Preparing to activate SMS-LMS interoperability

Information and instructions for Ultranet Administrators

Contents

1.0 PRE-ACTIVATION

1.1 Introduction

- When interoperability is switched on the SMS becomes the master and the LMS is the slave.
- The SMS assigns an ID to all entities it passes through to the LMS. Users, groups and classes are all assigned an ID which henceforth is known to the interoperability process.
- Manually (or csv) created entities which exist in Ultranet prior to interoperability being switched on do not have these IDs and thus are not known to the SMS.

1.2 Approach to interoperability

When cutting across to Interoperability the school needs to decide to what level of management control is going to be given to the SMS.

The options are:

Option 1	**Full control to the SMS**
Effect	- Users, groups and class pages will all be managed by the SMS. - Users, groups and pages created manually will not be recognised by the interoperability process. If any of these are retained they will need to be managed manually.
Implications	When first activated this option requires a significant amount of fine tuning to: - Map existing class pages to new class pages - Get SMS IDs into the existing teacher accounts in Ultranet (MUSAC & ETAP only) - Re-create the class structure - if this has been hierarchical in the past. Once this has been done, all changes in the SMS will be reflected in the LMS i.e. new user accounts created/deleted when students enrol/leave; users added to or removed from groups in response to changes in subject options; new classes created when a new course/class is introduced.

Option 2	**Partial control to the SMS**
Effect	- Users and groups will be managed by the SMS. - Class pages created manually will be retained in the LMS in their current state with existing names.
Implications	SMS created groups will need to be associated with the manually created pages to which they need access. The SMS created groups will replace the pre-interoperability groups created in the LMS. The pre-existing groups do not have an SMS ID and are thus not known to the SMS. The SMS cannot therefore make adjustments to the group membership based on the information held in the SMS. Once this has been done, changes in the SMS will be reflected in the LMS i.e. new user accounts created/deleted when students enrol/leave, users added to or removed from groups in response to changes in subject options, new classes created when a new course/class is introduced.

Option 3	Minimal control to the SMS
Effect	- User accounts only will be managed by the SMS. - Parent accounts with access to the parent portal will be created.
Implications	- New users (students, teachers and parents) created in the SMS will automatically have a user account created in Ultranet. - Students removed from the SMS synchronisation list will automatically be removed from Ultranet as will their associated parent accounts. - New student accounts created by interoperability will need to be manually added to the appropriate groups in the LMS. - Classes and groups will be created and managed manually in the LMS as required.

1.3 Configuring the SMS

The school must:

- Be familiar with the way SMS-LMS interoperability is managed by their SMS system and know how to configure the option settings which control the data sent through by the SMS.

- Have NSNs entered into the SMS for all students. Any student without an NSN will be excluded from the data transfer.

- Know how to confirm that their SMS system has generated the set of XML messages and has deposited these in the upload folder for the LMS transport service to pick up.

- Have set up the SMS synchronisation schedule to run daily at a non-peak time.

SMS specific documentation providing detailed information has been produced by each SMS vendor.

1.4 User accounts in Ultranet

a. **Students**
- All pre-existing student user accounts in Ultranet must contain the student's SMS ID. (MUSAC refers to this as the 'Local student ID').

- The SMS ID is the key that Ultranet uses to map users created by interoperability to user accounts which pre-exist in Ultranet. Duplicate accounts will be created for any students who do not have their SMS ID recorded in their Ultranet user account.

b. **Teachers**

Similarly to students, duplicate accounts will be created for teachers if there is no SMS ID recorded in their Ultranet user account. Teacher IDs are handled differently by the different SMS systems as follows:

- KAMAR uses the 2-3 letter 'Teacher code' field as the SMS ID for teachers. If this field is entered into the SMS ID field in the teacher's Ultranet account prior to interoperability being activated then duplicates will not be created. If the teacher code

is not present in Ultranet prior to activation then the duplicate accounts can be deleted post-activation using the csv export/import process.

- MUSAC and ETAP generate an SMS ID for teachers as part of the interoperability process. As this ID cannot be obtained before interoperability is switched on, the creation of duplicate teacher accounts cannot be avoided. Once the duplicate accounts have been created, the SMS ID can be transferred to the pre-existing account and then the duplicates cleaned up using the csv export/import process.
- PC SCHOOL has an SMS ID field for teachers.

c. Parents

- Parent accounts will be created for the first time through interoperability. They will not pre-exist in Ultranet so the issue of duplicates will not arise.
- If parents are to receive email notifications of usernames and passwords and of any subsequent password changes then email addresses must exist in the SMS. Email addresses and notifications can be enabled at a later date. Refer to the document entitled 'Managing SMS-LMS Interoperability in Ultranet 2.3.4' for information on this.

Schools using KAMAR need to be aware that:

The KAMAR configuration screen has:

- An option setting to prevent parent accounts from being created twice where there is more than one child in the same family attending the school. This setting needs to be selected to prevent duplicate parents from being created.
- An option setting instructing KAMAR to ignore the salutation/title field when creating parent accounts. This setting needs to be selected if the school is enforcing a username format which includes all or part of the first name field.

Schools using MUSAC need to be aware that:

There is a setting the configuration area of the ENROL utility which needs to be selected to prevent accounts for Emergency contacts from being created in Ultranet.

1.5 Class pages

If full control is given to the SMS, duplicate class pages will be created when interoperability is switched on for the first time. This is because the classes coming across from the SMS will have their own unique ID numbers generated by the SMS, whereas the ID numbers of the pre-existing classes in Ultranet were generated independently in Ultranet.

Post-activation there is a mechanism for consolidating duplicates into a single entity in such a way that existing content is retained and the SMS recognises the old classes and does not create any further duplicates.

1.6 Configuring interoperability settings in Ultranet

Ultranet SMS-LMS Gateway settings must be defined <u>before</u> the interoperability process is activated. These configuration settings enable schools to modify some parameters in regard to the way in which Ultranet processes the data received from the SMS. Refer to the document entitled 'Managing SMS-LMS Interoperability in Ultranet 2.3.4' for more detail.

Key parameters to define in the first instance are: username format, whether a prefix is to be added to teacher and parent account IDs and whether or not usernames and passwords are automatically emailed out to users when the accounts are first created. Other settings can be applied after the initial batch is run.

2.0   POST ACTIVATION

2.1   Actions for administrators

The Ultranet administrator will need to:

- Check that the name format of the user accounts is as expected.
  If changes need to be made then the users created by the SMS can be removed from the Ultranet database (using the export/import tool), adjustments can be made to the username format setting and/or to the way data has been entered into the SMS, and the process can be run again.

- Map class pages created by the SMS, to pre-interoperability class pages which were created in Ultranet.

- Structure the class pages in a way which best meets the needs of the school by moving pages to be sub-pages of other pages e.g. several class pages nested under a 'Department' page.

- Decide whether or not groups and pages will be included in the synchronisation list from this point on and adjust the setting in the Gateway configuration screen as required.

- Check that the set of classes displayed on user dashboards is as expected.

- Upload display photos in bulk if this feature is not supported by the SMS via interoperability.

The school needs to be aware that:

- As yet, not all SMS systems are transmitting assessment data.

- As yet, not all SMS systems support the transfer of reports.

- As yet, not all SMS systems support the transfer of absence-only attendance information.

2.2   Dealing with duplicate teacher accounts

Where the SMS system does not store an SMS ID for teachers, duplicate accounts will be created when interoperability is switched on.

Once the duplicate teacher accounts have been created in Ultranet the SMS IDs can be recorded (either manually or exported on to a csv). The duplicate accounts can then be deleted and the SMS IDs entered into the existing teacher accounts in Ultranet. (NB: As there can be only one instance of an ID, the duplicate accounts will need to be deleted *before* the newly assigned SMS IDs can be entered into the original teacher accounts).

2.3   Dealing with duplicate parent accounts

If manually created parent accounts pre-exist in Ultranet the interoperability process will create a set of duplicate accounts as it does for teachers. To avoid the work involved in transferring SMS IDs to pre-existing parent accounts we recommend deleting the pre-existing accounts and creating new parent accounts via the interoperability process.

The new parent accounts will be automatically mapped to their learners and new login details can be automatically emailed out at the time that the accounts are created (or at a later date if the school is not yet ready to involve parents).

2.4   Managing class pages

Class pages and groups will be created by the interoperability process using the naming format that is used in the SMS. They will also have a hidden ID assigned that the SMS recognises.

These are likely to differ from the page and group names that have been manually created in Ultranet prior to interoperability and this can cause confusion when there are a large number of classes already in existence.

A mapping process is used to transfer the content from pre-existing Ultranet class pages to the SMS created class pages which are known to the SMS.

To minimise the mapping work required, Ultranet can be configured to ignore class pages when these are sent through from the SMS thus retaining the existing pages as they are. This will mean that class pages are not known to the interoperability process (as they do not have an interoperability assigned ID). The implication of this is that assigning access rights to the pages will need to be a manual process that will not be managed automatically by interoperability.

It is also important to be aware that class pages created by interoperability are all created at the root level. If a hierarchical structure of pages (i.e. class pages as sub pages of higher level faculty pages) pre-exists within Ultranet, then this will need to be recreated once interoperability has been activated. The functionality to move pages to lower levels of the tree exists but it is important to be aware that this is quite a time consuming undertaking in a large school with an extensive set of classes.

2.5   Managing Groups

Similarly to users and pages, the SMS creates groups based on the student-to-class relationships held in the SMS. An SMS created group is assigned an SMS ID which is known to the SMS thus enabling the SMS to manage the membership of the group.

When interoperability is activated a duplicate set of groups is created in the LMS. Whilst these groups will automatically be assigned access to the SMS created classes with which they are associated, they will not be associated with the manually (or csv) created class pages that pre-existed in the LMS.

Pre-existing groups in Ultranet do not have an SMS ID and are not known by the interoperability process. The SMS is unable to manage the movement of students in and out of these groups.