the server then log into the Portal and navigate to Operations/Scheduling page then select Create a new Schedule button and configure the the npi parent workflow to execute at the desired interval. CMS produces a new file every month or two.



## Step 1: Download NPI data

Once the npi parent workflow executes, it calls the download npi data workflow. This workflow downloads the monthly NPI ZIP file and decompresses it inside the workflow group for the account that it is executing under. For example the decompress dir: ../accounts/AccountName/npi/historic\_npi

*NOTE: NPI File Sizes may be over 9GB. Out of the box the Accelerator saves to /bridgegate/accounts/AccountName/npi/historic\_npi. If you want to change this location to a different location ie Mount Drive, you will need to change some of the workflow items in the download npi data workflow and the load npi to database workflow to reference the desired location. Make sure the BridgeGate Server has plenty of disk space to process NPI files. During translation the translated file (containing the insert statements) may be very large (100+-GB). Also take into consideration Archiving the Get/Send Data files. This Accelerator has workflow data archive off to save disk space.*

## Step 2: Create NPI Temp Table

Once the NPI data has been downloaded the create npi table workflow creates a temporary Postgres table named npidata\_temp. Once the data has been loaded in step 3 the temp table will be renamed to a NPI download date.

### Step 3: Load NPI to Database

Once the temp table has been created, the load npi to database workflow will get the NPI csv file and load it into the temp table. This step may take several hours depending on the Server configuration. The NPI csv file has several million rows. Once the load is complete the npi parent workflow will rename the temp table to the NPI download date.