MUSAC Classic - Absences Configuration Guide

Background

For medium to large schools, to prevent multiple users writing to the database simultaneously MUSAC has created an abProcessor which buffers the data being saved. Instead of each user's changes being saved directly to the database they are saved instead to a text file which is then in turn saved to the AB6 database by the abProcessor.

abProcessor Modes

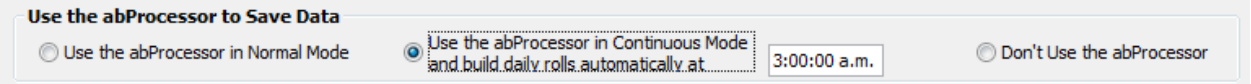
Absences can be run in one of three modes. Always ensure that all users have completely closed MUSAC Classic before changing. Using the abProcessor in continuous mode is preferred as it ensures that the abProcessor is run in a location with a strong and reliable connection to the MUSAC file server. If possible it is best to be run on the MUSAC file server itself:

- Continuous Mode using the abProcessor
- Normal Mode using the abProcessor
- without the abProcessor

Continuous mode:

Settings and Configuration > Miscellaneous - Using abProcessor in continuous mode is preferred as it ensures that the abProcessor is run in a location with a strong and reliable connection to the MUSAC file server, if possible it is best to be run from the MUSAC file server itself. In addition, the abProcessor will build the roles for you at the specified time.

To configure the abProcessor mode, open Absences > Setting and Configuration >Miscellaneous and at the bottom of the screen the following will be displayed.



Normal mode:

Using normal mode, each time Absences is opened by a user, will check to see if the abProcessor is running and if not, will then start up. While this gives the benefit of ensuring that the data is being buffered it does mean that this process can be run from any client and is dependent on the reliability of their network connection to the MUSAC file server.

Without the abProcessor:

Running Absences without the abProcessor allows data to be written directly to the AB6 database without being buffered, and we do not recommend this for medium to large schools.

Where you may choose to use Absences with the abProcessor off or in normal mode, no further configuration is required.

Attendance Daily Processes

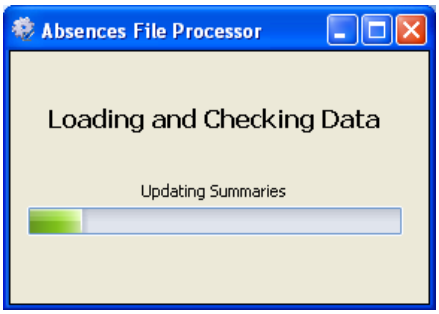
There are three regular processes that AB6 needs to perform:

1 Update of the internal table of student basic data

The update process occurs each time a user logs in and is needed to maintain the list of active students and sufficient detail to be able to supply data for students who are removed from the main database during the year (this is an audit function).

2 Update of half-day summary details in Student Manager

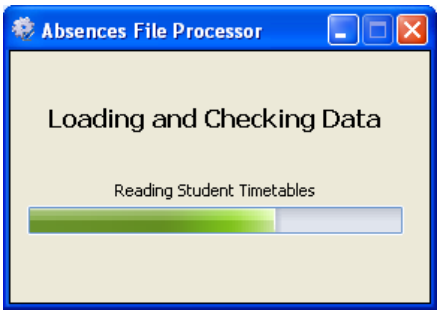
This process calculates the half-day attendance totals for each student and writes the summary to the relevant column in Student Manager so that accurate data is displayed on reports that refer to those columns. Note that attendance can be marked on part time students younger than 16 years of age, who are attending Academies. This process will occur once each day (unless auto update is switched off in Settings and Configuration > Miscellaneous). Usually this will occur when the first user logs on for the day.

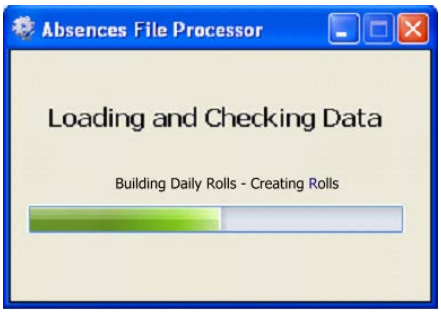


3 Creation of Daily Rolls

This process reads all timetable information for the day and creates rolls and roll-members for each timetabled class and each register (caregroup) class. This process will occur once each day, usually when the first user logs on for the day depending on the choice of mode for your abProcessor. The abProcessor can perform this function as part of a scheduled event if the executable is called with the command-line parameter "DAILY". In this case the processor displays a user interface, performs the task(s) and closes with no input required of the user.
For example: "`C:\MUSAC\AB\abProcessor.exe daily`"

Where the MUSAC Service is used, rolls will automatically be created.





Process to transition from Normal Mode to Continuous Mode

NB: These instructions are for Windows Servers only – not for Novell.

1 Log onto the MUSAC Server as administrator

2 Download the new version of **MUSAC Classic,** the **MUSAC Classic Service** from the MUSAC website. If the MUSAC server does not currently have the **MUSAC 32 bit System files** then download this as well.

3 Ensure that the MUSAC software is not in use

- Advise every user that there will be an outage to upgrade MUSAC Classic
- Ensure that all users have closed all MUSAC applications
- Complete a full backup of the current MUSAC installation
- Reboot the MUSAC Server
- Confirm that there are no open files on the Server
    - Open Computer Management from Administration Tools
    - View shared files (note this may list the abProcessor, see the next step)

4 If a scheduled task is currently being used to run the **abProcessor** or **build daily** rolls

- Stop the scheduled task
- Delete the scheduled task as these tasks are no longer required

5 Uninstall the current MUSAC Classic Service – if installed

- Stop the MUSAC Classic Service
- Uninstall the old version of the MUSAC Classic Service from the Control Panel

6 Install MUSAC onto the MUSAC file server

- Install the new version of MUSAC Classic
- Install the MUSAC 32 bit System files (if not already installed)
- Install the MUSAC Classic Service
- Install the Microsoft .NET4 Framework (if not already installed), this may require the server to be rebooted.

7 Set Absences to 'continuous mode' to ensure that only one Processor runs at one time

- Open Absences with a MUSAC administrator's username and password
- Select Settings and Configuration > Miscellaneous
- Set 'Use the abProcessor in Continuous Mode and build the daily rolls automatically at '
- The service will stop the abProcessor 3 hours and 10 minutes before, and re-start the abProcessor 10 minutes before the rolls are due to be built. This allows for other scheduled tasks like AutoJeCT and backups to run. Configure the build daily rolls time so that there is no conflict with other server tasks
- Close all MUSAC Classic Absences and the sidebar

8 Configure the MUSAC Service

- In C:\Program Files\MUSAC\MUSAC Classic Service open the '`MUSACClassicService.exe.config`' text file with a text editor like Notepad and change `%musacdir%` to the correct path (physical path only).

    e.g. `<add key="cmdir" value="D:\StaffApps\MUSAC\CM" />`
- Change the service 'Log on as' to a Domain Administrator account and password – right-click on the service and select Properties > Log on
- Start the new version of the MUSAC Classic Service

9 Check that the MUSAC Classic Service and the abProcessor has started correctly

- Open the Task Manager on the server and check that the `MUSACClassicService.exe` is listed in the processes tab, about a minute later the `abProcessor.exe` should also start.