

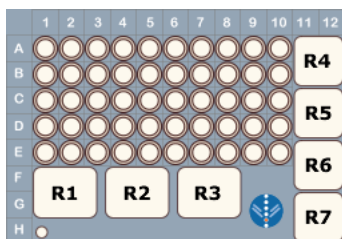
# STarSystem Script Guide

STarStation version 2.3 incorporates Script Manager functionality allowing multiple instrument maintenance operations to be organised into defined and ordered sequences called Scripts. STarStation software includes several default scripts that can be used to perform automated system startup, shutdown and troubleshooting procedures. Two template scripts are also provided which can be edited to provide automated system calibration.

All scripts are executed using the Scripting Interface accessed via the Scripts tab of the STarStation Instrument controls. This document provides an overview of the default and template scripts provided in STarStation.

All default scripts are identified with the "default" in the script name. Default scripts may be edited but cannot be saved with their original names.

The scripting interface is able to use two default plate types; a standard 96-well plate and a QC utility plate developed exclusively for STarStation 2.0. The plate type assigned to a particular script is displayed on the Scripts Tab of the Instrument Controls when the script is selected.



Script Name	Operations	Location	Plate Type
Default Startup	Warmup		QC
	Prime		
	Alcohol Flush	R1	
	Wash	R3	
	Wash	R3	

Default\_Startup\_Script

### Default Startup

The default startup script prepares the system for use, by warming up the detectors and removing air bubbles from the sample lines and cuvette.

Script Name	Operations	Location	Plate Type
Default Shutdown	Sanitise	R2	QC
	Soak	R3	
	Soak	R3	

Default\_Shutdown\_Script

### Default Shutdown

The default shut down script prepares STarSystem for shutdown and should be run at the end of each session.

Script Name	Operations	Location	Plate Type
Default Maintenance Wash	Backflush		QC
	Backflush		
	Backflush		
	Drain	R7	
	Drain	R7	
	Alcohol flush	R1	
	Alcohol flush	R1	
	Wash	R3	
	Wash	R3	
	Wash	R3	

Default\_Maintenance\_Wash\_Script

### Default Maintenance Wash

The default maintenance wash is used to prevent the accumulation of debris in the sample lines and cuvette and should be used at least once every two weeks if the system is used regularly.

### Default Unclog

The default unclog script does not require a plate and can be used to remove blockages from the sample tubing.

Script Name	Operations	Location	Plate Type
Default Unclog	Backflush		NONE REQUIRED
	Prime		
	Wash	Reservoir	
	Wash	Reservoir	

Default\_Unclog\_Script

## Template Scripts

Scripts with a name starting with "Template" are scripts designed as a starting point to design New Scripts. You should modify a template script and save it with a different name before it can be run. Template scripts can only be accessed through the Script Manager and cannot be run from the Scripts tab of the instrument Controls.

Template scripts include operations that utilise reagents with lot specific target values (calibration microspheres CAL1 and CAL2 for example). Template scripts cannot be run until the template has been modified and the lot specific information and target values necessary have been entered into the software. The lot values can be found on the Luminex Quality Control sheets which accompany the microspheres and can be entered via the Reagent Manager.

The template calibration script is created for a standard microplate, users may however if they wish modify this script to use the ACS QC plate since all of the operations in the script may be performed on either plate type. Users must define the lot numbers for the CAL1 and CAL2 operations in the provided template scripts. Refer to the editing scripts topic in

the software help file for details of editing a template script.

Script Name	Operations	Location	Plate Type
Template Calibration	CAL1	A1	STD or QC
	CAL2	A2	
	Wash	Reservoir	
	Wash	Reservoir	
	Wash	Reservoir	
	Wash	Reservoir	


Template\_Calibration\_Script

Script Name	Operations	Location	Plate Type
Template Start and Calibrate	Warmup		QC
	Prime		
	Alcohol Flush	R1	
	Wash	R3	
	Wash	R3	
	CAL1	A1	
	CAL2	A2	
	Wash	R3	
	Wash	R3	
	Wash	R3	
	Wash	R3	

Template\_Start\_And\_Calibrate\_Script

### Creating/Modifying Scripts

Scripts are created and modified via the Script Manager.

Access the Script Manager by clicking the Script Manager button on the Managers Toolbar in the Worklist tab  or by using the shortcut keys "Ctrl + B". Additionally the Script manager can be launched by selecting the **Script Manager** option from the **Edit** Menu.

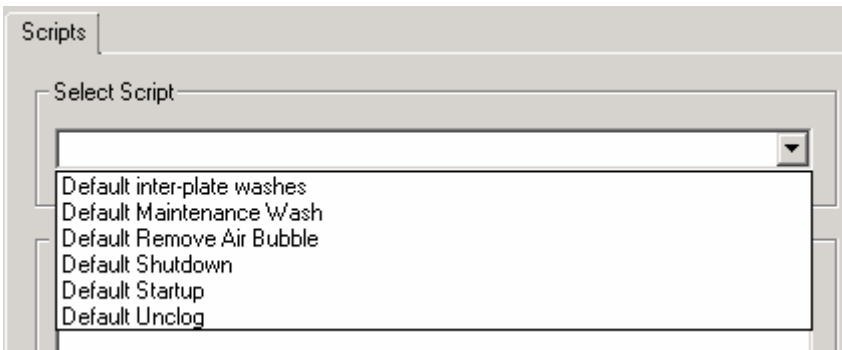
Scripted Sanitize and Alcohol Flush operations require 1025µl of fluid and are limited to the XY platform fluid reservoir when using a standard microplate or a large well (R1 through R7) when using an ACS Utility (QC) plate.

Refer to the Script Manager topic in the software help documentation for additional information.

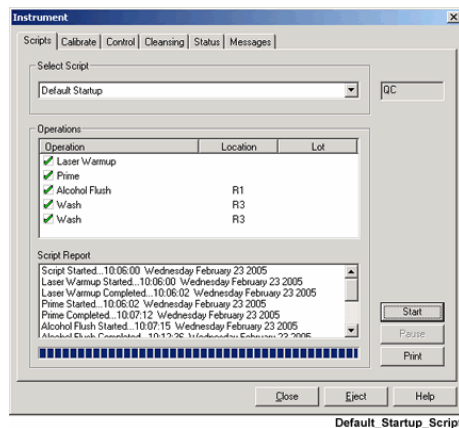
### Running Scripts

Scripts are selected and executed via the scripts tab of the STarStation instrument Controls.

- 1) Select the required script from the drop-down list in the Select Script field.
- 2) Ensure that the microplate type relevant to the selected script is used and that the plate is prepared in accordance with the operations and specified well locations listed in the operations window.
- 3) Press the Start Button to begin running the script.



Instrument\_Controls\_Scripts\_Default\_Scripts



Default\_Startup\_Script

**WARNING:** ACS QC/Utility microplates do not possess all of the well locations that map to a standard 96 well microplate. Caution should be used whenever the sample probe is moved downwards into the XY Platform when an ACS QC plate is inside the XYP.

The following well locations are not available on an ACS QC plate: F3, F6, F9, F10, G3, G6, G9, G10 and wells H1 - H10