



**HARRIS**  
GOVERN



# **I0I-std-fea-046**

## **Sequential Batch Processes Feature**

### **Govern V6**

**Release 6.0/6.1 Version 1**

Last Revision Update: 1/30/2019

[illegible]

## Disclaimer

Harris Govern has taken due care in preparing this manual. However, nothing contained herein modifies or alters in any way the standard terms and conditions of the purchase, lease, or license agreement by which the product was acquired, nor increases in any way the liability of MS Govern to the customer.

## Table of Contents

Overview .....	5
Example of a Sequential Batch Process .....	5
Configuration .....	6
Govern New Administration (GNA).....	6
Creating the Parent Schedule .....	6
Creating the Child Schedule .....	7
Govern Scheduler Console Preview and Execution .....	9
Viewing the setup in Govern Scheduler.....	9
APPENDIX.....	11
Business Rules .....	11
Deletions of Processes in Batch Scheduler and GNA.....	11
Presentation of Error message .....	11

## Overview

### **Available in Release 6.0 and 6.1**

The following feature addresses a business requirement to execute multiple batch processes sequentially. This feature will allow users to execute multiple batch processes during a period when there is less impact on users that are accessing the network. As an example, these sequenced batch processes could be initiated and set to run overnight, over a weekend, or through the extended periods of a holiday.

This document describes the configuration of a list of Schedules in order to create a linked sequence of Batch Processes in the Govern New Administration (GNA). As each batch process is successfully completed, i.e. no errors generated, it will automatically initiate the next preconfigured batch process in the user defined sequence.

**NOTE: Sequential Batch Processes** are initiated, and monitored in the Govern Scheduler (SC). The status of the execution of each batch process is displayed through the console of the Govern Batch Scheduler application.

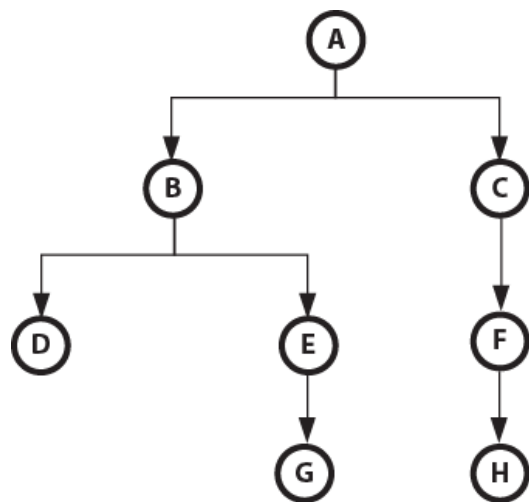
### Example of a Sequential Batch Process

The following is an example of a possible *Sequential Batch Process*. The example will demonstrate a basic batch process that, upon successful completion, will initiate two (2) child batch processes. Each of the two child processes will in turn trigger other processes, and so on. Refer to the example below.

#### Example

1. Batch process A is configured to run daily.
2. When Batch process A ends it will initiate batch processes B and C
3. Batch process B initiates batch processes D and E
4. Batch process E initiates batch process G
5. Batch process C initiates batch process F
6. Batch process F initiates batch process H

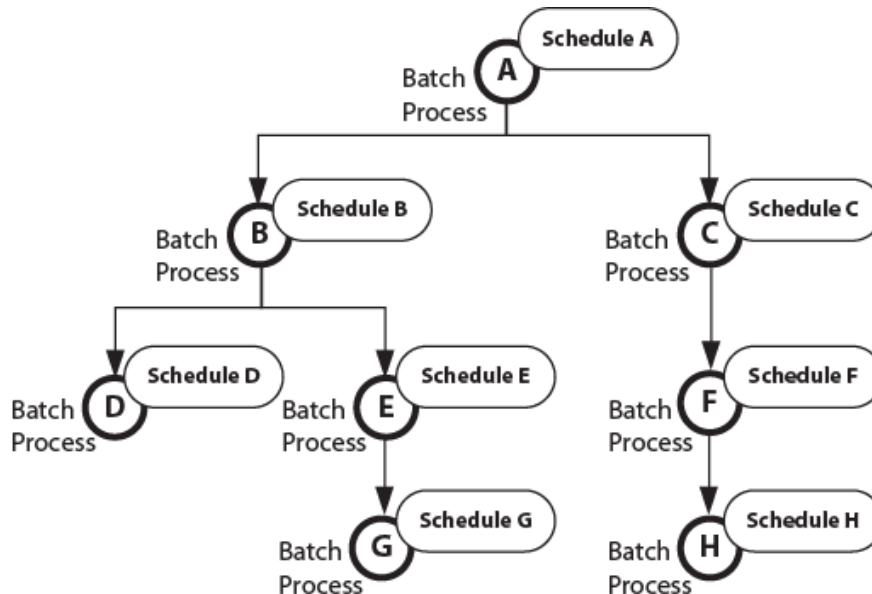
All batch processes B, C, D, E, and F are configured to be triggered upon successful completion.



## Configuration

Sequential batch processes are configured in the Govern New Administration (GNA). Preview and execution of the batch processes are presented in the Govern Scheduler.

For further detail Govern batch process scheduling, refer to the Govern Schedule user guide for details (106-gs-all-GovernScheduler.60.pdf).



## Govern New Administration (GNA)

To configure Sequential Batch processes it will be necessary to first create a new batch process or use an existing one. You would next need to create a schedule for that Batch Process. This batch process will then be configured to, upon completion, trigger the next batch process in the sequence.

**TIP:** When planning sequential batch processes, it is recommended that a flowchart of sorts is sketched out to use as a guide to visualize your setup. In addition, as each schedule is associated with a batch process, the batch process used should also be noted.

Using the example flowchart of schedules, i.e. A, B, C, D, E, and F, we will say that *Batch Process A* is associated with *Schedule A*. *Batch Process B* will be associated with *Schedule B*, and so on.

### Parent Schedule

With our flowchart drawn out for our example, we will say that the *Batch Process A* schedule will be called **Schedule\_A**. *Schedule A* is also the *parent* batch process that will trigger all subsequent processes. As the parent process its configuration is different from all subsequent processes.

### Creating the Parent Schedule

To create the **first schedule** called *Schedule A* in the GNA...

1. On the GNA ribbon, click *Editors (tab)* > **Batch Process Definition Editor**.
2. In the *Batch Process Definition Editor* select the batch process that will be the parent.
3. On the Batch Process Definition tab, either select an existing batch process, or click **Create a new item** to create a batch process.
4. Click to select the **Scheduling** sub tab.
5. Click **Add**.

- The form to configure the schedule is displayed.

**NOTE:** If the batch process requires parameters to be configured, this must be completed first. The save action is required before you can schedule the batch process.

- Click to select the *Schedule* tab.
- Enter a *Name*, and a *Description*.

**NOTE:** Name and Description are required parameters; you will not be able to save without completing them.

- In the Settings group below, set a frequency for the schedule; select **One time**, **Day**, **Week**, or **Month**. Additional settings allow you to specify a Start Date, and expiration date, i.e. **Expires on**. For our example, this will be a one time schedule so select **One time**.

**NOTE:** As this is the first batch process, the option for *Triggered* should not be selected.

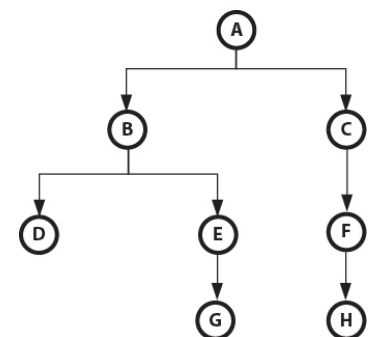
- Click **Save Changes** on the *Schedule* tab.
- Click the Close button [X] in the upper right hand corner to close the form.

## Creating the Child Schedule

### Configuring B and C

Referring back to our flowchart, we see that the *Children* batch processes, B, and C, are at the same level and are triggered by batch process A. We will need to configure Schedule B to trigger batch process D, and E. Batch process C will trigger batch process F. As batch processes B and C are both at the same level, they will be run simultaneously.

To create any **Children schedules**, e.g. *Schedule B*, *C*, and all other subsequent processes...



- On the GNA **Batch Process Definition Editor**, click to select the batch process that will be designated as *Schedule B*.
- On the Batch Process Definition tab, click to select the *Scheduling* sub tab.
- Click **Add** to display the *Schedule* window.

4. If the batch process requires parameters to be configured, this must be completed first. The save action is required before you can schedule the batch process.
5. Select the *Schedule* tab.
6. Enter a Name and a Description for the schedule; for our example we will use *Schedule B*, and "*Schedule B triggered by Schedule A*" for the **Name** and **Description**: respectively.

We now need to specify that Schedule B is to be triggered by the successful completion of the batch process that is attached to Schedule A.

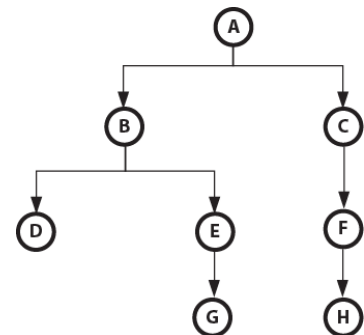
7. In the Settings group, click the *Triggered* radio button.
8. In the Parent group, select the batch process for Schedule A from the combo box, i.e. *Batch Process A*.
9. Select the *Schedule*; the combo box will display Schedule A.

**NOTE:** If the batch process is also associated with other schedules, they will also be listed. It is important that you select the correct schedule.

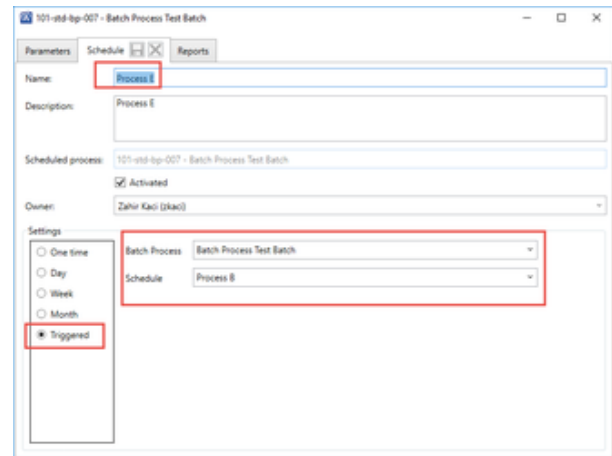
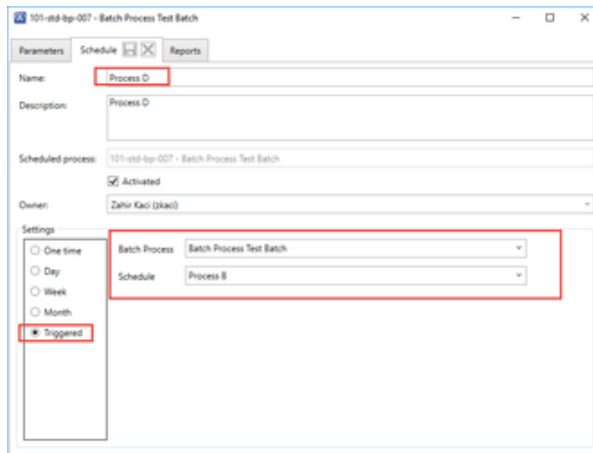
10. On the *Schedule* tab, click **Save Changes**, to save the setup.
11. Click the [X] in the upper left hand of the form to close the form.

### Configuring Sequential Schedules D and E

Referring back to the workflow sketch, we see that **Schedule C / Batch Process C** is at the same level as Schedule B, it will be necessary to select the batch process that will be associated with *Schedule C*. For the Parent you will specify *Schedule A*. For the configuration, it will be necessary to repeat all steps for configuring a *Child Schedule*; see above steps. **Schedule D / Batch Process D** and **Schedule E / Batch Process E** are triggered by Batch Process B, and should be configured accordingly.



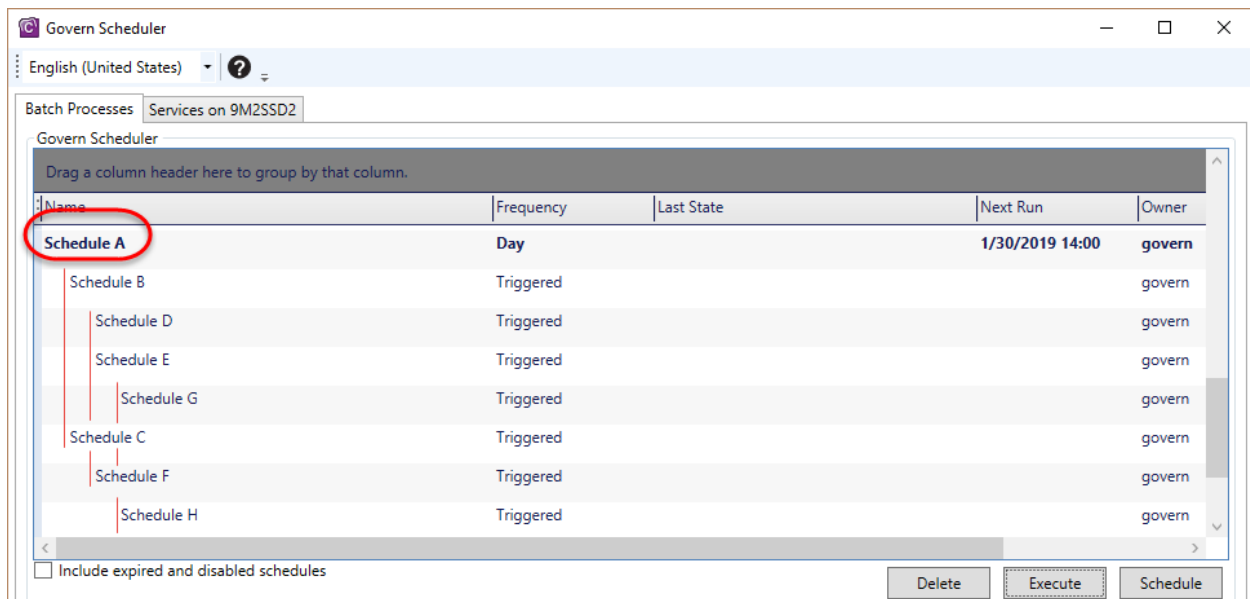




## Govern Scheduler Console Preview and Execution

### Viewing the setup in Govern Scheduler

When complete the final sequential batch processes can be seen in the **Govern Scheduler** group of the Govern Scheduler console. Looking at the interface, we can see that Schedule A is at the top of the list as the parent process. Schedule B and Schedule C are at the same level, both have their sub processes which they will trigger. *Schedule D* and *Schedule E* will be triggered by *Schedule B*, and *Schedule F* is triggered by *Schedule C*. Finally *Schedule G* is triggered by *Schedule E*, and *Schedule F* triggers *Schedule H*.



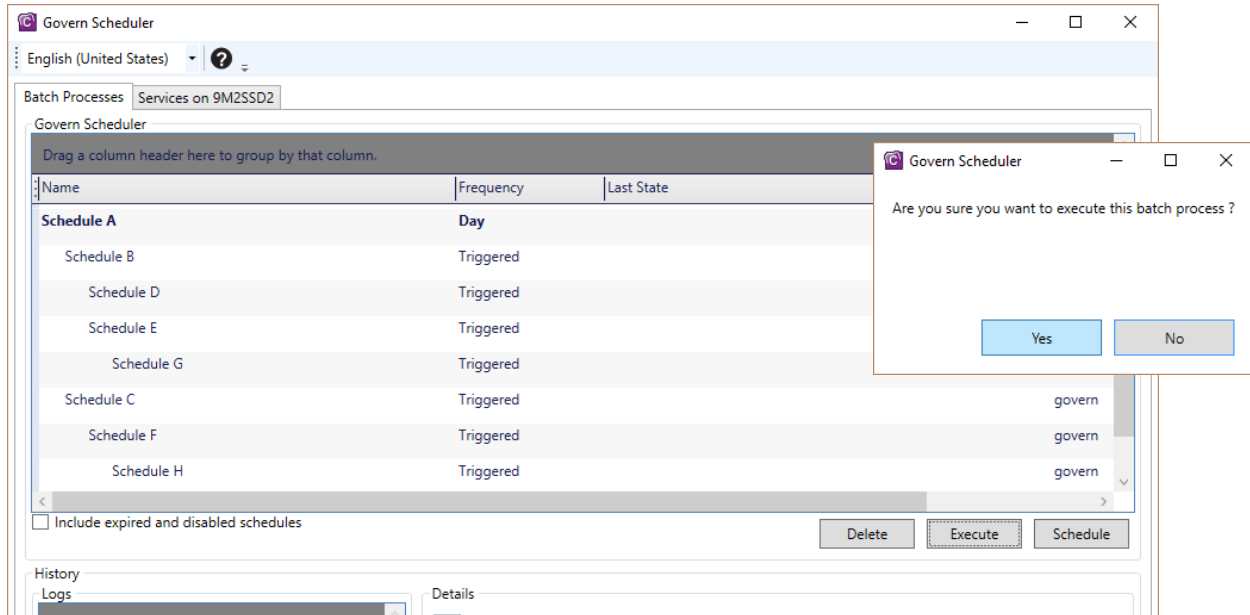
### If a Batch Process fails...

During execution of the batch processes, if a batch process in the sequence fails, all subsequent children processes in that chain will not be executed. For example, if *Batch Process B* for *Schedule B* fails to execute, it will need to be corrected. After rectifying the error with the process, it will be necessary to execute *Batch Process B* again. After which all subsequent processes will then be triggered. It is not necessary to execute the entire process flow again, i.e. **Schedule A**.

## Executing the Batch Process

To execute the Batch Processes in the Scheduler Console

1. Click to select the process in the console.
2. Click **Execute**.



**NOTE:** Refer to the Govern Scheduler user guide for additional configuration details, and running Batch Processes.

## APPENDIX

### Business Rules

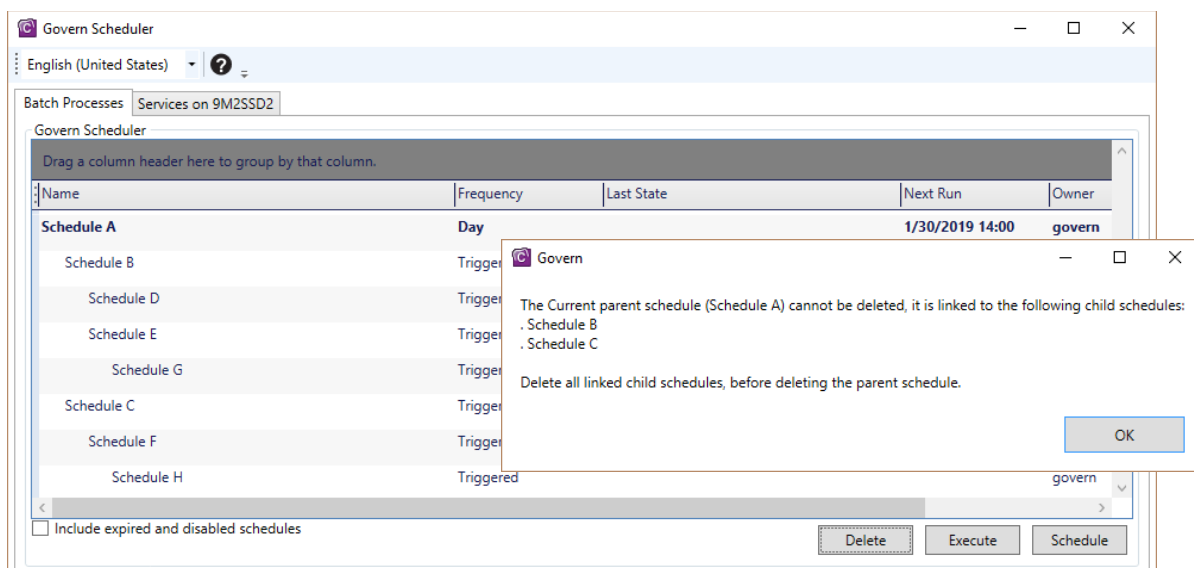
#### Deletions of Processes in Batch Scheduler and GNA

In the Batch Scheduler or in GNA, trying to delete a schedule with Child schedules will generate an error message. This message will indicate that in order to proceed, you must first delete the child schedules before you can delete the parent.

#### Presentation of Error message

##### *Deleting Parent Schedules in the Batch Scheduler*

An error will be generated when attempting to delete parent schedules that are linked to sub schedules, i.e. schedules that they trigger.



##### *Deleting Schedules in Govern New Administration (GNA)*

When attempting to delete Schedule B in the GNA, an error will be generated.

