AFO 661 – Gate manager

661.1 Introduction

The gate manager for study spaces and reading rooms is functionality that allows to control the access to certain spaces/rooms. This control can be automatic, with gates that only open once the access has been granted, or manual.

It is also possible to just register entries and exits for statistical purposes. In all cases, the user who wants to enter or exit has to identify him- or herself with his/her user badge.

Whether access is granted or not is determined by the user's borrower record (correct, blocked, suspended) and by a number of parameters that determine how often users may enter and exit the study space.

Please note

This module is only available with a specific license.

This module is only available with V-smart.

Access to some functions in this AFO is only available to logins with system user privileges.

661.1.1 Implementation

661.1.1.1 Access Control with gates

If automatic gates are used at the entrance and exit of the study space, they incorporate a barcode reader that is used for identification. Optionally there may be buttons at the exit gate that indicate the type of exit (short, long, final).

A daemon process listens at the server side for any access requests. The gates that are used so far are delivered by an external company and use a specific protocol to communicate with the server daemon. Therefore the daemon may need to be adapted for new gate providers.

When a request is received, the daemon does the appropriate checks and sends a message to the gate to indicate whether access is allowed, together with some explanatory text.

661.1.1.2 Access Control without gates

In this case the user barcode is read with a reader attached to the workstation. Once more the necessary tests are done, and the result is displayed on the screen.

661.1.1.3 Checks executed before access is allowed or denied

User record checks

- Test if barcode exists; if not, entry is denied

- Test if borrower record is blocked; if so, entry is denied

- Test if borrower record has been suspended; if so, entry is denied

- Test if borrower membership has expired; if so, entry is denied

- Test if borrower record expires within {parameter} days; entry is allowed, but a first warning message is sent

- Test if borrower record expires within {parameter} days; entry is allowed, but a second (and last) warning message is sent

Other checks

1. Entry

- Test if user is still registered as present in the study space; if so, access is denied

- Test if user has left the study space for more than {parameter} times; if so, access is denied

- If a new place is needed, check if there are free places available; if not, access is denied

2. Exit

- Test if user is registered as present in the study space; if not, exit is denied

- Test if user has books on loan; if so, and if the study space only allows consultation in place, exit is denied – the user can temporarily leave the books in deposit

- For long temporary exits, test if the maximum number {parameter} has not been exceeded; if so, do not allow a long temporary exit

Short exits expire automatically after {parameter} minutes. If the user does not return within this time, his/her place is released.

When a user exits without indicating "short" or "long" exit (so it is a "final" exit), the place is released immediately.

661.1.1.4 Counters and statistics

Counters are maintained during the day of the number of free places, number of reserved places, number of occupied places, number of entries and number of exits.

Also, general information is created and kept about number of visits for statistical purposes.

Statistics can be obtained through the statistics module SSP, where "Gate managers" is a separate category.

After starting this AFO you will be presented with this menu:
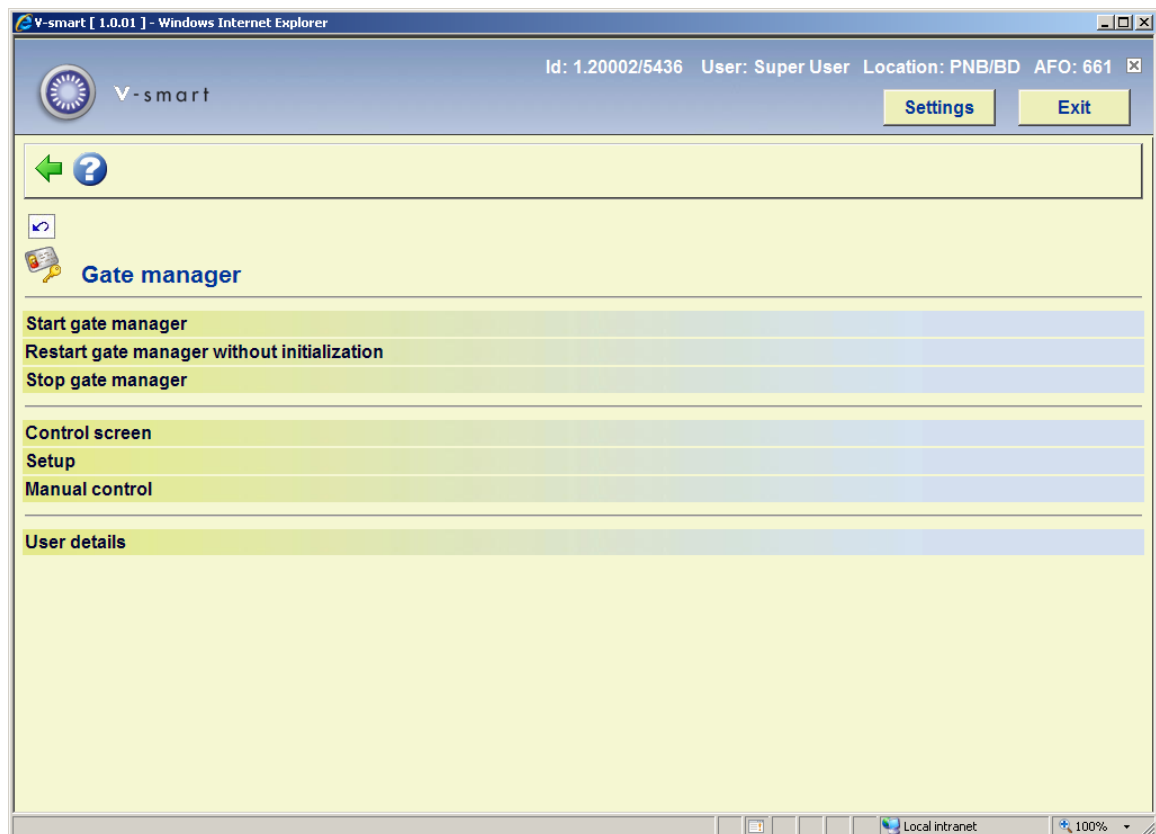
The various menu options are described in the next sections.

661.2 Access control maintenance

661.2.1 Setup

After selecting the option Setup from the main Gate manager menu, you will be presented with a sub menu:
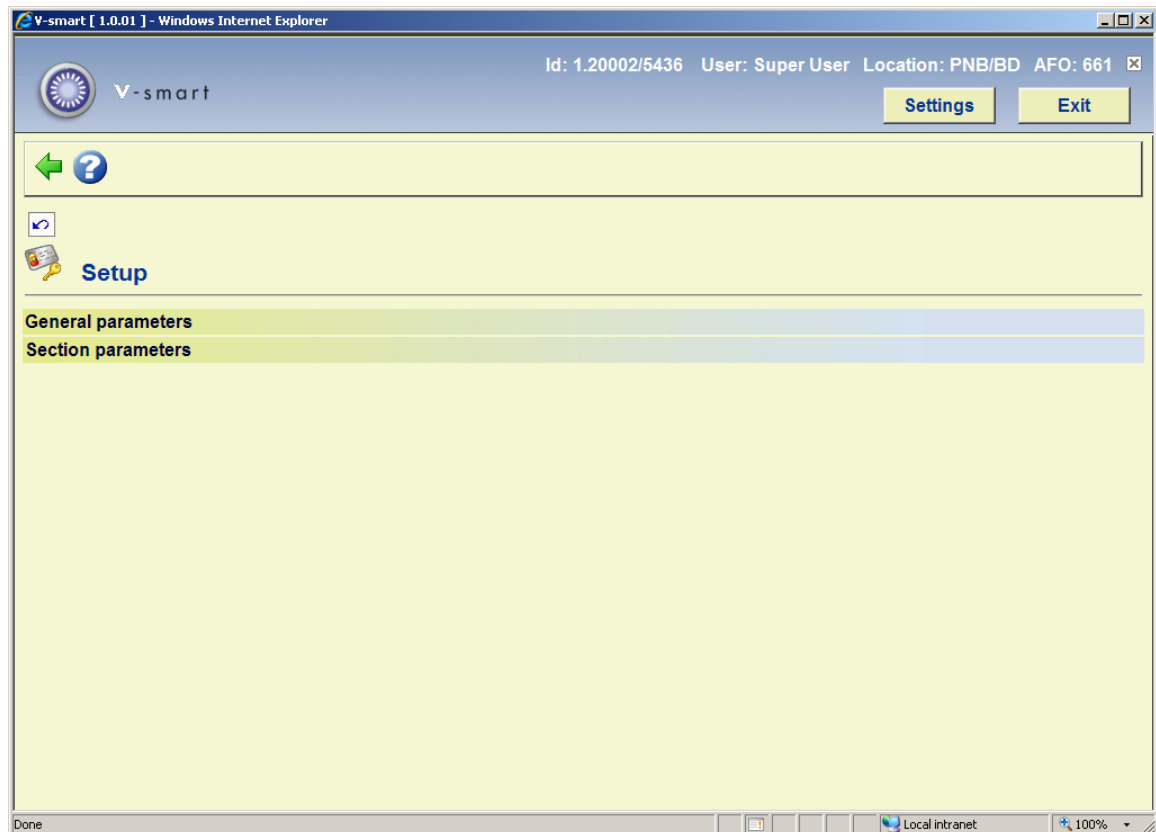
661.2.1.1 General parameters

After selecting this option, an input form is shown:
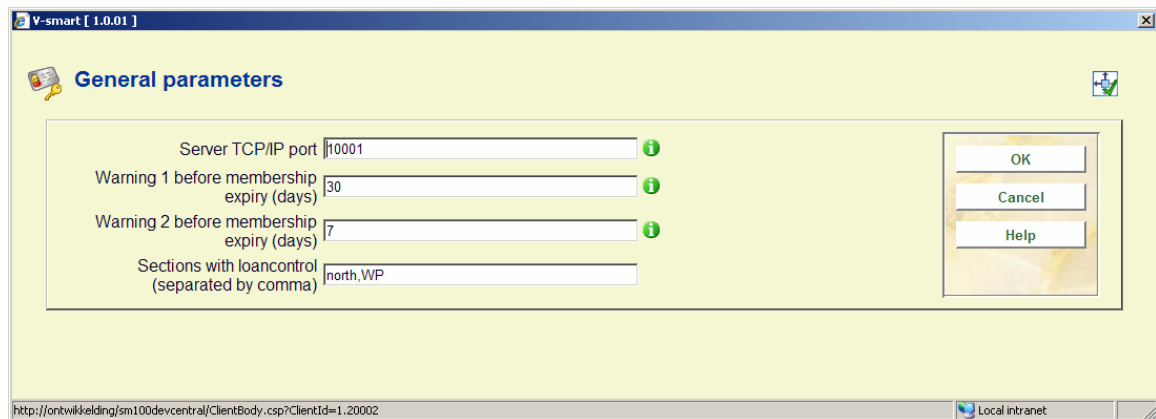
Fields on the screen

**Server TCP/IP port**: Port on which the control access daemon is listening.

Warning 1 before membership expiry (days): If membership expires within this number of days, warning 1 is shown to the user (unless warning 2 is active).

Warning 2 before membership expiry (days): If membership expires within this number of days, warning 2 is shown to the user. Note that this number of days should be smaller than the number set for warning 1.

Sections with loan control (separated by comma): List of locations where a user can not leave the study space with any documents, and from which he can not loan documents if he has not entered the study space.

661.2.1.2 Section parameters

After selecting this option, an overview screen is shown:
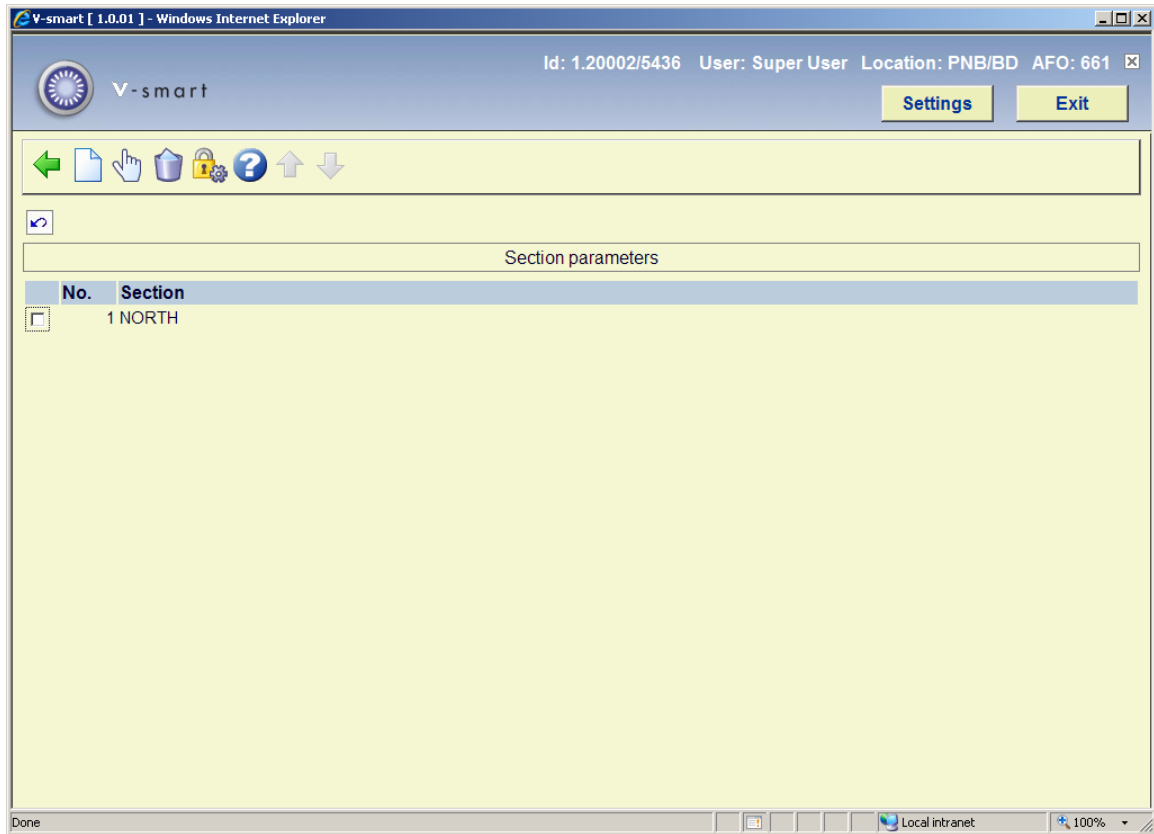
Options on the screen

View/modify properties: Select a line and then this option to view/modify the properties of a section. See below for an explanation of the fields.

Delete section: Select a line and then this option to delete the section.

New section: Use this option to add a new section. An input form will be displayed:

Fields on the screen

Section name: Location of the study space – this must be one of the locations as defined in the Vubis database.

Number of seats: Number of places available in the study space.

Entry gates (separate with comma): List of entry gate id's – every entry should have a unique gate id.

Exit gates (separate with comma): List of exit gate id's – every exit should have a unique gate id.

Maximum number of long interruptions: Maximum number of times that a user can select a "long exit" when leaving the study space.

Maximum number of short interruptions: Maximum number of times that a user can select a "short exit" when leaving the study space - once this maximum has been exceeded, the user will no longer be allowed to enter the study space.

Maximum time for long interruption: Maximum number of minutes before the user should return after a "long exit" – if this time is exceeded the user's place is released.

Maximum time for short interruption: Maximum number of minutes before the user should return after a "short exit" – if this time is exceeded the user's place is released.

Period documents on loan are kept: Time after which documents on loan that are given in deposit will no longer be held and may be returned to the shelves.

Printer for interruption receipt: Printer on which receipts will be printed that indicate at what time the user must return in order to conserve his/her place.

Activate access control: On/Off option that indicates whether control is activated – if this is not the case, entries and exits are just registered.

661.2.2 Starting and stopping

661.2.2.1 Start gate manager

Use this option to start the access control daemon and initializes all counters. After selecting this option a message will be displayed:
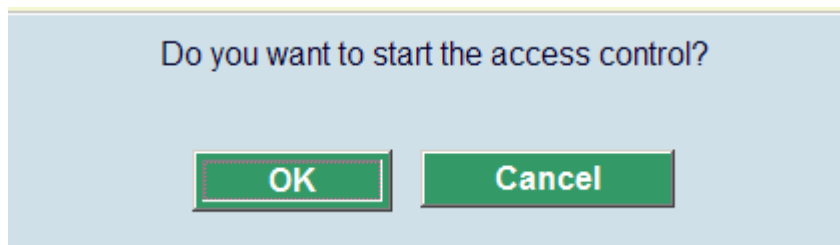
661.2.2.2 Restart gate manager without initialization

Use this option to restart the access control daemon, but without (re)initilisation of all counters. After selecting this option a message will be displayed:
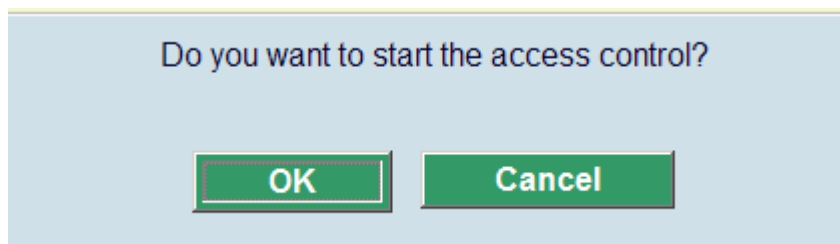
661.2.2.3 Stop gate manager

Use this option to stop the access control daemon. After selecting this option a message will be displayed:
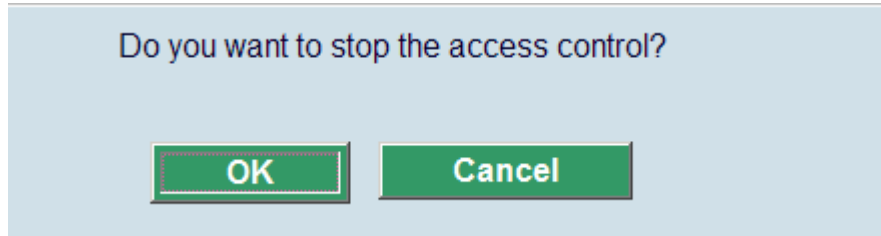
661.2.3 Control screen

This option opens a separate monitor window that displays the entry and exit requests, as well as the counters:
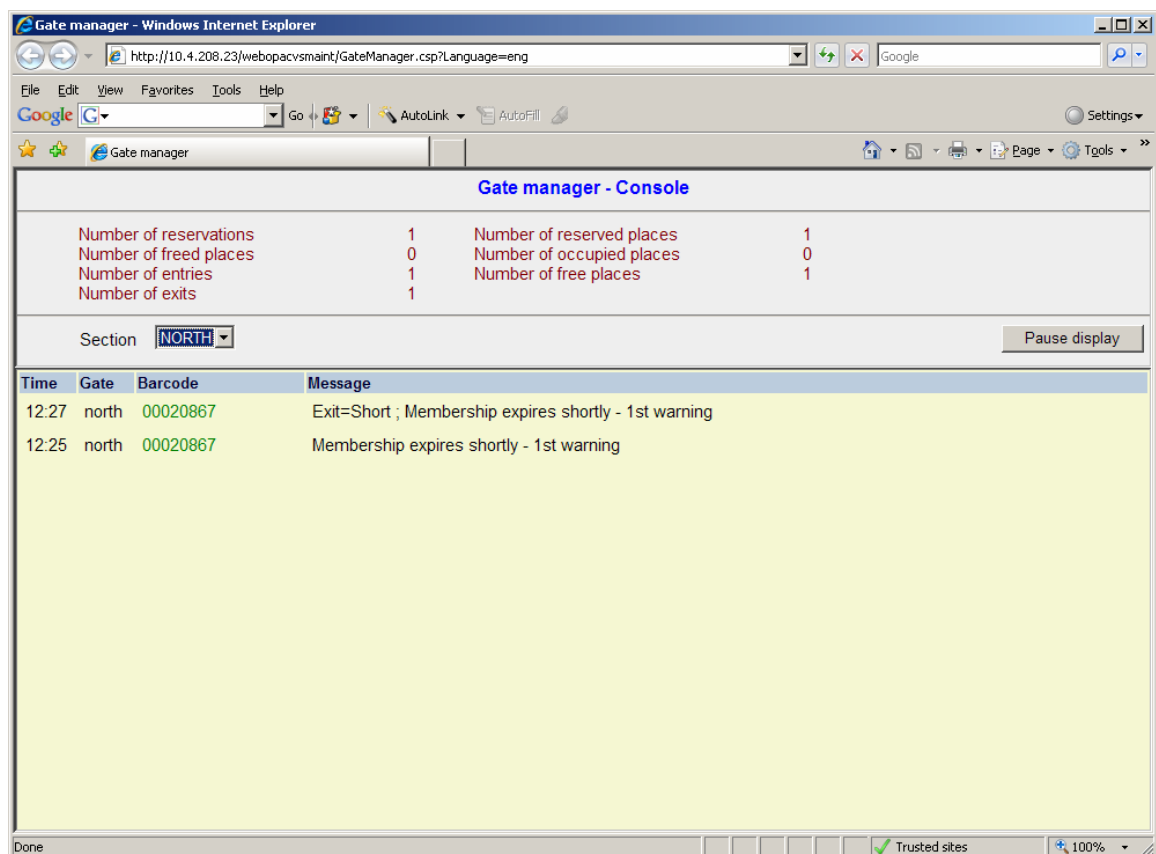
Green barcodes mean access has been granted, red barcodes mean access has been denied. It is possible the same barcode appears more than once, for instance if access was originally denied and then granted with override.

661.3 Manual control

Use the option manual control to register entries and exits manually.

Please note

Note that the statistics data are updated when the gate manager daemon is started. So if you are using manual mode only, you will still need to start the daemon to get up-to-date statistics.

If you have more than one section defined, you will be prompted to select a section first:
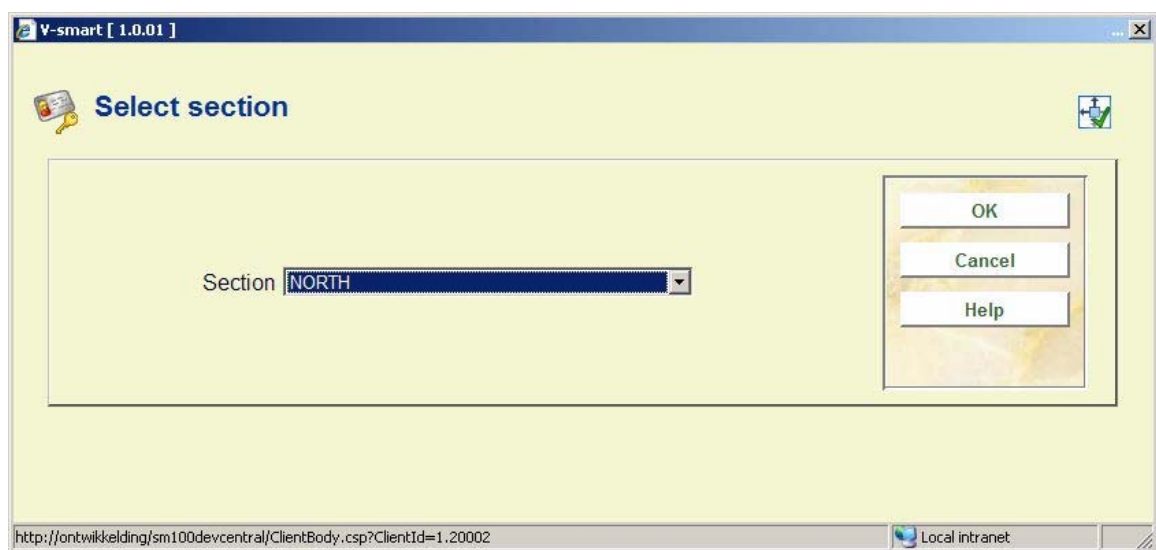
Otherwise you will be taken straight to the sub menu for the section:
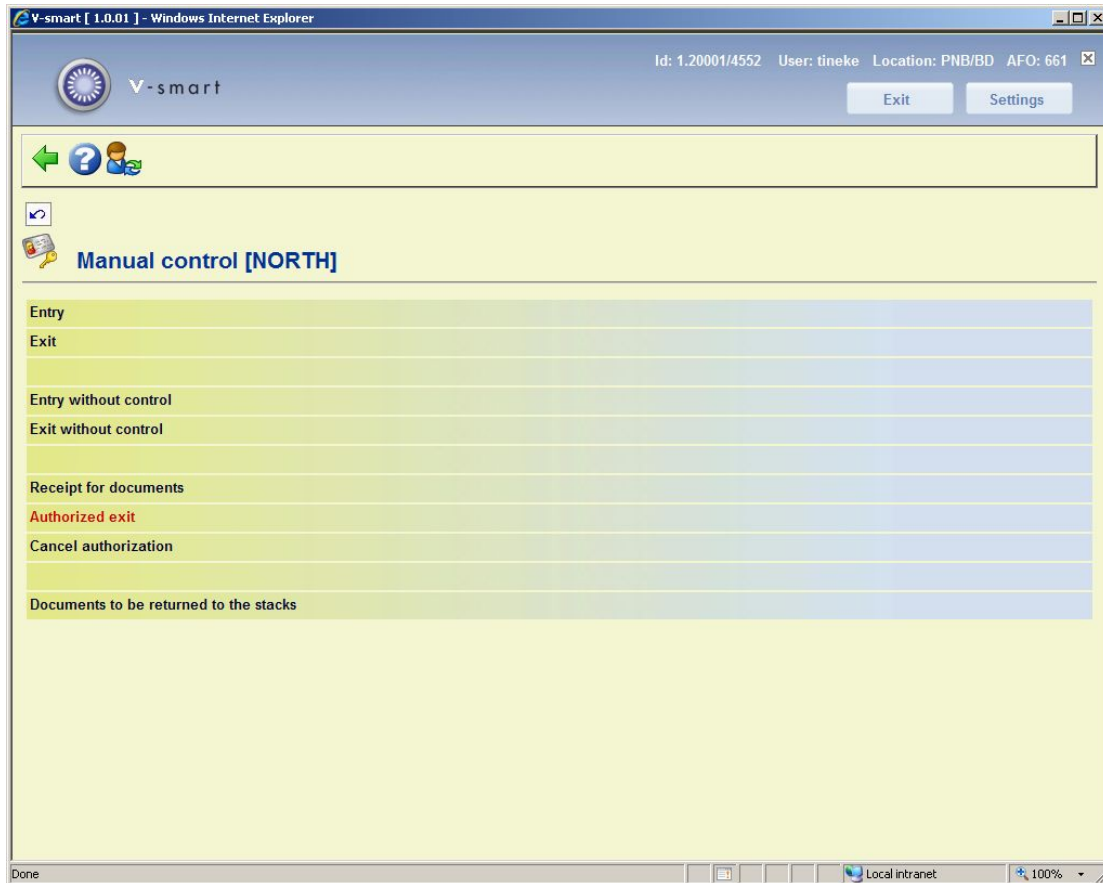
661.3.1 Controlled entry/exit

Entry: After selecting this option, an input form will be displayed:
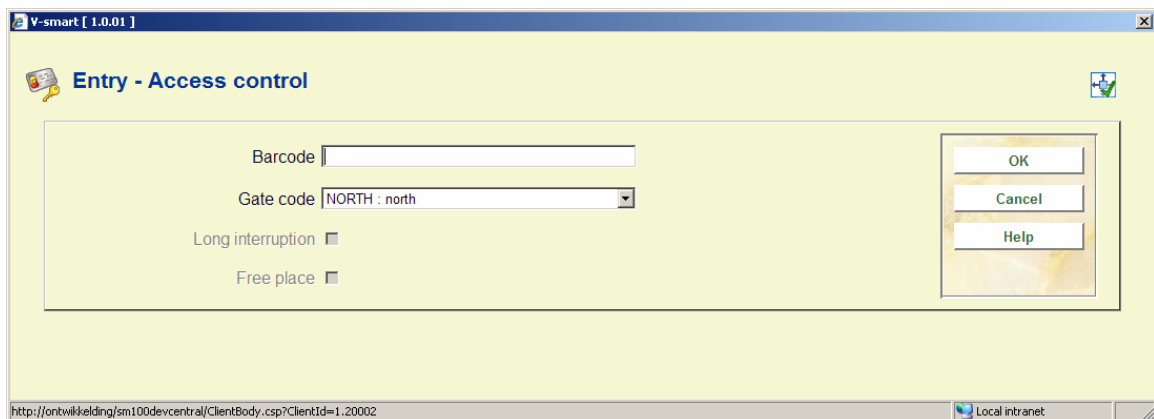
Input a borrower barcode and select an entry gate. The system processes the entry request for the user. If the user passes the validation checks, a message is displayed:
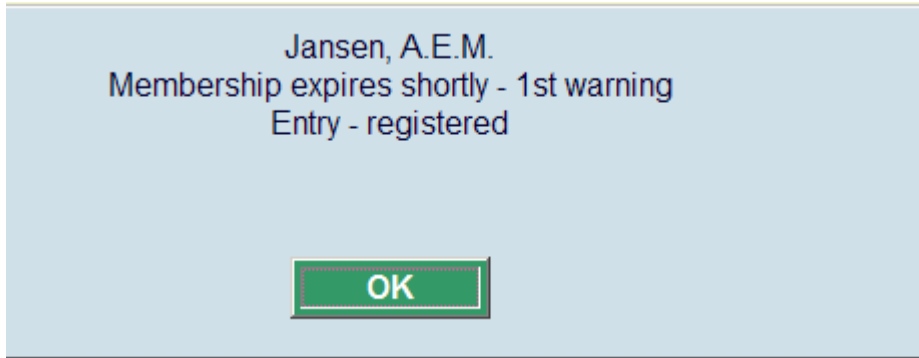
If the user does not pass the validation checks, a warning is displayed:
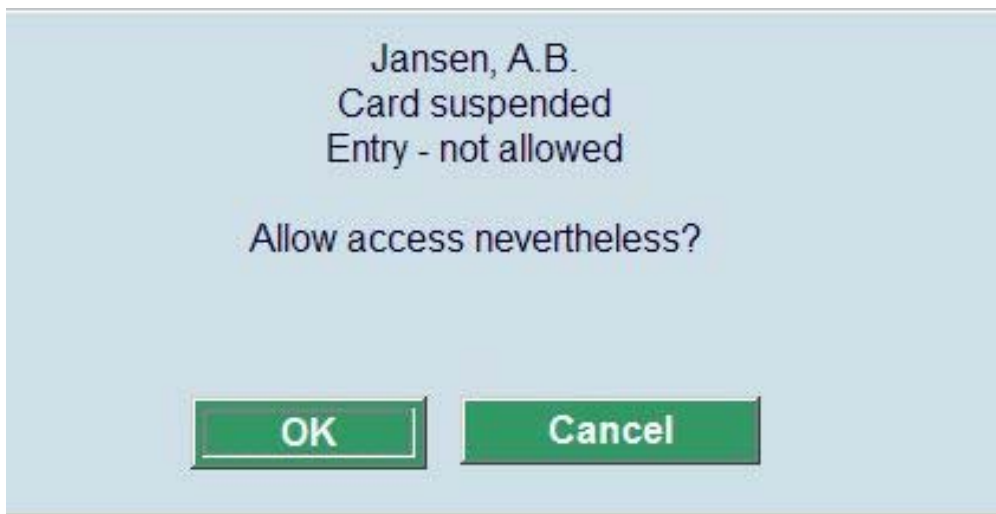
If you click **OK** on this form, entry is granted anyway.

Exit: After selecting this option, an input form will be displayed:
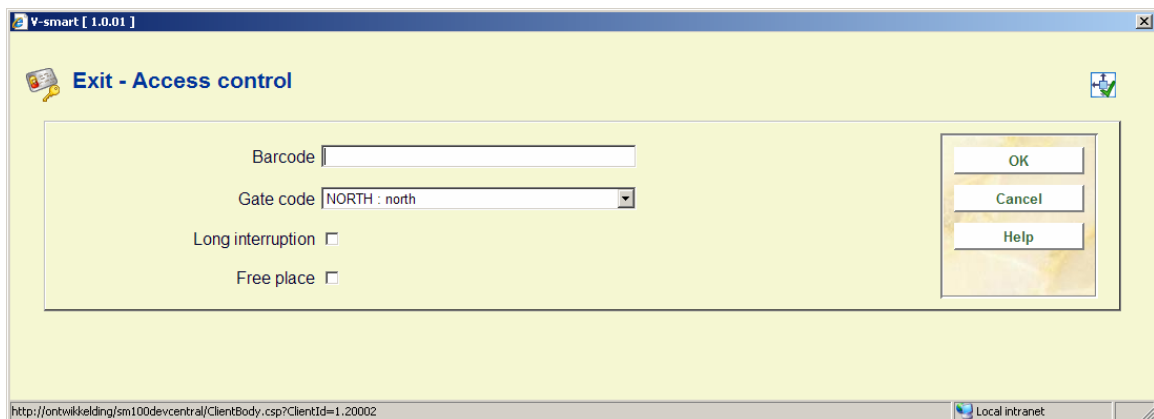
Input a borrower barcode and select an entry gate. Optionally mark Long interruption and/or Free place. After processing the request, the system displays a message:
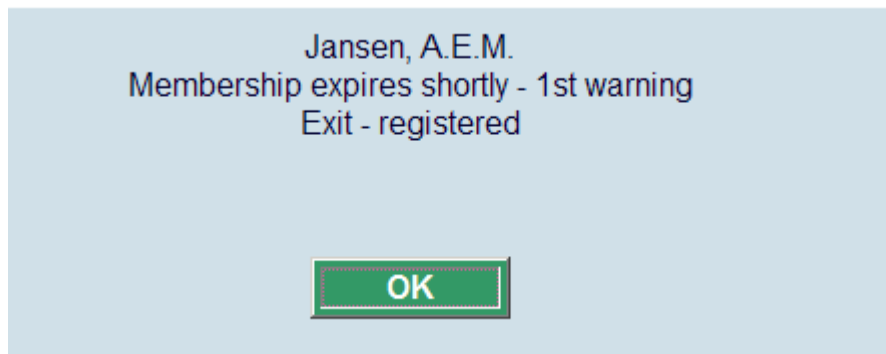
Please note

If a borrower block was overriden to allow access anyway on entry, a warning that exit is not allowed will be displayed. This can also be overriden. But in practice this will probably seldom occur.

Authorized exit: This option is used to authorize an exit for a user that has documents on loan – this authorization is normally given after the user has left the documents in deposit.

After selecting this option, the standard form for searching a borrower will be displayed:
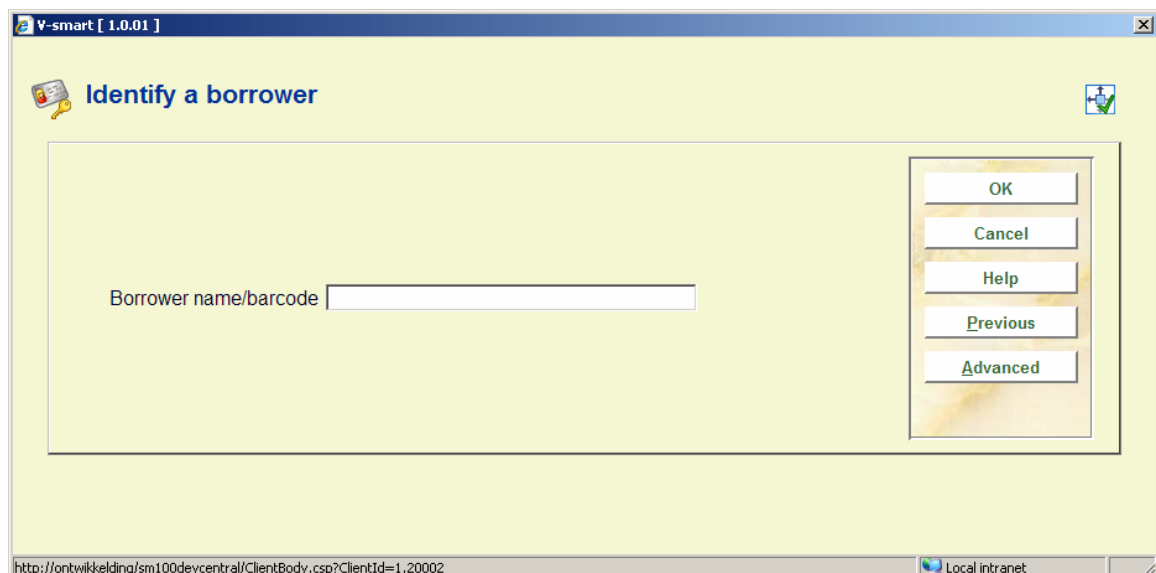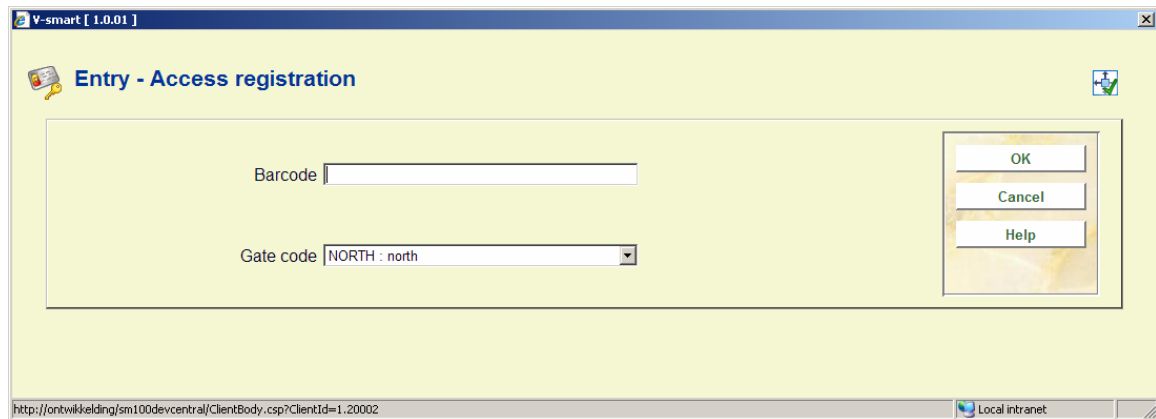
Cancel authorization: This option is used to cancel the exit authorization for a user – this is done after the user has recovered the documents that were left in deposit. After selecting this option, the standard form for searching a borrower will be displayed.

661.3.2 Entry/exit without control

Alternatively, you can register entries and exits without any checks being performed.
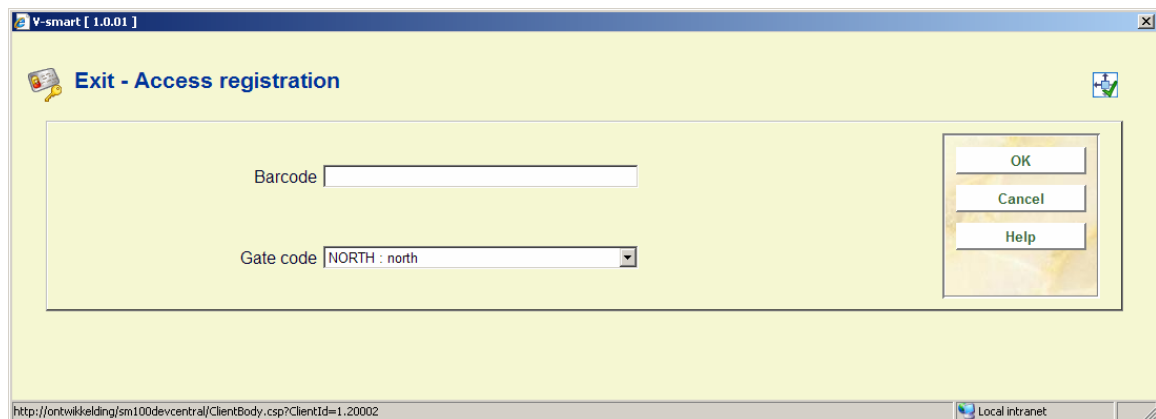
Entry without control: Use this option to just register entries, without control. An input form will be displayed:

After entering the borrower barcode, no messages are displayed by the system.

**Exit without control**: Use this option to just register exits, without control. An input form will be displayed:

After entering the borrower barcode, no messages are displayed by the system.

661.3.2 Documents

The other two menu options deal with document processing.

Receipt for documents: Displays documents on loan, with a print option for a deposit receipt. After selecting this option, the standard form for searching a borrower will be displayed:
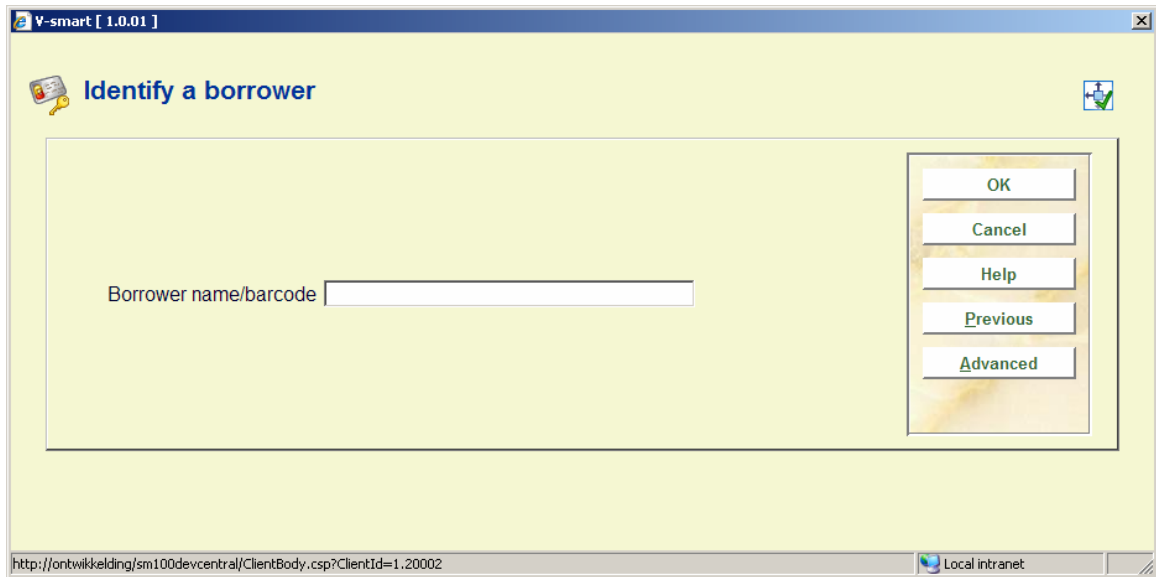
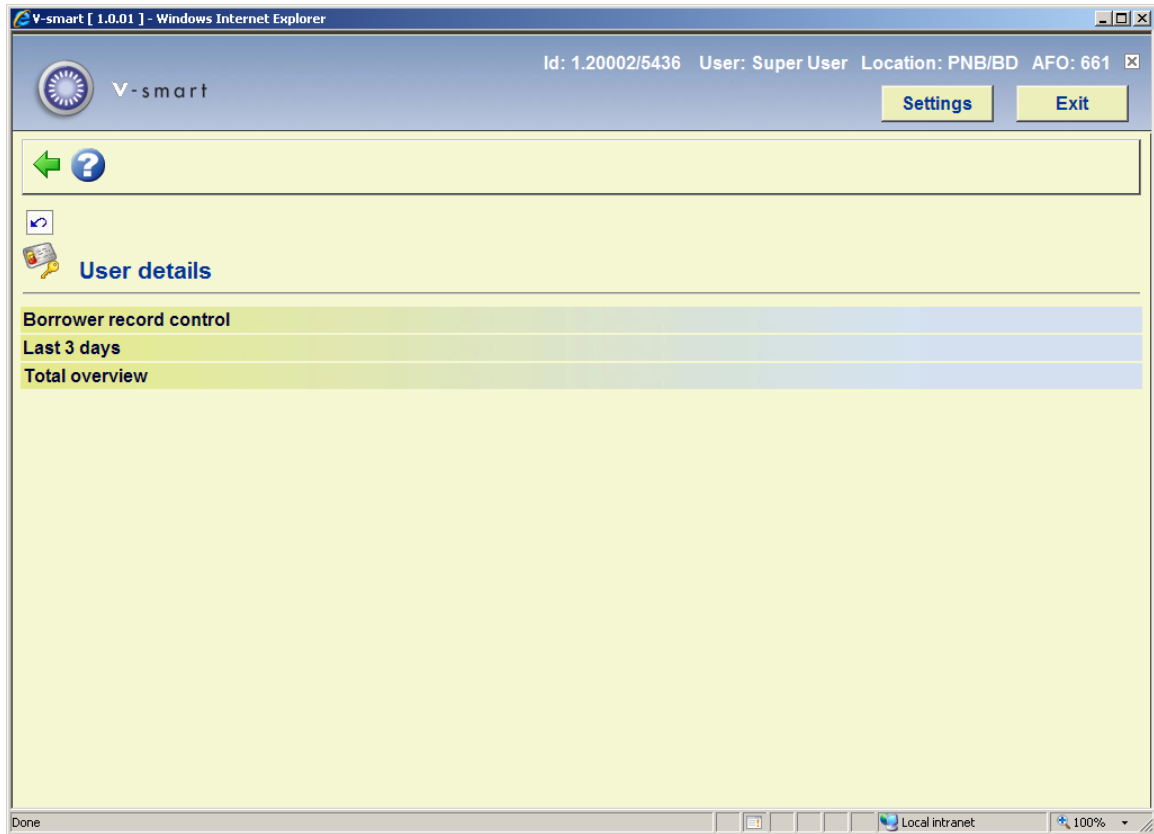After identifying a borrower, an overview screen will be displayed:
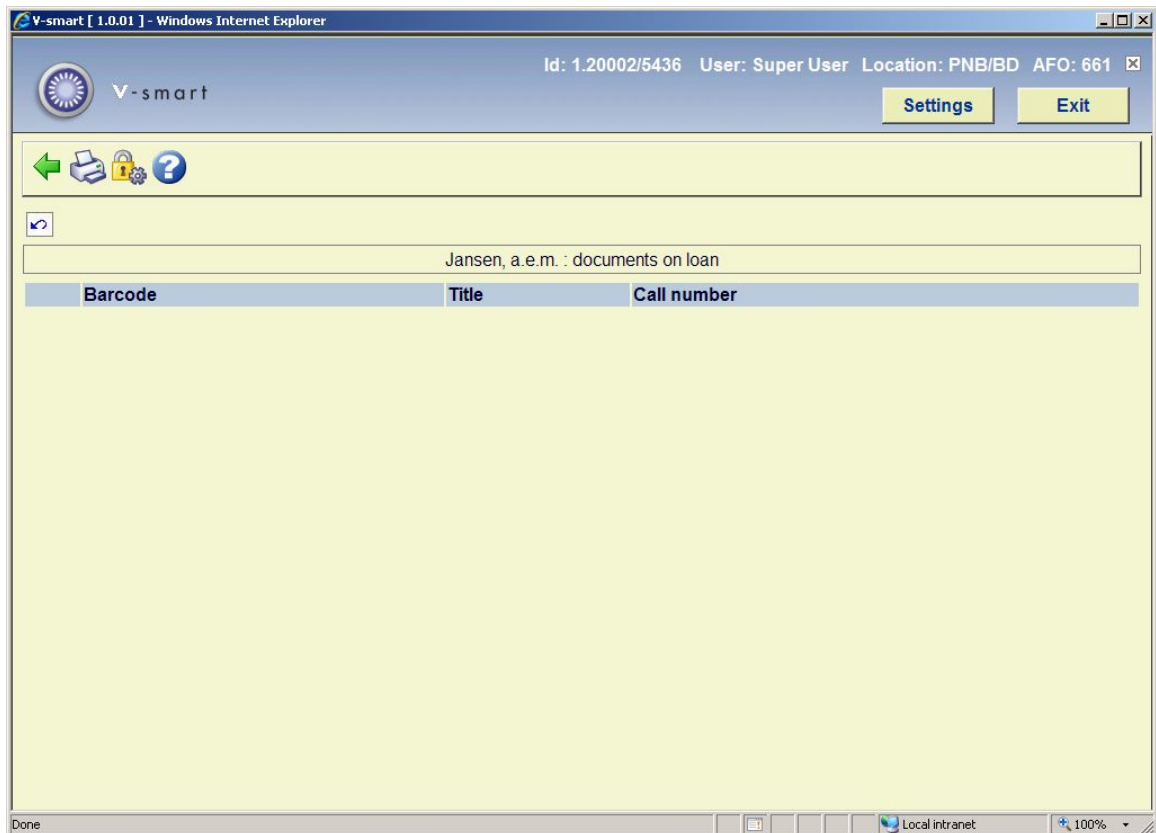
Documents to be sent to the shelve: List of documents that after a certain time {parameter} can be sent to the shelves because the users have not recovered them.
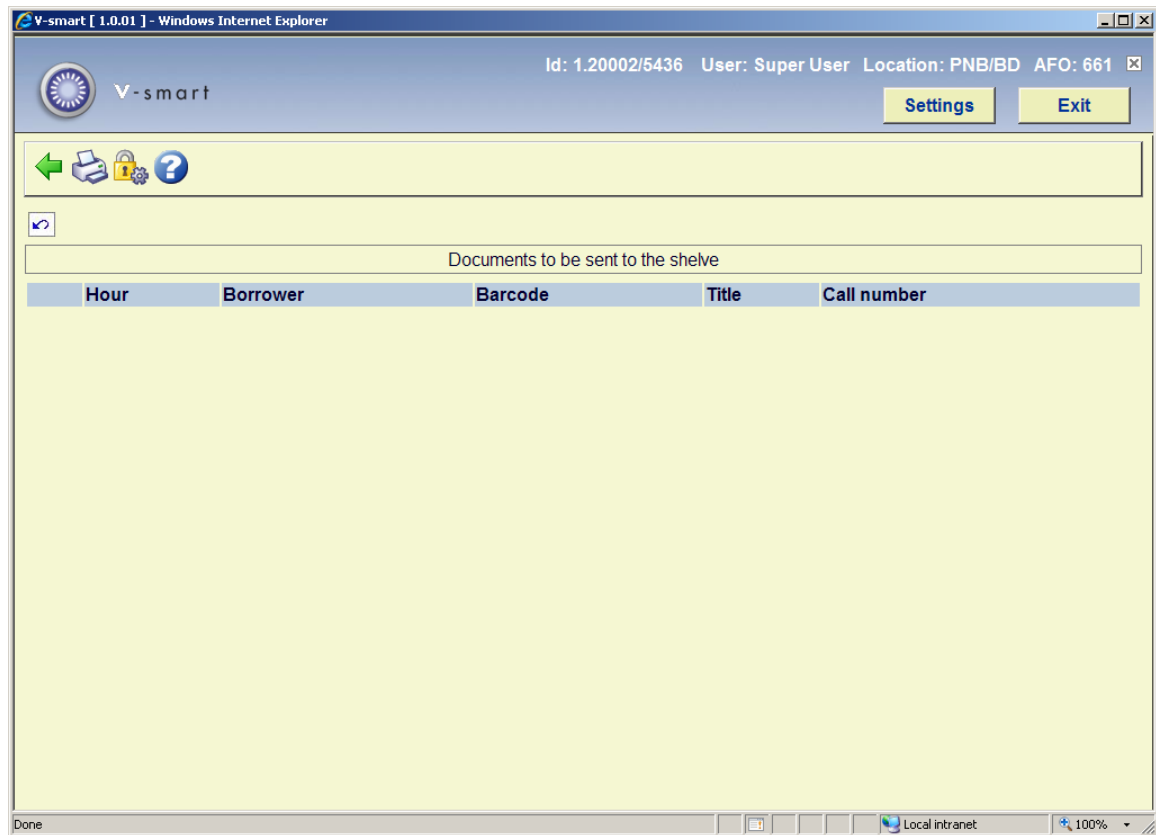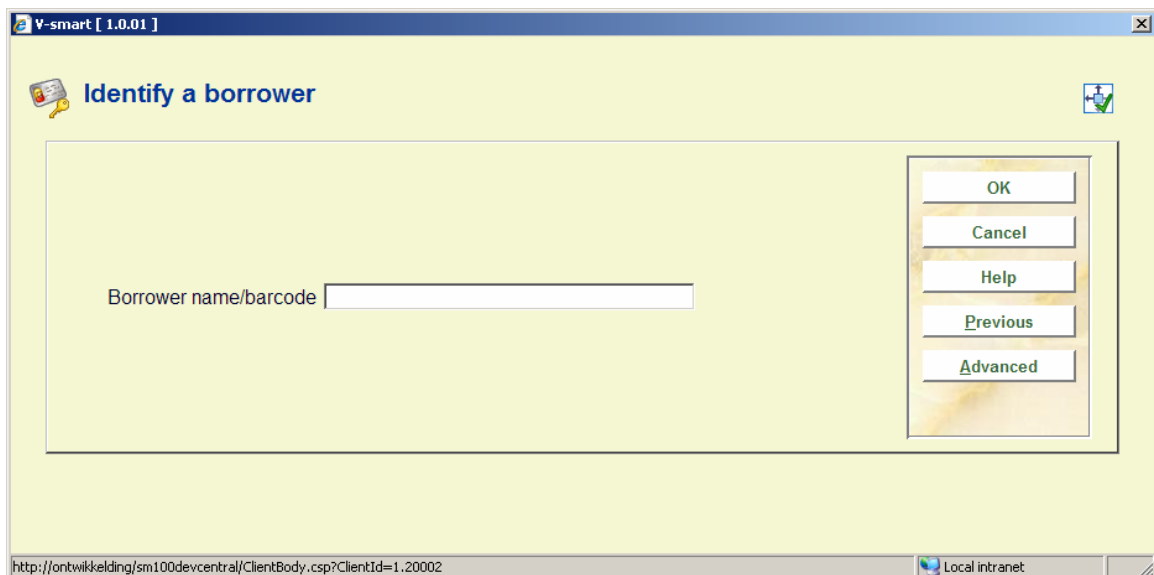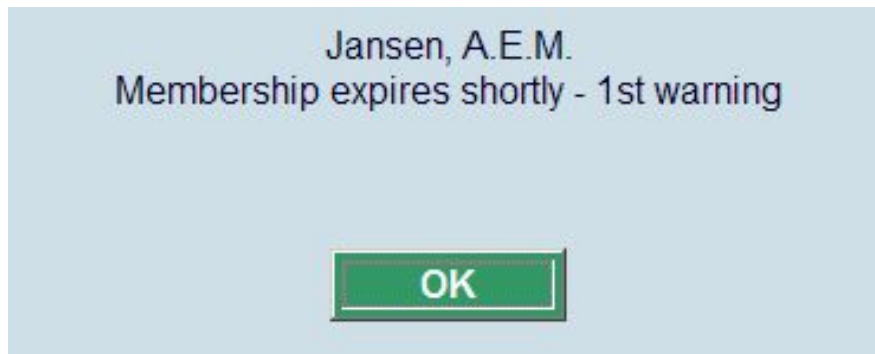

661.4 User details

After selecting this option a sub menu will be displayed:

Borrower record control: Does the borrower record checks that are done when an entry is requested, and displays the result. After selecting this option, the standard form for searching a borrower will be displayed:
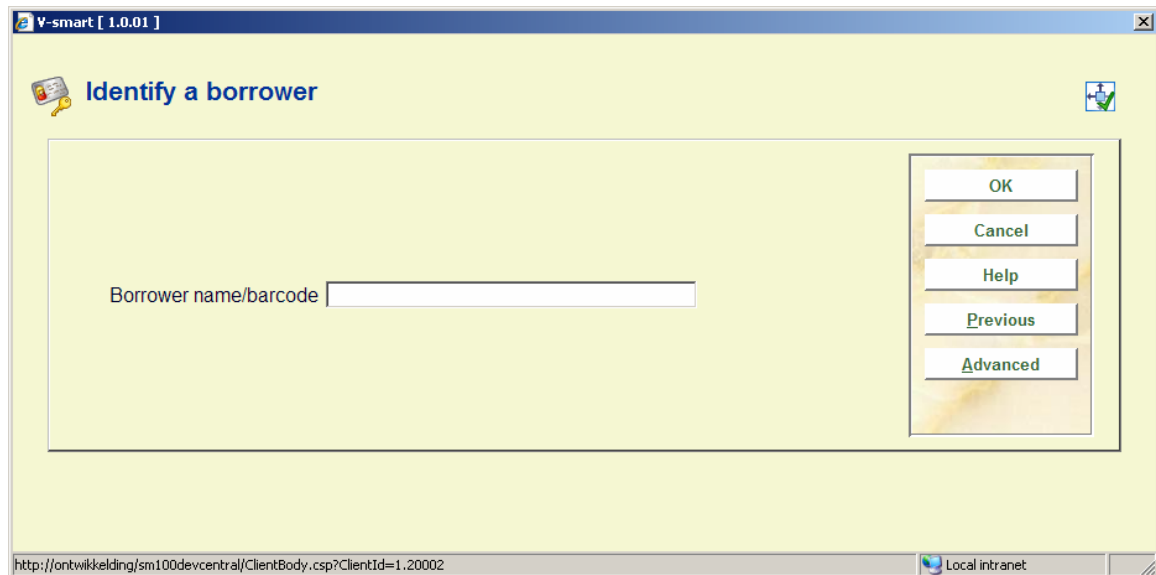

After identifying a borrower a warning may be displayed:

The warning can relate to a borrower block and/or to the fact that the borrower already has a place.

Last 3 days: Displays all entries and exits of the borrower for the last 3 days. After selecting this option, the standard form for searching a borrower will be displayed:

After identifying a borrower an overview screen will be displayed:
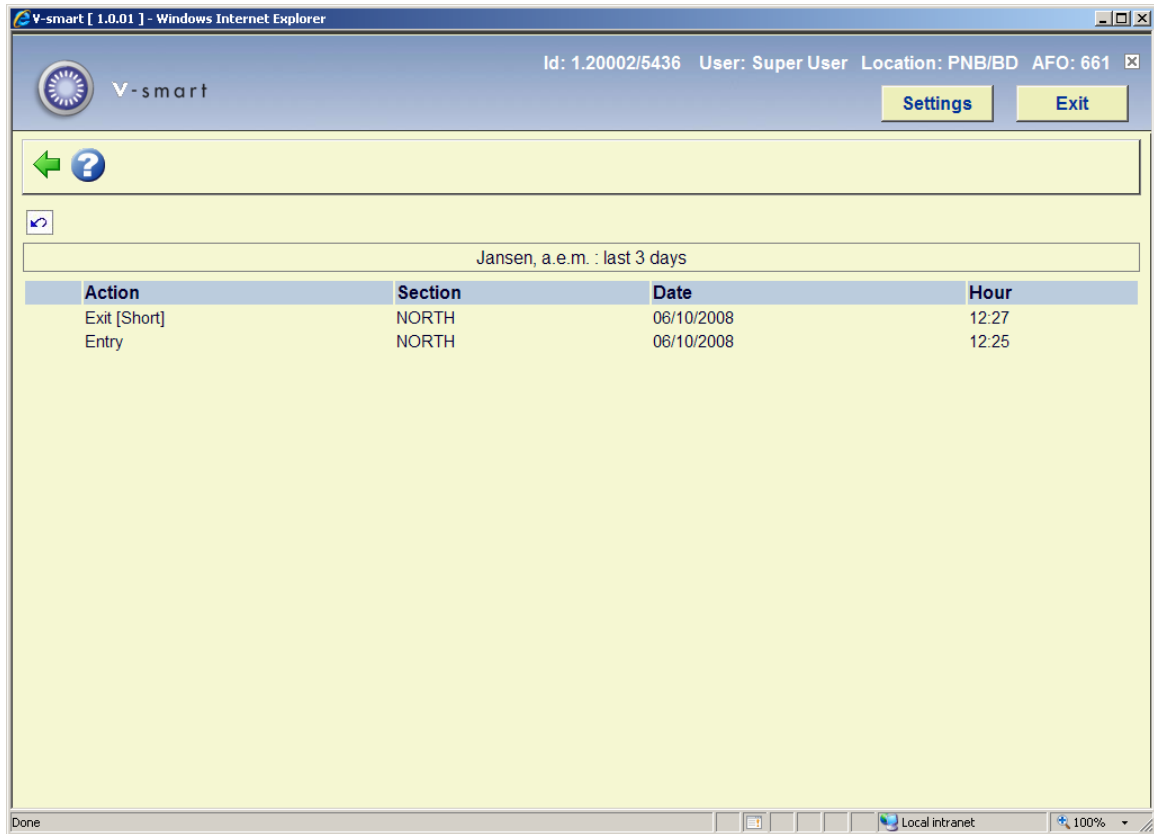
Total overview: Displays total number of entries and exists for a borrower, as well as the maximum and minimum time spent, and the date and time of the last visit. After selecting this option, the standard form for searching a borrower will be displayed:
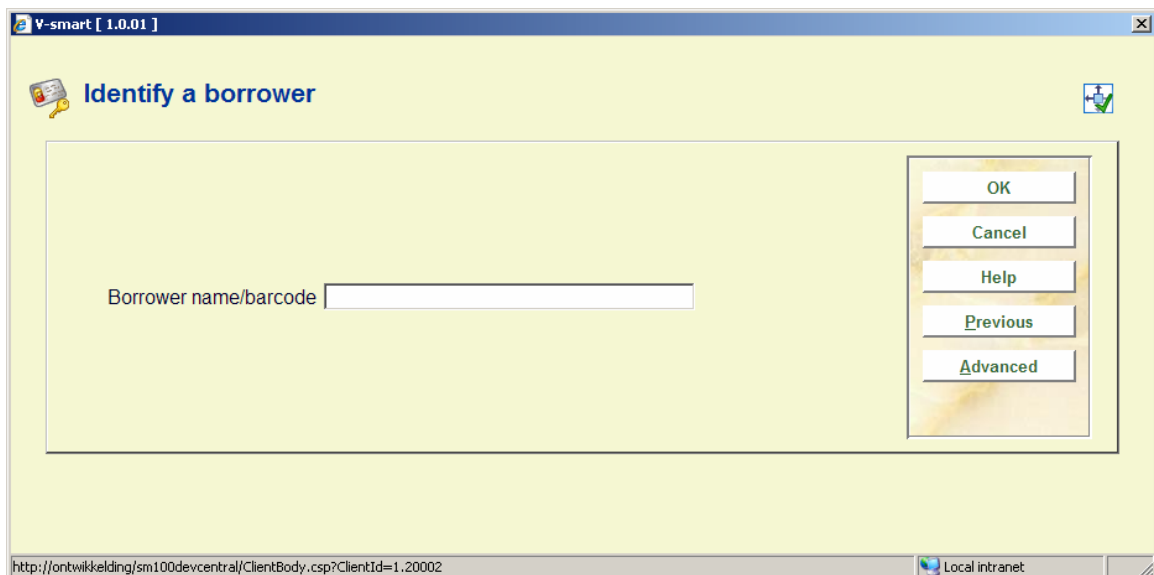
After identifying a borrower an overview screen will be displayed:

Jansen, a.e.m. : total overview

Number of entries	2
Number of accesses to an entry gate	3
Minimum time spent	0.01
Maximum time spent	0.04
Total time spent	0.06
Last gate access	06/10/2008 17:11

- **Document control - Change History**

Version	Date	Change description	Author
1.0	October 2008	creation	
1.1	January 2009	new screen shot manual control menu	