Software Requirements Specification

Auto Creation of Staff Email
Project No. XAUN0002

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## 1. Project Team

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2. Overall Description

2.1 Description of Need

There is currently no policy requiring all students, faculty and staff to have an email ID. Consequently, while most faculty members have an email ID, many students and staff do not. Furthermore, there is no automatic “registration” of the individual’s email address in the official University directory, and it is only available if the individual voluntarily registers the email ID. Both of these facts contribute to poor quality of the email addresses in the directory and result in incomplete distribution of electronic communication.

The University is constantly attempting to reduce costs, improve efficiency and improve service to our students and employees. Electronic communication is timelier and less expensive than paper and oral communication. Furthermore, electronic communication supports President Todd’s philosophy of openness and transparency. Consequently, it is not surprising there has been an increase in requests for custom lists of email addresses and electronic distribution of official University communications. Given the policy issues noted above, and this increase in demand for electronic communication, the poor data quality of email addresses in the University directory will become increasingly problematic.

After some study, an email committee made the following recommendations concerning the above problems.

- Email is the primary mechanism for official communication within the University, except for strictly personal communications, and is only supplemented by other forms of official communications as required.
- A UK email address should automatically be assigned to all employees when they are hired. The address should be a UK approved “uky.edu” email address.
- The policy requiring an email ID should include all current and new employees: faculty and staff; regular and temporary; full-time, part-time and half-time; STEPS employees, post-docs, house-staff and if financially viable, all retirees.

This project is being undertaken to implement a system to automatically identify newly hired employees and to generate an email ID for them, as well as identify all existing employees who do not have U-Connect (NIMS server) email accounts. This information will then be communicated to Human Resources so they may notify the employee.

If this project is not undertaken, electronic communication at the University will never achieve the full benefits of such communication.

2.2 Product Functions

The major functions of the new system include:
- Identify new faculty or staff assignments
- Create u-connect mail IDs in UAMS
- Extract login information created for the u-connect mail account and return it to the appropriate area.

2.3 User Classes

The creation of the staff email accounts will be a series of batch processes, therefore, no user interface will be created.
2.4 Operating Environment

This system will need to query an Oracle database to identify newly hired faculty and staff. It will then insert records into a Microsoft SQL Server database. A comma-delimited output file will be generated of the newly created email IDs and returned to designated areas.

2.5 Design/Implementation Constraints

3. External Interface Requirements

3.1 User Interfaces

There will be no user interface to this system. It will operate in a batch mode on a regularly scheduled basis.

3.2 Software Interfaces

This system will extract information from the Oracle HRS extracts on UKWH, generate records in the SQL Server Repository database on Europa, and generate a flat file of created IDs from the Repository database.

4. System Features

4.1 Identify Newly Hired Employees

4.1.1 Description and Priority

Newly hired employees need to be identified and their UKID, name, department number and the prime department address captured for input to the email ID creation process. New employees include everyone with a new active HRS prime assignment who is not a retiree.

4.1.2 Action/Response Sequences

This will be a batch process that will run on a regularly scheduled basis. According to the Email Requirement Procedures document, automatic creation of the U-Connect logon ID will take place either 7 days prior to the assignment start date entered on Screen 016 in HRS, or the day after the date of entry in HRS, whichever is earliest.

4.1.3 Functional Requirements

REQ-4.1.3.1:
Locate newly hired employees. The process should identify employees either 7 days prior to their assignment start date or within a day after the date of entry in HRS, whichever is earliest. (I do not see an entry date field in the HRS Oracle extract.)

Can the system identify if an assignment has been picked up already, or do we just pull the information and then when we get to UAMS find they already have a U-Connect logon ID?

Assignment table, PRIMEASSIGNCD = “Y”, ASSIGNBEGDT, UKID, DEPTNO.
REQ-4.1.3.2:
Find the prime department address for the employee identified in REQ-4.1.3.1.
Dept table, ADDR1, ADDR2, ADDR3, DEPTNO, DEPTNAME, ZIPCD.

REQ-4.1.3.3:
Find the employee name for each prime assignment identified in REQ-4.1.3.1.
UKID, LASTNAME, FIRSTNAME in the PERSON table.

REQ-4.1.3.4:
Capture the UKID, LASTNAME, FIRSTNAME, DEPTNO, ADDR1, ADDR2, ADDR3, ZIPCD and DEPTNAME to use to create NIMS email account requests within UAMS.

4.2 Create Email IDs for New Hires

4.2.1 Description and Priority
For each UKID of newly hired employees, create a login owner and login record in UAMS if not there. Also create a server login ‘add’ record for the NIMS server for each UKID if an active ID does not already exist.

Following is a general overview of the UAMS application. The LoginOwner table has one row in it for each person with computer accounts. Each LoginOwner may have zero or more rows in the Login table. Each row in the Login table corresponds to a Login ID (LoginId) which must be unique. Therefore no two people are allowed to have the same LoginId. Each LoginId may be valid on zero or more Servers. There is one row in the SvrLogin table for each Server that a particular LoginId is valid for. The list of possible Servers is contained in the Server table. Each Server is identified by a unique Server Code (SvrCd).

Action codes:
M Modify, one or more informational fields for this server login have changed.
P Password reset, the password for this server login should be reset as per the password field
A Add
D Delete
V Activate
I Inactivate
S Suspend
N NOP, used to abort a scheduled Action

Status codes:
N Newly inserted SvrLogin row, status undefined
A Active, the user is allowed to login and use this SvrLogin
S Suspended, the user is not allowed to login until the administrative suspension is cleared
I Inactive, the user is not allowed to login until SvrLogin is reactivated
D Marked for Deletion, user is not allowed to login, server will delete this login

Processed codes:
R Ready, this server login record is ready to be processed by the server’s autoids procedure
I In process, this server login record has been picked up for processing by the server’s autoids procedure
P Processed, this server login record has been processed by the server’s autoids procedure and no activity is pending. However, this does not necessarily mean that the processing was successful. Check return code for that information.
4.2.2 Action/Response Sequences
Again, this is a batch process that will run on a regularly scheduled basis upon completion of the process described in section 4.1.

4.2.3 Functional Requirements

REQ-4.2.3.1:
Look in the UAMS system for each new employee and see if they have an active “NIMS” server account. If this is true, no further action is needed.

SvrLogIn table, SvrCd = NIMS and StatCd = A.

REQ-4.2.3.2:
If the NIMS server record does not exist, the system should create one. However, it must first create both a login owner record and login record.

REQ-4.2.3.3:
If a NIMS server account exists but is not active, the system should generate an activation request. However, if the account exists but is suspended no further action should be taken for this individual other than writing the information to an exception report.

REQ-4.2.3.4:
The NIMS server accounts are not created immediately should be there within 30 minutes. The system needs to be scheduled to execute a process, sometime after the initial adds and activates, to check that the NIMS server successfully processed the requests. A ‘P’ processed code indicates that the record has been processed by the server. However, the system would also need to check the return code to verify a successful process.

If the account request was not successfully processed, generate an error report and send it to accounts@lsv.uky.edu.

4.3 Extract Email IDs for New Hires

4.3.1 Description and Priority
Once NIMS server accounts have been processed, the system should extract the login ID and send it to Human Resources, along with the employee UKID, LASTNAME, FIRSTNAME, DEPTNO, ADDR1, ADDR2, ADDR3, ZIPCD and DEPTNAME, so they may generate appropriate correspondence to the employees.

4.3.2 Action/Response Sequences
This is a regularly scheduled batch function that will run a specified time after completion of section 4.2.

4.3.3 Functional Requirements

REQ-4.3.3.1:
Extract the following information, put it in a comma-delimited file and send to ??? in HR.
- UKID
- LASTNAME
- FIRSTNAME
- DEPTNO
- ADDR1
- ADDR2
- ADDR3
- ZIPCD
- DEPTNAME.
4.4 Identify Existing Employees without NIMS

4.4.1 Description and Priority
Those existing employees who do not have U-Connect (NIMS server) accounts must be identified so that U-Connect logon IDs may be created for them.

4.4.2 Action/Response Sequences
This will be a batch process that will run one time.

4.4.3 Functional Requirements

REQ-4.4.3.1:
The system must generate a list of current UK employees, including everyone with an active HRS prime assignment who is not a retiree.

REQ-4.4.3.2:
The system will then look in UAMS for each employee and determine if they have a current, active NIMS account. If they do, do nothing further for this employee. All employees without a current, active U-Connect logon ID will be captured and input to the process in the next section.

4.5 Create Email IDs for Existing Employees

4.5.1 Description and Priority
For each UKID of existing employees without NIMS accounts, create a login owner and login record in UAMS if not there. Also create a server login ‘add’ record for the NIMS server for each UKID if it does not already exist.

Following is a general overview of the UAMS application. The LoginOwner table has one row in it for each person with computer accounts. Each LoginOwner may have zero or more rows in the Login table. Each row in the Login table corresponds to a Login ID (LoginId) which must be unique. Therefore no two people are allowed to have the same LoginId. Each LoginId may be valid on zero or more Servers. There is one row in the SvrLogin table for each Server that a particular LoginId is valid for. The list of possible Servers is contained in the Server table. Each Server is identified by a unique Server Code (SvrCd).

Action codes:
M Modify, one or more informational fields for this server login have changed.
P Password reset, the password for this server login should be reset as per the password field
A Add
D Delete
V Activate
I Inactivate
S Suspend
N NOP, used to abort a scheduled Action

Status codes:
N Newly inserted SvrLogin row, status undefined
A Active, the user is allowed to login and use this SvrLogin
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D Marked for Deletion, user is not allowed to login, server will delete this login

Processed codes:
R Ready, this server login record is ready to be processed by the server’s autoids procedure
I  In process, this server login record has been picked up for processing by the server’s autoids procedure
P  Processed, this server login record has been processed by the server’s autoids procedure and no activity is pending. However, this does not necessarily mean that the processing was successful. Check return code for that information.

4.5.2 Action/Response Sequences
Again, this is a batch process that will run upon completion of the process described in section 4.4.

4.5.3 Functional Requirements
REQ-4.5.3.1:
If the NIMS server record (u-connect login ID) does not exist for this employee, the system should create one. However, it must first create both a login owner record and login record if they do not already exist.

REQ-4.5.3.2:
If a NIMS account exists but is not active, the system should generate an activation request. However, if the account exists but is suspended no further action should be taken for this individual other than writing the information to an exception report.

REQ-4.5.3.3:
The NIMS server accounts are not created immediately should be there within 30 minutes. The system needs to be scheduled to execute a process, sometime after the initial adds and activates, to check that the NIMS server successfully processed the requests. A ‘P’ processed code indicates that the record has been processed by the server. However, the system would also need to check the return code to verify a successful process.

If the account request was not successfully processed, generate an error report, and send it to accounts@lsv.uky.edu.

4.6 Extract Email IDs for Existing Employees

4.6.1 Description and Priority
Once NIMS server accounts requests have been processed, the system should extract the login ID and send it to ???, along with the employee UKID and name, so they may generate appropriate correspondence to the employees.

4.6.2 Action/Response Sequences
This is a batch function that will run a specified interval after completion of 4.5.

4.6.3 Functional Requirements
REQ-4.6.3.1:
Extract the following information and put it in a comma-delimited file, and send to ???.

- UKID
- LASTNAME
- FIRSTNAME
- DEPTNO
- ADDR1
- ADDR2
- ADDR3
- ZIPCD
- DEPTNAME.
<table>
<thead>
<tr>
<th>5. Other Nonfunctional Requirements</th>
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<td>6. Security</td>
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<td>7. Issues</td>
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</tbody>
</table>
By signing below, you certify that you have read, fully understand, and agree with the contents of this document. Changes made to the requirements after this date must be agreed upon in writing, and will affect the project timeline.

Printed Name/Title ___________________________ Signature ___________________________ Date __________

Printed Name/Title ___________________________ Signature ___________________________ Date __________

Printed Name/Title ___________________________ Signature ___________________________ Date __________

Printed Name/Title ___________________________ Signature ___________________________ Date __________