Experiment Code: ReqSpec2022

**UAM/IMS Integration**

**UAM IMS Requirements**

**Specification**

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**1 Summary**

***1.1 Background***

The University Accommodation Management system, UAM, is a specialised student housing solution. Applicants for student accommodation register by completing an online application via a link from the University website.

The Identity Management System (IMS) was introduced to the University in 2008 and is the University's system of record for identity information and primary web authentication. There is currently no automated integration between UAM and the IMS.

In order to bring some efficiency and provide a better user experience for students it is desirable to integrate the UAM system with the IMS – ensuring that a student only needs to register and update personal data in one system. Additionally, it would be beneficial to pass various affiliation information from other University systems to UAM to keep them informed of any student’s status changes.

***1.2 Scope***

The following items are considered to be in scope;

∙ Integration with the IMS for the Accommodation Application process to eliminate the need for students/applicants to register and enter personal details in more than one system.

∙ UAM Integration with IMS for any changes or updates to personal details for accommodation applicants or current students who have previously registered online.

∙ The integration of relevant Affiliations a person has with the University to UAM as they are up updated in the various downstream systems.

***1.3 Dependencies***

This project is dependent upon:

∙ ITS resource being available to do the development

∙ The accommodation package (UAM) being able to integrate suitably with the IMS

***1.4 References***

None

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***1.5 Glossary of terms***

**Term Meaning**

UAM University Accommodation Management (UAM) system is the University’s specialised student housing solution.

SAP The Student Administration Platform.

IMS The Identity Management System (IMS) is the University’s master repository for Personal Data. It stores and maintains details of all persons that the University has a relationship with, including students, staff, visitors, alumni and contractors.

AfUE Application for University Entrance. This is an application for recording applications for admission to programmes of study at the University. It interfaces with the IMS for the Personal and Contact details of the applicants.

ULN University Login Name – assigned to persons in the IMS when an Identity becomes resolved.

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**2 Solution Overview**

When a prospective or current student wants to submit an online Application for Accommodation at the University they will use the links currently provided on various web pages, e.g. the University Home page ‘Accommodation’ link, or via the Application for University Entrance (Accommodation Services link).

The solution for accommodation follows the pattern already established for similar web forms like the Application for University Entrance. Applicants visiting the Application for Accommodation for the first time will be required to register themselves in the IMS and provide all the necessary personal data. The applicant will then be transferred back to the accommodation form where their personal data will be displayed ‘read only’. A link back to the IMS will be provided in order that applicants can update personal data at any time.

Additionally, it would be useful for Accommodation staff to have basic student related information provide to UAM from other systems, to assist them in processing an applicant’s request for accommodation.

**3 Functional Specification**

***3.1 Process models***

**3.1.1 Account Registration**

Under an Integrated systems approach, the ‘Account Login’ section on the University Accommodation Home page will direct the user to the IMS for Sign in. For someone who has previously registered with the university, they can use their University ID (7 character number), ULN (if they are already a student) or the personal email address

they used to create their account. If they are new to the University then they will be taken to the IMS registration screen (for Accommodation applicants). They will be required to enter the following;

1. Email Address

2. First Name

3. Last Name

4. Password

Following completion of this form and acceptance of the terms and conditions they will be sent a confirmation email. They will be required to complete the verification by clicking on the ‘Complete Your Registration’ link and populating the following information (some of which is compulsory).

1. Title

2. Middle Names

3. Preferred Name

4. Previous Name

5. Mobile Phone Number (required)

6. Home Phone Number (required)

7. Correspondence Address (required)

8. Gender (required)

9. Date of Birth (required)

10.Citizenship (required)

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11.Residency (if not an NZ citizen)

12. Ethnicity (required)

13. Emergency Contact details (required)

14. National Student Number (NSN)

Once this page is complete the applicant can return to the Accommodation portal – Home Page and lodge an application.

Note: Where a UAM administrator enters an application on behalf of an applicant, they will need the ability to create the identity in the IMS first. Then they will enter the IMS ID number into UAM manually and push the person message from the IMS in order to populate the required personal data fields. This process for gathering personal data would also be the same for non-student accommodation residents, who are currently entered into UAM through the Administration pages.

**3.1.2 Completing an Accommodation Application – IMS Identity Data**

Once an Applicant has either logged in or registered (in the IMS) and completed their verification they can begin a new Application, by selecting the ‘My Application’ link from the home page – as they do today. The UAM system will recognize them as being logged in, receiving their credentials from the IMS, using the 7 character

unique University ID as the link between the two systems.

The Select Application page of the UAM system will look no different to how it is currently and once an applicant selects their application type and clicks on ‘Save and Continue’ - they will be transferred to the ‘Personal Details’ page. This page will be modified from what they see today, as all fields (not just ‘Family Name’ and ‘First Name’) will be display only. A link will exist on the page to ‘Update Personal Details’, which will transfer the user to the IMS (in a new browser window) where they can maintain their own data. When they return to the ‘Personal Details’ page their applicant information will be updated with whatever was saved in the IMS. This will be a near real-time update.

Similarly, with the ‘Contact Details’ page in the Accommodation Application – all fields will be read only with three separate buttons to link to different parts of the IMS for adding and/or updating Addresses, Phone & Email and Emergency Contacts details. A new browser window will be opened in the IMS on the appropriate page – and when saved will push a near-real time message to the Accommodation system to update anything that has changed.

**3.1.3 Synchronising Affiliation data**

Some affiliations (which represent the relationships a person has with the University) are displayed in the IMS. These are maintained in a number of University systems and sent via messaging to University Login Management system and LDAP (which is where the IMS is reading these from). When these affiliations are updated (or when a user is initially sent to the Accommodation system) these will be sent via message to the UAM database (for internal use only) using an Application Programming Interface (API) - supplied by UAM. This will enable administrators to have up to date information relating to an applicant’s (or current resident’s) status with the University. The Affiliations of interest to UAM are;

a. Applicant

b. Undergraduate Student

c. Postgraduate Student

d. Doctoral Student

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e. Alumni

**3.1.4 Other Student Related data**

**NCEA Test Results**

When an applicant selects the ‘School Leaver’ option on the UAM application form they will be prompted for their National Student Number (NSN) if it is not already stored against their IMS identity. Note: NSN will be included in the personal data

collection once an applicant verifies their email address, but will be optional at this stage. When an applicant proceeds to select their Accommodation Application type, and they select Option1 (School Leaver), a check on the database will be made to determine if their NSN number has been collected. If not, it will prompt them for it. When it is entered, or on confirmation that it has been entered, a web service will pull all relevant NCEA test data from the SAP database. Note: at this stage CIE and IB results sent from the Ministry of Education do not contain the NSN number so it will not be possible to collect these results automatically using the NSN number.

**Scholarship Information**

As part of the Education question in the Accommodation Application, information is gathered on whether an applicant has applied for or intends to apply for a scholarship. If an applicant has previously applied the information relating to this application is currently stored in SAP (though in the future this will be in Scholarship Management) and could be retrieved by a web service and posted directly to the UAM database via an API. The current scholarship question will be left in place, for cases where applicants intend to apply or have applied for a scholarship that is not centrally managed, i.e. some faculties manage their own scholarships.

**Photos**

All students are required to have an ID card photo entered in the university ID card system. A message is published from this system every time a new photo is added for a student. There is a requirement for the UAM system to subscribe to this message where a student is a current accommodation applicant or resident. This will update the UAM database directly via an API.

***3.2 Business Rules / Regulatory Requirements***

| **Type of**  **Rule** | **Identifier** | **Rule details** |
| --- | --- | --- |
| Regulation |  | All requirements of the Public Records Act 2004 must be observed and adhered to. |
| Regulation |  | All requirements of the Privacy Act 1993 must be observed and adhered to. |
| Regulation |  | All requirements of the University's Employment Code - Access to Personal Information policy must be observed and adhered to. |

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***3.3 Assumptions***

|  | **Assumption** |
| --- | --- |
| 1. | The Identity Management System will be the master for all personal data and will be responsible for sending any changes relating to people that the Accommodation system is interested in as they are updated or added. |

***3.4 Functional Requirements***

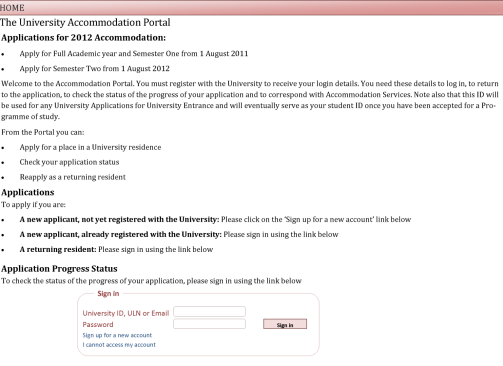
| **Requirement #** | **Requirement Description** | **Navigation** | **Dependencies / Traceability** |
| --- | --- | --- | --- |
| 1 | An Accommodation Applicant should only be required to register once with the University in order to apply for Admission to a Programme of Study and to stay in a University Residence. A single ID should be used to access both Applications and eventually be used as their Student ID once they are accepted into a Programme. |  |  |
| 2 | Personal and Contact Details required for the Accommodation Application should be created and maintained in the IMS. A user should be able to access the IMS to amend these details directly from an Application within UAM. |  |  |
| 3 | The UAM system should be updated automatically when a person (who is either an Applicant, a current  University Accommodation resident or who has been offered a place in a University residence) changes or updates their personal or contact details in the IMS. |  |  |
| 4 | The UAM system should be updated automatically when a person’s (who is either an Applicant, a current  University Accommodation resident or who has been offered a place in a University residence) affiliations with the university change. |  |  |

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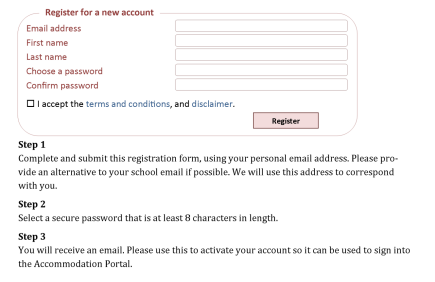
| 5 | A report is required to identify persons with current accommodation  applications who are not current students and whose applications for admission have been declined. |  |  |
| --- | --- | --- | --- |
| 6 | A report is required to identify current University residents who are no longer active students (or were never enrolled). |  |  |
| 7 | Photos from a student’s id card are required to be sent to UAM when they are added or updated in the ID card system. |  |  |
| 8 | Secondary School details and NCEA results (from Year 12 onwards) should be sourced from SAP data (and populated in the UAM database) if this available at the time an applicant completes the form – and we have received their NSN. |  |  |
| 9 | Scholarship information should be pre-populated in the UAM database, from SAP, if it exists at the time an applicant completes the form. |  |  |
| 10 | Hard Copy Applications – for those students that submit a hard-copy application, Accommodation staff require the ability to create user accounts in the IMS (on their behalf). They can then manually enter the IMS ID into UAM and then push the relevant person message from the IMS. |  |  |
| 11 | Non-Student Applications – the business require the ability to process applications for non-students also. These persons will still require the same IMS registration (entered manually by UAM staff) and be pushed from the IMS in the same way as is the case with manually entered student applicants. |  |  |

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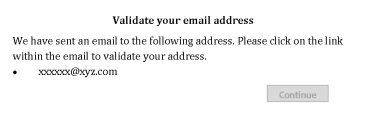
**3.4.1 Account Registration (online Student Applicants)**

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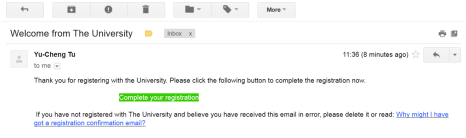
From the ‘Sign up for a new account’ link:

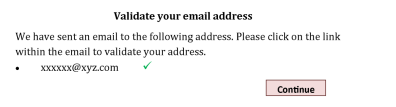
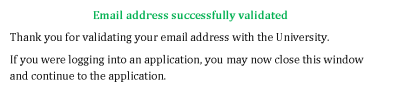


Clicking on the register Button will invoke the following message;

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Confirmation Email from IMS

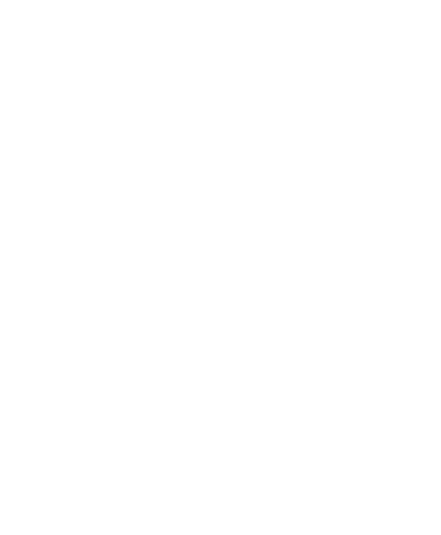
**The University**

Clicking on the ‘Complete your registration’ link will bring up the following message; 

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**Student (and potential student) Application**

Clicking on the ‘Continue’ button opens up the Personal and Contact Details Page (tbd)

**Application for Accommodation** 

\*Required fields

**Your name**

**Full legal name**

*Important: Please ensure the name reflects the legal name on passport or birth certificate* Title

\*First name

Middle names

\*Last name

**Preferred name**

*Use this section to indicate other names*

Do you have a preferred name that is different from your full legal name? ☐Yes ☐No Do you have a previous or maiden name? ☐Yes ☐No

**Your contact details**

\*Home phone ☐ Preferred Contact number

\*Mobile phone ☐ Preferred Contact number

\*Mailing address

Start typing your address. If you have an overseas address select Enter Overseas Address, or if you can’t find your NZ address, select Manually enter a NZ address.

**Enter overseas address Manually enter a NZ Address** 

or

\*Home address ☐ Same as Mailing address

**Your demographics**

\*Gender ☐Male ☐Female

\*Date of birth

\*Citizenship

\*Ethnicity

**Emergency Contact**

\*Contact Name

\*Relationship

Email

Home phone \*

Mobile phone

Work phone

Address

**Your National Student Number (NSN)**

If you are applying as a New Zealand School Leaver then please provide your NSN

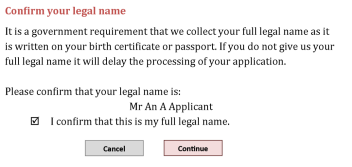
*NSNs are the unique numbers used to identify students on the New Zealand National Student Index ***Next**

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If a person selects a citizenship other than ‘New Zealand’, ‘Australia’ or ‘Cook Islands’ they are presented with this question (per the current AfUE)

\*Citizenship 

\*Are you a permanent resident of New Zealand? ☐Yes ☐No

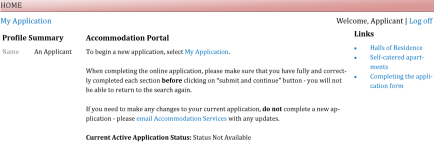
Click on Next once all Fields are populated and receive the following Confirmation message; 

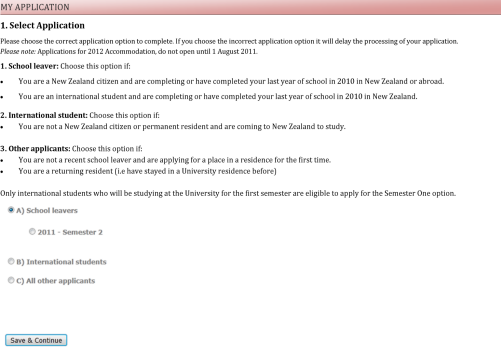
Clicking on Continue will take you into the ‘Welcome’ page (with Profile Summary in top left hand corner) of the Accommodation Application.

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**3.4.2 Completing an Accommodation Application**

Once signed in or immediately after completing the Registration steps in Section 3.4.1 an applicant will be directed to the ‘Welcome’ page.

Using the ‘My Application’ link starts the Application process.



After selecting the type of applicant you are, and selecting ‘Save & Continue’ you are presented with your personal details. Note: the Personal and Contact Details pages are the same regardless of the Application type, e.g. School Leaver, International Student, or Other Applicants.

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For Type 1 Applications (School Leavers), the following additional question should be asked, if the NSN is not already in the IMS for the applicant;

**Your National Student Number (NSN)** 

If you are applying as a New Zealand School Leaver then please provide your NSN

*NSNs are the unique numbers used to identify students on the New Zealand National Student Index ***Next**

This will enable the retrieval of any stored NCEA exam results in SAP (e.g. year 12 NCEA) for Applicants. Given the sensitive nature of this data the results should be only populated in the database tables and not displayed to the applicant.



This page would be pre-populated with data from the IMS. Click on Update personal details to go to the IMS and change or add data (see below).

Clicking on the ‘Confirm & Continue’ button will take the user to the Contact Details page.

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The Add/Update IMS buttons will take the applicant to the following IMS pages to maintain their person data;

Add/Update Address Details – IMS



Click on Update Address

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Note: When Entering an Address you can enter a Contact Name (required by Accommodation)

This is then displayed as a ‘care of’ (or c/o);

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Add Update Email & Phone – IMS



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Add / Update Emergency Contact Details – IMS



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**Other Application Information**

**1. NCEA Test Results and School Details**

Section 3 of the UAM Application (Section 4 for international applicants) requires Secondary School details and results, Proposed Tertiary Study and Scholarship information – some of which is asked for and stored in other University systems;

This is the current page in the Accommodation Application



For NZ School Leavers who have NCEA results – they will no longer be required to fill out section a) of this form – as we would have collected their NCEA result and school information from SAP at the time that entered their NSN.

However, the section will need to remain (and be re-worded accordingly). See sample below;

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**2. Scholarship Information**

Section c) of this application page should stay as it is. However, we will also be importing any SAP scholarship information (i.e. whether an applicant has applied for a scholarship, and if so, the name of the scholarship) for accommodation applicants from the new Scholarship Management system. These will only relate to centrally administered scholarships and not those managed by the faculties. The Scholarship Management online application system is currently in development and is unlikely to be available to provide this information at Go Live. Instead this integration will be turned on when Scholarship Management is implemented. Given that the above question will remain in the application form, UAM will continue to capture this information manually from applicants.

**3.4.3 Synchronising Other Personal Data**

**IMS Changes and Affiliation data**

When an affiliation (of interest to UAM) is added to or removed from a person that exists in the UAM database (i.e. a current applicant, and past or present University resident), a message should be published from the IMS and subscribed to by UAM to update the person’s record. The IMS will send all Affiliation changes to UAM for all IMS identities, but will update only those persons that exist in the UAM database, via an API. Note: UAM is interested in any change to a person’s identity record that is not captured by the processes in Section 3.4.1 and 3.4.2 of this document.

The Affiliations of interest to UAM are;

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a. Applicant

b. Undergraduate Student c. Postgraduate Student d. Doctoral Student e. Alumni

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**Photos**

Along with the affiliation data - photos should also be published to UAM, and re-sent whenever they are updated in the ID card system – for students who are current accommodation applicants or residents (as with the affiliation messages). Currently, there is an outbound message from the ID card system which UAM will subscribe to receive newly added or updated photos.

Note: Given the size of the files in relation to photos it will be necessary for the UAM administrators to clean out photos that are not required on a regular basis, e.g. for those applicants that never become residents.

**3.4.4 Reports**

Once Affiliation data is interfaced into UAM, the business will be able to better identify persons who are either currently staying at a University residence and are not entitled to (as they are no longer or never were a student) or have an outstanding accommodation application but have been refused entry to a programme of study at the University. Reports are required to be written that will use the affiliation information of a person in the UAM to determine their eligibility to accommodation.

Data required for the Report will be;

a. UAM ID number

b. UniversityID

c. Legal Name

d. Resident Status

e. Resident Year

f. Enrolment Term

g. Enrolment Status

h. Residence

i. Current Affiliations

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***3.5 Data Requirements and Transformations***

**3.5.1 Personal Details**

| **Field**  **Description** | **Field**  **Type** |  | **Req UAM Record Name** | **UAM Field**  **Name** | **IMS Record Name** | **IMS Field**  **Name** | **Comments** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Surname | Char 40 | Y | Entry | NameLast | PERSONNAME | LASTNAME Where NAMETYPE = PRI | IMS Legal last name |
| First Name | Char 40 | Y | Entry | NameFirst | PERSONNAME | FIRSTNAME Where NAMETYPE = PRI |  |
| Middle Name | Char 40? | N | Entry | NameOther? | PERSONNAME | MIDDLENAME Where NAMETYPE = PRI |  |
| Preferred Name | Char 40 | Y | Entry | NamePreferred |  | FIRSTNAME  LASTNAME Where NAMETYPE = PRF | IMS Preferred Names |
| University ID | Char 30 | Y | Entry | ID1? | PERSONEXTERNAL IDENTIFIER | IDENTIFIERVALUE  Where  .DENTIFIERTYPE = 'UniversityID' | Will be required – and  automatically populated |
| Gender | Int? | Y | Entry | GenderEnum  (Edit Table) | PERSON | GENDER | F, M or U (Issue?) |
| Date of Birth | DateTime | Y | Entry | DOB | PERSON | DATEOFBIRTH |  |
| Citizenship Status | Int? | Y | EntryDetail | Citizenship\_  CountryID? (Edit Table) | PERSON | CITIZENSHIP | Country in IMS |
| Residency | Char? | Y |  |  | PERSON | RESIDENCY |  |
| Ethnicity | Char 50 | Y | EntryDetail | Ethnicity  (Edit Table) | PERSONETHNICITY | PERSONETHNICITY | Can have multiple in IMS  Mapping (Ethnic group Code) |
| Photo | Image |  | EntryDetail | PhotoImage | ID card System:  PHOTO | CONTENT | Subscribe to ID card photo message – from ID card  system (not IMS) |

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**3.5.2 Address Details**

| **Field**  **Description** | **Field**  **Type** |  | **Req UAM Record Name** | **UAM Field**  **Name** | **IMS Record**  **Name** | **IMS Field**  **Name** | **Comments** |
| --- | --- | --- | --- | --- | --- | --- | --- |

Mailing Address (AddressTypeID =’Mailing’)

| Contact Name | Char 80 | Y | Entry  Address | Contact Name | PERSONPHYSICAL  ADDRESS | CAREOF | Where ADDRESSTYPE =  ‘Mailing’ |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Street Address | Char 80 | Y | Entry  Address | Street  (Note: Street2 also) | PERSONPHYSICAL  ADDRESS | LINE1 & LINE2 & LINE3 & LINE4 |  |
| Suburb | Char 80 |  | Entry  Address | Street2? | PERSONPHYSICAL  ADDRESS | SUBURB |  |
| City/Town | Char 60 | Y | Entry  Address |  | PERSONPHYSICAL  ADDRESS | CITY |  |
| Region | Char 60 | Y | Entry  Address | StateProvince?  (Edit Table) | PERSONPHYSICAL  ADDRESS | COUNTY or STATE |  |
| Country | Int | Y | Entry  Address | Country\_ID  (Edit table) | PERSONPHYSICAL  ADDRESS | COUNTRY |  |
| Postal Code | Char 10 | Y | Entry  Address | ZipPostcode | PERSONPHYSICAL  ADDRESS | POSTALCODE |  |

Phone and Email

| Telephone  Number | Char 25 | Y | Entry  Address | Phone | PERSONPHONE | AREACODE||  PHONENUMBER | Where PHONETYPE =  ‘Semester’? Or ‘Other’? or ‘Home’ |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Preferred Flag? |  |  |  |  | PERSONPHONE | ORDERPREFERENCE | Where PHONETYPE =  ‘Semester’? Or ‘Other’? or ‘Home’ and ORDERPREFERENCE = 1 |
| Mobile Phone | Char 25 |  | Entry  Address | PhoneMobileCell | PERSONPHONE | AREACODE||  PHONENUMBER | Where PHONETYPE = ‘Cellular’ |

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| Preferred Flag? |  |  |  |  | PERSONPHONE | ORDERPREFERENCE | Where PHONETYPE = ‘Cellular’ ORDERPREFERENCE = 1 |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Email | Char 100 |  | Entry  Address | Email | PERSONEMAIL  ADDRESS | EMAIL | Where EMAILYPE = ‘Home’? \*\*\* Allow it to be editable? |

Home Address (AddressTypeID =’Home’)

| Contact Name | Char 80 | Y | Entry  Address | Contact Name | PERSONPHYSICAL  ADDRESS | CAREOF | Where ADDRESSTYPE = ‘Home’ |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Street Address | Char 80 | Y | Entry  Address | Street  (Note: Street2 also) | PERSONPHYSICAL  ADDRESS | LINE1 & LINE2 & LINE3 & LINE4 |  |
| Suburb | Char 80 | Y | Entry  Address | Street2? | PERSONPHYSICAL  ADDRESS | SUBURB |  |
| City/Town | Char 60 | Y | Entry  Address |  | PERSONPHYSICAL  ADDRESS | CITY |  |
| Region | Char 60 | Y | Entry  Address | StateProvince?  (Edit Table) | PERSONPHYSICAL  ADDRESS | COUNTY or STATE |  |
| Country | Int | N | Entry  Address | Country\_ID (Edit table) | PERSONPHYSICAL  ADDRESS | COUNTRY |  |
| Postal Code | Char 10 | Y | Entry  Address | ZipPostcode | PERSONPHYSICAL  ADDRESS | POSTALCODE |  |

**3.5.3 Emergency Contact Address**

| Contact Name | Char 80 | Y | Entry  Address | Contact Name | PERSONEMERGENCY CONTACT | CONTACTNAME |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Emergency Contact Relationship | Char 50 | Y | Entry  Address | Relationship | PERSONEMERGENCY CONTACT | RELATIONSHIP | Mapping required?  See IMS Values below |
| Street Address | Char 80 | Y | Entry  Address | Street | PERSONEMERGENCY CONTACT | CONTACTCAREOF|| CONTACTBUILDING CONTACTSTREET | Note: each field has 50  characters! |

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| Suburb | Char 80 | N | Entry  Address | Street2? | PERSONEMERGENCY CONTACT | CONTACTSUBURB |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| City/Town | Char 60 | Y | Entry  Address |  | PERSONEMERGENCY CONTACT | CONTACTCITY |  |
| Region | Char 60 | Y | Entry  Address | StateProvince?  (Edit Table) | PERSONEMERGENCY CONTACT | CONTACTCOUNTY or CONTACTSTATE |  |
| Country | Int | Y | Entry  Address | Country\_ID  (Edit Table) | PERSONEMERGENCY CONTACT | CONTACTCOUNTRY |  |
| Postal Code | Char 10 | Y | Entry  Address | ZipPostcode | PERSONEMERGENCY CONTACT | POSTALCODE |  |
| Telephone  Number | Char 25 | Y | Entry  Address | Phone | PERSONEMERGENCY CONTACT | PHONEAREACODE|| PHONENUMBER | Where PHONETYPE = ???  (Home or Work) |
| Mobile Phone | Char | N | Entry  Address | PhoneMobileCell | PERSONEMERGENCY CONTACT | PHONEAREACODE|| PHONENUMBER | Where PHONETYPE =  ‘Mobile’ |
| Email | Char | N | Entry  Address | Email | PERSONEMERGENCY CONTACT | EMAIL??? |  |

**3.5.4 School Details and NCEA Results**

| **Field**  **Description** | **Field**  **Type** |  | **Req UAM Record Name** | **UAM Field**  **Name** | **SAP Record**  **Name** | **SAP Field Name** | **Comments** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| NSN |  | Y |  |  | SAD\_NCEA\_S\_NZL | SCC\_NSN |  |
| School Name |  |  |  |  | EXT\_ORG\_TBL | DESCR |  |
| Last Year of  School |  |  |  |  | SAD\_NCEA\_S\_NZL | SAD\_UEBS\_YEAR |  |
| NCEA level |  |  |  |  | SAD\_NCEA\_STDNZL | SAD\_NCEA\_LEVEL |  |
| Subject |  |  |  |  | SAD\_NCEA\_STDNZL | TEST\_COMPONENT |  |

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| Standard? |  |  |  |  | SAD\_NCEA\_STDNZL | SAD\_NCEA\_STD\_CODE |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Result? |  |  |  |  | SAD\_NCEA\_STDNZL | SAD\_NCEA\_RESULT |  |

**3.5.5 Affiliations**

| **Field**  **Description** | **Field**  **Type** |  | **Req UAM Record Name** | **UAM Field**  **Name** | **LDAP Record Name** | **LDAP Field**  **Name** | **Comments** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Student ID |  |  |  |  | ? | EMPLID |  |
| Affiliation? |  |  |  |  | ? | GROUP? | Affiliation values such as  APPLICANT, ALUMNI,  DOCTORATE, POSTRAG,  UNDERGARD |

**3.5.6 Scholarship Information**

| **Field**  **Description** | **Field**  **Type** |  | **Req UAM Record Name** | **UAM Field**  **Name** | **SAP Record**  **Name** | **SAP Field Name** | **Comments** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Student ID |  |  |  |  | RSH\_AWDSTAT\_ANZ | EMPLID |  |
| Year |  |  |  |  | RSH\_AWDSTAT\_ANZ | RSH\_OFFER\_YEAR |  |
| Status |  |  |  |  | RSH\_AWDSTAT\_ANZ | RSH\_SCHOLAR\_STATUS | e.g. Applied, Active, Offer etc |
| Description |  |  |  |  | RSH\_SCH\_DTL\_ANZ | RSH\_DESCRFORMAL | Description of Scholarship |

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**3.5.7 Reports**

| **Field**  **Description** | **Field Type** | **UAM Record Name** | **UAM Field Name** | **Comments** |
| --- | --- | --- | --- | --- |
| Entry ID | Int | Entry | EntryID | 7 character code (sent from IMS) |
| Legal Name | Char 40 | Entry | NameFirst|| NameOther ||NameLast | Concatenate Name fields (40 characters each) |
| Resident Status | Char 50 | EntryDetail | ResidentStatus |  |
| Resident Year | Char 50 | EntryDetail | ResidentYear |  |
| Enrolment Term | Char 50 | EntryDetail | EnrollmentTerm |  |
| Enrolment Status | Char 50 | EntryDetail | EnrollmentStatus |  |
| Residence |  | ??? |  | Current Residence |
| Affiliations | Char 12 |  |  |  |

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**3.5.8 Configuration Data**

**3.5.8.1 IMS Relationship Values:**

Currently the Accommodation application has a free text field for the description of an applicant’s relationship to their Emergency Contact. The IMS Emergency Contact is validated against the following ‘relationship’ values;

**Relationship Descriptions**

1. Aunt

2. Brother

3. Daughter

4. Employee

5. ExSpouse

6. Father

7. Father-in-Law

8. Flatmate

9. Friend

10. Grandchild

11. Grandfather

12. Grandmother

13. Guardian

14. Mother

15. Mother-in-Law

16. Neighbour

17. Nephew

18. Niece

19. Non-Qualified Adult

20. Other

21. Other Relative

22. Partner

23.Self

24.Sister

25.Son

26.Spouse

27. Uncle

**3.5.8.2 Ethnicity**

Below is a comparison of the Ethnicity values in the IMS and the current UAM application. UAM will be required to bring their values in line with the IMS.

| **IMS Value** | **UAM Value** | **Comments** |
| --- | --- | --- |
| Australian | Australian |  |
| British and Irish | British | UAM has these listed separately |
| Cambodian | Cambodian |  |
| Chinese | Chinese |  |
| Cook Island Maori | Cook Island Maori |  |
| Dutch | Dutch |  |
| Fijian | Fijian |  |

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| Filipino | Filipino |  |
| --- | --- | --- |
| German | German |  |
| Greek | Greek |  |
| Indian | Indian |  |
|  | Irish | See above |
| Italian | Italian |  |
| Japanese | Japanese |  |
| Korean | Korean |  |
| Latin American/Hispanic | Latin American/Hispanic |  |
|  | Malaysian | Not in IMS |
| Middle Eastern | Middle Eastern |  |
| Niuean | Niuean |  |
| North American | North American |  |
| NZ European/Pakeha | NZ European/Pakeha |  |
| NZ Maori | NZ Maori |  |
| No Response |  | Not in UAM |
| Other |  | Not in UAM |
| Other African | Other African |  |
| Other Asian | Other Asian |  |
| Other European | Other European |  |
| Other Pacific Island | Other Pacific Island |  |
| Other South East Asian | Other South East Asian |  |
| Polish | Polish |  |
| African | South African/African | No South African group in IMS |
|  | South African/European | No South African group in IMS |
| Samoan |  | No Samoan group in UAM |
| South Slav | South Slav |  |
| Sri Lankan | Sri Lankan |  |
| Tokelauan | Tokelauan |  |
| Tongan | Tongan |  |
| Vietnamese | Vietnamese |  |

**3.5.8.3 Citizenship & Residency**

In UAM there are currently only 4 Citizenship Groups;

1. NZ Citizen

2. Australia Citizen

3. Permanent Resident

4. Overseas

In the IMS Citizenship equates to the Country Code on an individual’s passport – currently there are 255 country codes (per SAP Country table). The residency will be derived from the Citizenship (in the IMS), i.e. New Zealand and Australian citizens will be given residency of NZ and Australia. All other persons will be required to disclose whether or not they are permanent residents or if not, they will be deemed to be ‘Overseas’.

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**3.5.8.4 Address Regions**

In UAM there are currently only 16 Regions available against the physical address. These are;

1. Auckland

2. Bay of Plenty

3. Canterbury

4. Gisborne

5. Hawkes Bay

6. International

7. Manawatu Wanganui

8. Marlborough

9. Nelson

10. Northland

11. Otago

12.Southland

13. Taranaki

14. Waikato

15. Wellington

16. West Coast

In the IMS there is no Region validation. Instead, for NZ address there is in-built validation as you enter the address. For some foreign address there is State or County validation based on the country selected.

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***3.6 Configuration Requirements***

Given the difference in some of the values stored in the IMS for Countries, Citizenship and Ethnicity, it will be necessary to change the current edit table values in UAM to be in alignment. Additionally, if the affiliation is to be brought into UAM there may be some configuration required to store these.

***3.7 Non-Functional Requirements***

**3.7.1 Security**

With the change to have users sign into the UAM Application using their IMS credentials, the sign-on security within UAM will have to be re-written to accept the IMS ID and passwords. It will be no less secure than it is currently and there should be no need for any change to roles and security profiles within UAM. This will be detailed as part of technical specification.

**3.7.2 Performance**

A change to master login information and personal and contact data within the IMS adds extra complexity and with it, potential for performance degradation. Any web service or messaging from the IMS to UAM should happen in near-real time, as it does with similar interfaces between the IMS and the AfUE or IMS and SAP. The users should not notice that they are in fact in another system and any transferring between the two should be seamless.

**3.7.3 Training**

Training will be required for UAM staff in regards to how the IMS should be used by Accommodation Applicants. There may be additional affiliation functionality within UAM that staff need to be trained in also.

**3.7.4 User Documentation**

This specification will provide the necessary information for staff to understand any new functionality and how the Application process will work once integrated with the IMS.

**3.7.5 On-going support and maintenance**

The UAM system is currently and will continue to be supported by SMS. The Integration with the IMS will be supported by IT Service.

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**3.7.6 Technical Approach – API’s and Web Services**

The UAM system has a number of Application Programming Interfaces (API) available to load data from external systems. UAM will subscribe to the existing IMS Person message2 using the University’s Enterprise Service Bus (ESB) to create a web service to pass and filter the data coming from the IMS, which will then be processed by the relevant API.

***3.8 Testing***

**3.8.1 Test Scenarios**

| **Req #** | **Test Scenario** | **Expected Outcome** |
| --- | --- | --- |
| 1 | Add a new Accommodation Application for a new user – not previously  registered with the University | Accommodation Application submitted – UAM and IMS are linked using the University ID |
| 2 | Modify an Accommodation Application for a new Applicant using IMS credentials to log in | Can access Accommodation Application using IMS login credentials |
| 2 | Add an Accommodation Application for a user who has previously filed an  application in the AfUE – and does not have all the necessary personal and contact details in the IMS | Can create an Accommodation  Application and required fields show up on the personal and contact details pages in the UAM application. |
| 2 | Add an Accommodation Application for a user who was a Friend of the university and already has an University ID and password | Can create an Accommodation  Application and required fields show up on the personal and contact details pages in the UAM application. |
| 2 | Change some personal details for an Applicant while completing step1 of the UAM application | Personal detail changes can be made from using the link to the IMS. Upon save the user is returned to the UAM  Accommodation Application where the changes are reflected on the personal Details Page. |
| 2 | Change some contact details for an Applicant while completing step2 of the UAM application | Contact detail changes can be made from using the link to the IMS. Upon save the user is returned to the UAM Accommodation Application where the  changes are reflected on the Contact Details Page. |
| 3 | Change some personal details for an Applicant directly in the IMS | Personal detail changes are sent to UAM and update the database. |
| 3 | Change some contact details for an Applicant directly in the IMS | Contact detail changes are sent to UAM and update the database. |
| 4 | Change an applicant’s affiliations from applicant to student | Personal detail changes are sent to UAM and update the database. |

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| 4,5 | Remove an accommodation applicant’s ‘applicant’ affiliation in SAP, i.e. change their Programme Status to ensure it is NOT one of the following;  AD(Approved)  AP(Pending)  PM(Prematriculant)  WT(Waitlisted)  Then run the Affiliation Report | Personal detail changes are sent to UAM and update the database. The report runs successfully and shows the applicant whose status has changed. |
| --- | --- | --- |
| 4,6 | Drop a student (who is currently in a University Residence) from their  programme of study. Then run the Affiliation Report | Personal detail changes are sent to UAM and update the database. The report runs successfully and shows the applicant who has been dropped. |
| 11 | Create an application for a NCEA student | The Education page of the application will not ask for secondary school details |
| 11 | Create an application for a CIE student | The secondary school details and results questions on the Education page of the application will be  displayed |
| 10 | Upload a photo for an accommodation applicant, in the ID card system | A photo will be sent to the UAM database for an existing applicant |
| 12 | Enter a scholarship application in SAP for a person who has an active  accommodation application. | Scholarship information will be passed from SAP into the UAM database. |

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**4 Approval and Change Control**

| **Version #** | **Description of Change** | | | **Author** |
| --- | --- | --- | --- | --- |
| 1.0 | Initial draft | | |  |
| 2.0 | Update following meetings with Accommodation staff | | |  |
| 3.0 | Update following meeting with Development and Solutions Architects staff | | |  |
| 4.0 | Update following conversations with the Integration Architecture office | | |  |
| **Review** | | | | |
| **Date** | | **Name and Position** | | |
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| **Approval** | | | | |
| **Date** | | **Name and Position** | **Signed** | |
|  | |  |  | |

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