



# Privacy Impact Assessment

## Emily Carr University of Art + Design

### Clockwork Enterprise Solution

PIA# 2024-10

**Part 1 – General Information**

<b>Name of Department/Unit</b>	Student Accessibility Services	<b>Project ID</b>	2024-10
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*In the following questions, delete the descriptive text and replace it with your own.*

**1. What is the initiative?**

The Student Accessibility Services (SAS) Office provides accommodations to the learning environment for students with speech, hearing, visual, physical, mental health and neurological disabilities as well as chronic health conditions, acquired brain injury and temporary disabilities. To assess and determine eligibility for accommodations, the Office collects information about student accommodation needs via various outlets – completion of forms in SurveyMonkey, intake forms via PDF and email, submission of doctor’s notes and evidence to support accommodation requirements via email and fax etc. Once received, documentation is used to inform SAS of next steps required for intaking a student and accommodating their needs. Various tools are subsequently used to coordinate meeting with students – Microsoft Booking and email. Once intake is completed and student accommodations assessments are completed, SAS stores this information in SharePoint and Outlook and may be required to submit certain eligibility documentation to Student Aid BC (via Student Aid BC’s online portal). Additional information about SAS’s intake and assessment process for student accommodations can be found [here](#).

At this time, there is no centralized environment for SAS to collect, use, store, make available and communicate with students and other ECU staff / faculty about accommodation activities. ECU is looking to implement a tool to centralize these processes and documentation initially within Student Accessibility Services (SAS) and then will consider other opportunities such as use within the office of the Coordinator, Student Rights, Responsibility + Safety (SRRS).

This tool is called “Clockwork Enterprise” by TechnoPro Computer Solutions USA Inc. Clockwork is a comprehensive management system that provides university departments with a secure, multi-purpose, intake, case management, scheduling & tracking solution to serve the needs of various student populations, including students who require accommodations, and student’s submitting complaint and misconduct reports. Clockwork is widely used by post-secondary institutions in BC and Canada and provides a single



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solution to supporting the complex needs of disabled students in a post-secondary environment. Clockwork is hosted within Microsoft Azure datacentres with data sovereignty requirements in place to limit ECU data to be only stored and backed up in Canada (see additional information in Part 5).

Clockwork offers a variety of tools in one place to gather initial student information, coordinate intake documentation from students and external sources, schedule meetings, assess student needs (e.g., accommodations), schedule appointments, meetings, exams and tests, and communicate internally with other ECU departments and members through a secure platform. Clockwork provides easy access to information for faculty and students, and can eliminate data entry, copying and recopying of students' information as it can be synchronized with Colleague (one-way sync from Colleague to Clockwork using Clockwork's Data Sync Module<sup>1</sup>). Where synced with Colleague, Clockwork will pull information from Colleague's PHIN page to populate student fields in Clockwork. At the time of writing, it was anticipated that information from Colleague's PHIN database would only be used for new student intakes with historical information for previous intakes being retained in Colleague. The list of student information pulled from Colleague and data sync process are captured in proceeding sections.

For the purposes of SAS, student intake can be facilitated through Clockwork via upload of documentation and completion of forms developed by SAS directly in Clockwork. Accommodations and supporting assessments can be entered into Clockwork, keeping staff and students advised and updated at all times. Accommodation information can then be shared with any other active module including test and exam booking, tutoring, note-taking, and service providers among other services.

For the purposes of SRRS, Clockwork would serve several important functions that would enhance casework being done related to student conduct (policy 4.6) student complaints (policy 4.7), sex and gender-based violence and misconduct (policy 3.6 and policy 3.6.1 (procedures for sex and gender-based violence for students) and harassment, bullying + discrimination (policy 8.6 and 8.6.1 procedures).

Transitioning to a standardized platform for intake, case management of files (which involve multiple documents) and conclusion/termination will have several positive impacts on the administration of individual files as well as the maintenance of the aggregate caseload. These includes:

- Ensuring private, secure and consistent access to documents for decision-making within the respective ECU departments
- Standardizing document storage, management and archiving
- Standardizing intake for all files

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#### <sup>1</sup> Clockwork's Data Sync Module

Permits ECU to sync data between Clockwork and your Colleague. This enables ECU to add student information and courses into Clockwork by simply typing in a student number. Along with syncing while first adding a student into Clockwork, the data sync also runs nightly, keeping all active students in sync. Currently, the data sync is a one-way operation; Clockwork will not attempt to change data in Colleague. All data fields that are being pulled into Clockwork will become read-only fields in Clockwork since the nightly sync will always revert the data back to what is in the external system. Example: Student name, phone, address, email, emergency contact, academic information, registered courses, etc.



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- Verifying secure receipt of communications and documents for all files
- Enabling students to securely send sensitive documents securely
- Enabling the SAS and SRRS Offices to securely issue final reports / assessments documents
- Securely collaborate and manage individual cases with other ECU staff / departments

#### Use of Clockwork Overview

##### *Configuration and Initial Set-Up*

Prior to go live, Clockwork will work with ECU to facilitate the configuration and implementation of the software for ECU's purposes. This will occur in three phases:

- Phase 1: Pre-launch Configuration and Testing (local network)
  - Clockwork will initially setup a temporary location on their internal servers (locally hosted in Clockwork datacentres in Ontario, Canada; not Azure) to hold ECU's Clockwork instance. This location is used to configure and customize the software, including form design, document templates, online portal and data sync functionalities. No personal information is transmitted to Clockwork's server during this phase, only sample/fake data is used for testing.
- Phase 2: Migration to Microsoft Azure (cloud hosted)
  - Clockwork will migrate the configuration into Microsoft Azure. Clockwork and ECU will finalize and confirm the configuration of data sync, online modules, and web authentication. Clockwork will also reconfirm that the Phase 1 configuration is still valid.
  - To establish the data sync functionality between Clockwork and Colleague, ECU will install the Azure Copy Powershell (AZCopy) on ECU's local infrastructure (EduCloud). Daily, two CSV files from Colleague that contain student and course information (new and updated) will be pulled using a pre-configured script and hosted on EduCloud. The files will then be transferred to Clockwork via AZCopy. Upon receipt, the Colleague files will be pulled from AZCopy by Clockwork and into its secure Azure hosting environment.
  - Two files will be synced daily:
    - A demographic file that contains basic details about all active ECU students including SSO details so that student can login to Clockwork without creating an additional account.
    - A course information file that contains details about course registration and associated instructors.
  - The two CSV files will be stored within Clockwork's Azure hosting environment and only used to populate / sync information for students who have created a profile in Clockwork. Given the amount of personal information contained in the files, ECU worked with Clockwork to try to determine a different sync pathway so that only demographic and course information for students who create a profile would be sent to Clockwork once the profile is created (rather than a file with all ECU students' demographic information sitting at rest within Clockwork), but this proved to be not possible given limitations associated with Clockwork's database structure and technical processes.
- Phase 3: Training and Going Live



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- At this point, ECU's subscription becomes active, and Clockwork will commence training activities for ECU staff. ECU will determine the launch date for students after training is completed.

#### *Clockwork Login and Access*

Clockwork hosts different access portal for different roles.

1. Desktop application: used by authorized ECU staff members who have access to student records in Clockwork. Access is provisioned by a unique Clockwork generated account (username and password) and MFA (token sent to email).
2. Student web portal: used by students logging in to request an appointment, submit documentation and interact with SAS. Access is provisioned via ECU's SSO with access configured by ECU ITS in accordance with current M365 account permission policies.
3. Faculty web portal: used by faculty assigned to view and interact with specific student records by SAS. Access is provisioned via ECU's SSO with access configured by ECU ITS in accordance with current M365 account permission policies.

#### *Step by Step Use of Clockwork*

Upon login, the student will be taken to a registration page that reflects the SAS intake form template and associated requirements. The student will complete the intake form in Clockwork and submit it for SAS review; this submission supports the creation of a unique student profile in Clockwork. Upon creation of the new student record Clockwork will pull corresponding student information from Colleague that is hosted in a separate Clockwork database within Azure and only triggered when the new profile is created. As such, Clockwork will automatically populate specific elements of student information in the student's profile in Clockwork as well as course schedules and other relevant course-related information. Additional information about Clockwork's Data Sync module and requirements for ECU ITS implementation are outlined in Appendix A.

At the time of intake, the student can also upload PDF documentation to be reviewed alongside their intake form via Clockwork's secure file conduit, including medical notes, transcripts, external assessments etc.

Upon submission of the student's intake form, the student will be placed in the SAS intake queue. Student documentation will be reviewed by authorized SAS staff who have been approved access to Clockwork.

Authorized SAS administrators with access to Clockwork will login using the desktop application via a separate Clockwork account and MFA token provisioned by Clockwork to access the application (not linked to ECU SSO).

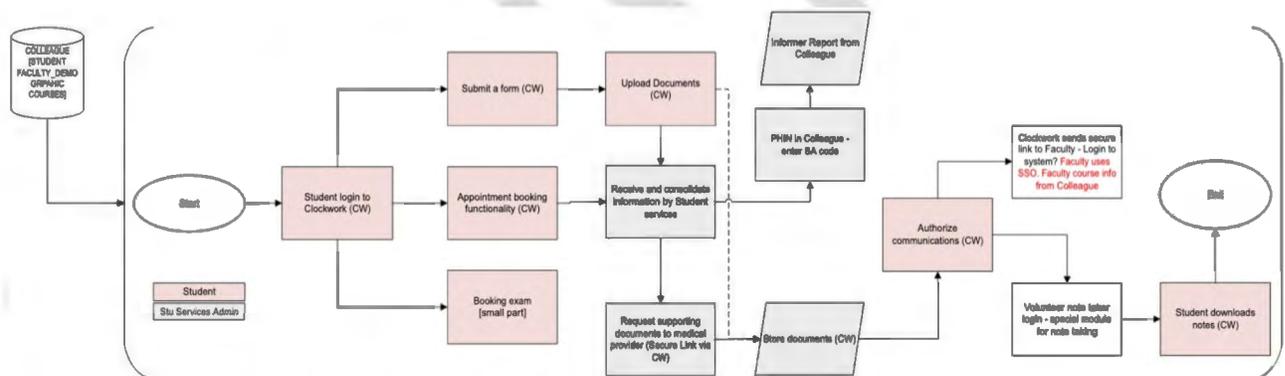
During their review, depending on the privileges assigned to their account, SAS staff can access all profiles and files authorized for their review, make notes, request additional documentation and outline recommendations within Clockwork. They can also edit the intake form and save changes where incomplete information was provided in the student's submission.

Upon intake approval, SAS staff can view the student’s course calendar (as per Colleague sync) and suggest meeting times to discuss intake and next steps with the students. Students can also book a meeting directly in Clockwork, which will sync with the SAS Office staffs’ Outlook calendars. To note, where a booking is made in an Outlook calendar, all personal information including the student’s name and purpose for the meeting is masked).

Once intake is completed and SAS has met with the student, additional SAS forms can either be completed directly in Clockwork or completed externally and securely uploaded to Clockwork by SAS or the student. These forms are then associated with the student’s profile within Clockwork and available for review by authorized SAS staff and the student. Where SAS needs to communicate with ECU faculty or other departments about a specific student’s accommodations, SAS staff with administrative rights to Clockwork are able to assign an account to the ECU faculty / teaching staff with access limited to the student and information that is necessary to complete the designated activity.

Where ECU faculty / teaching staff are assigned a student profile for review to ensure accommodations for said student are integrated into their teaching, access to the faculty web portal is provisioned. Access is time limited and limited to only student profiles assigned to the faculty / staff member.

*Figure 1: ECU / Clockwork Business Process*



## 2. What is the scope of this PIA?

The following activities are in and out of scope of the PIA.

In scope:

- Deployment of Clockwork by ECU to support student service activities, specifically the SAS office, with the opportunity to expand to other offices such as SRRS. Where differences are noted between SAS and other offices (e.g., SRRS), an amendment to this PIA will be completed prior to the use of Clockwork.
- Collection, use and disclosure of student information required to assess and implement accommodations by the SAS office.



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- Offsite hosting, storage, retention and destruction of student information stored in Clockwork within Microsoft Azure datacentres in Canada.

Out of scope:

- Historical collection and updates to student's SAS information captured in Colleague prior to 2025 including the PHIN database, which may be synced with Clockwork.
- Use and disclosure of student accommodation information collected via Clockwork and submitted to BC government ministries to determine eligibility and funding requirements.

### 3. What are the data or information elements involved in the initiative?

The following information will be involved in the initiative and is focused on information required by SAS. Where Clockwork expands to uses by other ECU offices such as SRRS, additional information may be involved, and this PIA will be updated accordingly.

#### ***Clockwork / Colleague Data Sync***

- Demographic Data CSV
  - First name
  - Last name
  - Middle name
  - Chosen name
  - Email address (personal)
  - Email address (ECU)
  - Home state / province
  - Home country
  - Program
  - Level
  - ECU student number
- Course Information CSV
  - ECU Student number
  - Course start date
  - Course end date
  - Term
  - Subject duration
  - Course code
  - Section
  - Class type
  - Campus
  - Instructor name
  - Instructor email address
  - Instructor username
  - Instructor phone
  - Primary instructor



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- Day of week
- Class start time
- Class end time
- Building room

#### **SAS Documentation Requirements Collected in Clockwork**

- SAS Pre-Registration Request
  - Student's first and last name
  - Program of study
  - Year of study
  - Student ID
  - Semester
  - Priority registration request
- CAPER-BC Application Form
  - Student's first, middle, last name
  - Phone number
  - Email
  - Institutional advisor
  - Institution
  - City
  - Type of disability
  - Memberships
  - Hardware and software requirements
  - Additional needs
- Functional Limitations Assessment Form
  - Student's first and last name
  - Date of birth
  - Phone number
  - Email
  - Confirmation of disability based on health diagnosis
  - Confirmation of permanent disability / persistent or prolonged disability
  - Monitoring to determine diagnosis
- Audio Recording Agreement
  - Student's first and last name
  - Student ID
- Consent for Collection or Disclosure of Information
  - Student's first and last name
  - Full residential address



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- Type of documentation / information
  - Name of collecting or disclosing organization or person
  - Full address of collecting or disclosing organization or person
- StudentAid BC – Appendix 8
- Student’s first and last name
  - Mailing address
  - Email address
  - Phone number
  - Social insurance number
  - StudentAid BC application number
  - Student number
  - Personal education number
  - Date of birth
  - Gender
  - Citizenship status
  - Date of onset of primary disability
  - Length of time individual receiving care for medical conditions
  - Categorization of disability (permanent, persistent, prolonged)
  - Primary disability
  - Disability impacts on daily activities
  - Description of primary disability including frequency and severity of functional limitations
  - Secondary disability
  - Secondary disability’s impacts on daily activities
  - Description of secondary disability including frequency and severity of functional limitations
- Additional information collected in Clockwork
- Class schedules
  - External medical notes and assessments (e.g., audiologist report)
  - Accommodation notices
  - Referrals for support
  - Financial forms/assessment for disability bursary in addition to StudentAid BC Appendix 8 (e.g., Learning Disability Student Bursary; APSD; other provincial student aid forms)
- Staff, Faculty and Notetaker Information
- First and last name
  - ECU email address
  - ECU student ID number (where applicable)
  - Course teaching schedule (where applicable)

#### 4. Does the initiative include personal information?



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Yes, as described in Question 3, a significant amount of personal and sensitive personal information will be collected from students.

**Part 2 – Collection, Use and Disclosure**

*This section will help you to identify the legal authority for collecting, using, and disclosing personal information and to confirm that all personal information elements are necessary for the purpose of the initiative.*

Use this column to describe the way personal information moves through the initiative step by step as if you were explaining it to someone who does not know about your initiative.	Collection, use, disclosure	FOIPPA authority
ECU discloses student demographic information, course information, faculty information and notetaker information nightly via Colleague / Clockwork data sync.	Use, Disclosure	32(a); 33(2)(d)
Student contacts ECU SAS to apply for academic accommodations.	Collection	26(c)
SAS provides student with information about intake process; student logs in to Clockwork using ECU SSO to complete intake form or schedules meeting with SAS to complete intake form together, in person.	Collection	26(c)
SAS staff completes review of intake form and supporting information in Clockwork and requests additional documentation (e.g., documentation from medical provider).	Use, Disclosure	32(a); 33(2)(c); 33(2)(d)
Where applicable, student provides written consent for ECU to contact individuals / organizations on behalf of student to collect documentation.	Disclosure	33(2)(c)
Student uploads documentation to Clockwork OR SAS receives documentation directly from provider (fax, email) and uploads to Clockwork.	Collection	26(c)
Student uses Clockwork to access their accommodation notices, make appointments with SAS, schedule exam accommodations,	Use	32(a)



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request notetakers and access forms to complete bursary applications.		
Authorized SAS staff use Clockwork to manage information related to student accommodations, manage appointments with students, update the student’s record with necessary information and documentation, and facilitate completion and submission of forms for students (e.g., StudentAid BC Appendix 8).	Use, Disclosure	32(a); 33(2)(d)
Where SAS staff need to communicate with ECU staff / faculty outside of SAS regarding a student’s accommodations, SAS creates a role for the staff / faculty member with need to know / least privilege restrictions in place to limit access to student information. Faculty / staff login to Clockwork to review student information and to facilitate support for accommodations.	Use	32(a)
With explicit consent obtained from the student, SAS releases student information collected in Clockwork to external parties (e.g., parents / guardians).  No direct access to Clockwork will be provided for external parties; SAS will collect and compile the necessary information and securely transfer it to the external party.	Use, Disclosure	32(a); 33(2)(c); 33(2)(d)
Clockwork securely stores, backs up, and retains student information in Microsoft Azure as per contractual requirements.	Storage, Retention	30
Clockwork provides technical support for ECU users where requested, which may require limited access to students’ personal information.	Disclosure	33(2)(t)

#### 5. Collection Notice

The following collection notices and privacy-focused language are provided in different SAS forms and the SAS webpage. One standard notice will be provided upon login to Clockwork that outlines ECU’s FIPPA requirements for the collection, use and disclosure. Additionally, the SAS webpage will be updated to reflect ECU’s privacy policies and practices. At the time of writing, work to consolidate language provided in different notices and generate a consistent notice was underway.



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- Current notices and privacy-focused language in place:
  - [Accommodation Request Form](#) (basic privacy language provided but does not meet FIPPA collection notice requirements)
  - [Functional Limitations Assessment Form](#) (consent to use information and to contact medical provider outlined but does not meet FIPPA collection notice requirements)
  - [Accommodation Renewal Request](#) (no privacy language outlined; no FIPPA collection notice)
  - [Consent to the Collection and/or Disclosure of Information](#) (basic privacy language provided but does not meet FIPPA collection notice requirements)
  - [ECU Webpage for Student Accessibility Services](#) (ECU SAS webpage provides a privacy overview section but requires updates to align with ECUs' policies and practices)

### Part 3– Storing Personal Information

#### 6. Is any personal information stored outside of Canada?

No, all personal information collected and stored by ECU in Clockwork is stored in Canada, specifically Microsoft Azure Canada locations: Central (Toronto) and East (Quebec City). Backups of the personal information are also hosted and stored by Microsoft Azure in Canada.

#### 7. Where and how are you storing the personal information involved in the initiative?

EduCloud:

Data pulls for the nightly sync between Colleague and Clockwork will be stored by ECU on ECU's EduCloud server (all data stored within BC as per previous EduCloud PIA).

Clockwork:

All personal information collected and stored by ECU in Clockwork is stored in Canada, specifically Microsoft Azure Canada locations: Central (Toronto) and East (Quebec City). Backups of the personal information are also hosted and stored by Microsoft Azure in Canada.

#### 8. Does the initiative involve [sensitive personal information](#)? If yes, where and how are you storing the personal information involved in the initiative?

Yes, this initiative does involve sensitive personal information, specifically personal health information provided by the student and by the student's medical provider(s) (express consent obtained).

Data pulls for the nightly sync between Colleague and Clockwork that contain sensitive personal information will be stored by ECU on ECU's EduCloud server (all data stored within BC as per previous EduCloud PIA).

All sensitive personal information collected and stored by ECU in Clockwork is stored in Canada, specifically Microsoft Azure Canada locations: Central (Toronto) and East (Quebec City). Backups of the sensitive personal information are also hosted and stored by Microsoft Azure in Canada.



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#### Part 4 – Assessment of Disclosure Outside of Canada

Complete this section if you are disclosing sensitive personal information to be stored outside of Canada. Otherwise continue to Part 5.

Sensitive personal information will only be stored and backed up inside Canada – Part 4 does not apply.

9. Is the sensitive personal information stored by a service provider?

If yes, fill in the table below (add more rows if necessary).

Name of service provider	Location of service provider	Country of residence of the service provider
1.		

10. Describe the contractual terms in place, if applicable.

If you wish to model your Protection Schedule, email [privacy@ecurad.ca](mailto:privacy@ecurad.ca).

Describe the contract. Be able to cite a duration.

11. Are you relying on an existing contract, such as an enterprise offering from BCNet?

12. If you are in place, do you have authorized access to sensitive personal information?

13. Provide details about how you will track access to sensitive personal information.

14. Describe the privacy risks of disclosure outside of Canada.

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1.					
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### Part 5 – Security of Personal Information

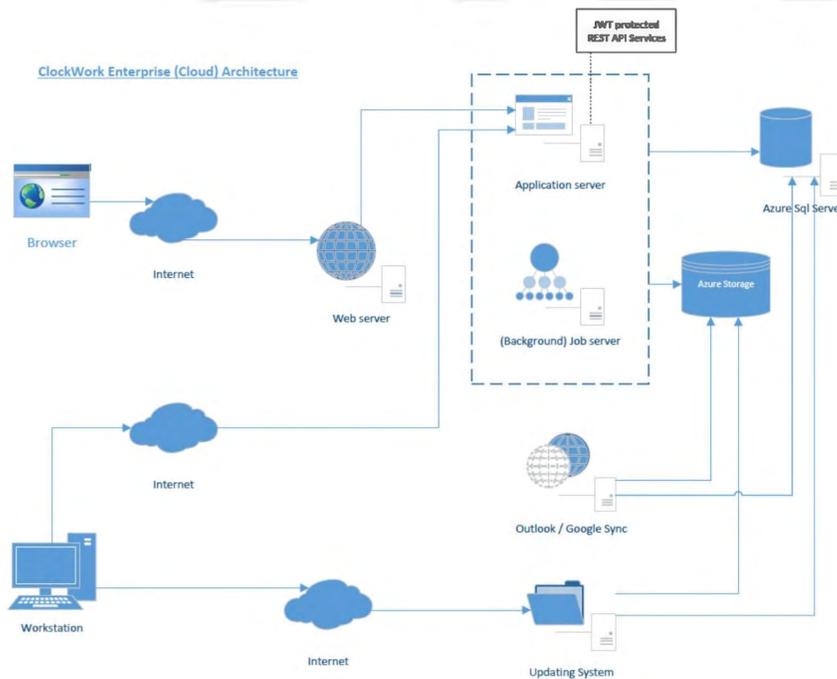
*This part captures information about the privacy aspects of securing personal information. People, organizations, or governments outside of your initiative should not be able to access the personal information you collect, use, store or disclose. You need to make sure that the personal information is safely secured in both physical (e.g., your office building or work environment) and technical (e.g., online cloud service) environments.*

**15. Does the initiative involve digital tools, databases, or information systems? Yes / No**

Yes, it does involve a digital platform / database that is hosted by a cloud service provider (EduCloud and Clockwork).

EduCloud’s hosting architecture and supporting controls were previously assessed by ECU in a separate PIA.

Clockwork’s architecture diagram for the Azure hosting environment is outlined below.





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**16. Do you or will you have a security assessment to help you ensure the initiative meets the reasonable security requirements? Yes / No**

EduCloud:

Yes – a security assessment was previously completed for EduCloud and is captured in ECU’s PIA portfolio.

Clockwork:

Yes – a security assessment has been completed for Clockwork (HECVAT) and its hosting provider Microsoft Azure has also undergone various internationally accredited, externally validated security audits.

Microsoft Azure meets a broad set of international and industry-specific compliance standards such as ISO 27001 and has undergone an [SSAE 16 audit](#), and has received the Cloud Security Alliance (CSA) STAR certification.

Some additional security controls in place within Clockwork are noted below:

- SSO requirements available for set-up with Clockwork - Clockwork supports Active Directory and LDAP integration for staff logins. For student and faculty logins Clockwork supports Active Directory, ADFS, LDAP, Portal Guard, Shibboleth, CAS, as well as custom authentication.
- Institution data is logically separated from other customers (in different databases).
- All data sent and received is encrypted in both transport (SSL) and rest (AES 256 bit).
- Backup copies of the database are made using several strategies. Point-in-time-restore (PITR) and long-term-retention (LTR) backups are created and stored for varying lengths of time. PITR backups consist of full backups, differential backups and transactional log backups. LTR backups consist of full backups only. PITR and LTR backups are geo-redundant and protected by Azure Storage cross-regional replication.

**17. Controlling and tracking access - Please check each strategy that describes how you limit or restrict who can access personal information and how you keep track of who has accessed personal information in the past. Insert your own strategies if needed.**

Strategy	Yes / No and please describe
<p><b>We allow employees only in certain roles access to information</b></p> <p>Clockwork utilizes role-based permission controls to control and limit access. 'No access', 'read-only access', or 'read/write access' permissions are available for all form data (including disability and accommodation data).</p>	Yes



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<p>Also, access to student records can be restricted based on custom rules such as 'part-time students', or other custom rules such as 'student is a relative of a staff member'. Various functions, such as modifying data form definitions, running reports, sending emails, can also be restricted based on user roles.</p> <p>Given Clockwork does not have a template for roles and privileges that can be analyzed prior to implementation, these settings will be reviewed and determined in Phase 1 of the initial set-up activities.</p> <p>Furthermore, within Clockwork, there are no system administration facilities, only security administration. Security administration involves assigning permissions to roles and assigning roles to users. A security administrator can view existing roles and modify permissions for those roles, add new roles, and assign or remove roles from specific user accounts. Administration accounts are created during initial implementation. Additional accounts can be created and managed by ECU, with specific permissions and settings. At the time of writing, it was anticipated that one ECU IT staff member and one ECU SAS team member would be designated administration accounts during the set-up process.</p> <p>To note: Different administrative tasks can be assigned to different users and these permissions can be assigned to roles or individual users.</p>	
<p><b>Employees that need standing or recurring access to personal information must be approved by the appropriate authority</b></p> <p>Yes, specific ECU staff who require access to Clockwork will be reviewed and purpose(s) for access validated by ECU's Clockwork security administrator(s) and ECU SAS team. ECU SAS and IT will coordinate account commissioning and decommissioning activities.</p> <p>Specific permissions will be tailored to their role / account and these permissions will be reviewed prior to the launch of Clockwork to ECU staff, faculty and students and on an ongoing basis.</p>	Yes
<p><b>We use audit logs to see who accesses a file and when</b></p> <p><u>Audit Logs for Student Profiles / Records:</u>          Clockwork's Audit Log feature enhances data security and compliance by tracking access to personal student information. This feature logs all instances where a staff member reads or writes any data classified as "Sensitive Student Information", ensuring transparency and accountability.</p>	Yes



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**Key Capabilities:**

1. **Comprehensive Logging**
  - Any read or write action involving personal information is recorded, along with the staff member's identity, the accessed student's record, date, time, and the specific data field(s) accessed.
2. **Query-Based Access to Audit Logs**
  - **Student-Based Query:** Retrieves a list of all log entries where any staff member has accessed a particular student's sensitive information within a specified time frame. Each log entry will include the identity of the staff, the date & time of access, whether data was written or simply viewed, and what type of data was accessed
  - **Staff-Based Query:** Retrieves a list of all log entries where a particular staff member has accessed any student's sensitive information within a specified time frame. Each log entry will include the identity of the student, the date & time of access, whether data was written or simply viewed, and what type of data was accessed

***Sensitive Student Information Tracked Under This Audit Feature:***

The following types of student information are included in the audit logs and can be further customized to ECU's privacy requirements.

- First and last name
- Address
- ECU Student ID
- Date of birth
- Contact information: email, telephone numbers, address
- Gender
- Primary disability
- Secondary disability
- Accommodation information
- Documentation
- Case notes and advising history
- Race, national or ethnic origin, color, or religious or political beliefs or associations
- Age, sex, sexual orientation, marital status, or family status
- Identifying number, symbol, or other particular assigned numbers
- Educational history
- Personal views or opinions (except if they are about someone else)
- Opinions of others about the individual



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<p>To note:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> TechnoPro/Clockwork staff typically do not have accounts on ClockWork once the instance is live and available for use. Accounts provisioned for TechnoPro/Clockwork staff during initial implementation are disabled after the official launch.</li> <li><input type="checkbox"/> For support, TechnoPro/Clockwork requests for schools to log in using their own ClockWork credentials. However, if a school chooses to provide TechnoPro with an account, that user account will also be tracked in the audit.</li> </ul> <p><u>Security Events:</u></p> <p>All security/authorization changes and user and administrator security events are logged in Clockwork. Logging is built-in and working out-of-the-box with logs being generated and stored both in the Clockwork database and Azure storage. Database logs contain personal information and capture user activity; for logins, Clockwork records specific user, date/time, and originating IP for login attempts (failed and success) and changes in the data (records). Whereas logs capture and stored in Azure storage consider technical / architecture security monitoring and do not contain any personal information.</p> <p>Logging reports available to ECU are those that are stored in the Clockwork database and are accessible via the Clockwork report tool. Logs in the report tool can be searched, sorted and filtered. Logs in Azure storage are available to ECU by request.</p> <p>Logs are stored in the database for a minimum of 5 years. Logs in Azure storage are kept for 6 months.</p>	
<p><b>Additional strategies:</b></p> <p>Data validation:</p> <p>Invalid data provided by the user can include missing required fields, invalid format (such as invalid email address or postal code), or invalid data length. When a user enters invalid data, the system will alert the user with messages for each invalid data item that was provided. The data is not saved but the user is provided the opportunity to fix the invalid data and submit again. When there are no invalid data items remaining, the data will be saved. The user also has the option of canceling the process without saving.</p> <p>Clockwork also provides warning messages for certain types of data that may be left blank or are of an unexpected format. These data item rules only warn the</p>	<p>Yes</p>



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<p>user to make sure that is what they intended to enter. The user will have the option of ignoring the warning and continue to save the data, or canceling the save and fixing the data before attempting to save again.</p> <p>Lockouts: The user's account will be locked (they cannot login again) once the failed login count for that account reaches the threshold. The threshold is configurable. An authorized user (security administrator) must unlock the account once it has been locked. ECU will determine the lockout threshold during Phase 1 of the initial set-up with a recommendation for three invalid attempts to be implemented.</p>	
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### Part 6 – Accuracy, Correction + Retention

*In Part 6 you will demonstrate that you will make a reasonable effort to ensure the personal information that you have on file is accurate and complete.*

**18. Do you have a process in place to correct personal information?**

Yes, information is confirmed by Colleague, which can be updated by students as their personal information changes. SAS will have the ability to confirm and update all data for accuracy. To note, given the one-way transfer of information from Colleague to Clockwork, Colleague will remain the source of truth for basic student information.

**19. Does your initiative use personal information to make decisions that directly affect an individual(s)?**

Yes, the information provided by outside medical sources and through various internal / external assessments will support the determination of eligibility for and implementation of academic accommodations for students with disabilities.

**20. Do you have a retention schedule in place related to personal information used to make decisions? Retention and/or disposition schedule that will ensure that personal information is kept for at least one year after it is used in making a decision directly affecting an individual?**

Data retention:

Data retention will comply with ECU's Records Retention Schedule in accordance with FIPPA requirements and supporting institutional policies.

Data destruction:



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Where ECU terminates its contract with Clockwork, Clockwork will return any ECU / student information stored within Clockwork as a SQL Server database backup file, along with a zipped collection of binary files that may have been stored in the system (such as .pdf, .docx, etc.). ECU will also be provided with a local installable copy of Clockwork reporting software that ECU can use to connect to the database backup on ECU systems to extract all student and administrative information stored in Clockwork.

**Part 7 – Additional Risks**

*In the table below describe any additional risks that arise from collecting, using, disclosing, or storing personal information in your initiative that have not been addressed by the questions on the template. Add new rows if necessary.*

Possible Risk	Response	Risk Level
<p>Risk 1: Clockwork’s standard contract does not consider standard privacy protections as per FIPPA requirements. as a service provider to ECU, Clockwork must be bound to implement equivalent privacy and security controls as ECU to ensure adequate safeguarding of personal information. With this contractual obligation in place, the risk of unauthorized access, collection, use and disclosure of personal information is heightened.</p>	<p>As a service provider to ECU, Clockwork must review and confirm acceptance of the FIPPA privacy protection schedule for cloud service providers. The schedule must be included as an appendix to the contract.</p>	<p>Medium</p>
<p>Risk 2: Demographic and course information for all active ECU students will be included in the CSV files transferred to Clockwork. The two CSV files will be stored within Clockwork’s Azure hosting environment and only used to populate / sync information for students who have created a profile in Clockwork. Given the amount of personal information contained in the files, ECU worked with Clockwork to try to determine a different sync pathway so that only demographic and course information for students who create a profile would be sent to Clockwork once the profile is created (rather than a file with all ECU students’ demographic information sitting at rest within Clockwork), but this proved to be not possible given limitations associated with Clockwork’s database structure and technical processes. Given information is being provided beyond what is justifiable for the purpose(s) of the service, this</p>	<p>The following mitigations will be considered at this time:</p> <ol style="list-style-type: none"> <li>1. Implementation of the FIPPA privacy protection schedule.</li> <li>2. In consultation with SAS staff, reduction in the number of elements of student personal information included in the CSV files (i.e., number of unique data fields populated).</li> <li>3. As of May 2025, by the request of ECU, Clockwork has implemented additional auditing controls (see Question 17 above) to mitigate the risks associated with storing and accessing sensitive personal information. these controls were not in place during our initial assessment of the software tool</li> </ol>	<p>High</p>



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Possible Risk	Response	Risk Level
could result in FIPPA non-compliance.	and ECU worked closely with Clockwork to implement this offering.	
Risk 3: Clockwork does not provide pre-configured roles and privilege templates; all accounts, roles, and privileges must be generated and assigned during the initial set-up. Given the amount and sensitivity of personal information made available in Clockwork, ECU must ensure individuals are only given access to the information they need to have the minimum set of privileges required to complete their job duties. Without appropriate access controls in place, the risk of unauthorized access, collection, use and disclosure is heightened.	During Phases 1 and 2 of the initial set-up, ECU IT and SAS to work with ECU Privacy Office to ensure RACI matrix is developed and appropriate policy and process for access provisioning is in place (e.g., RBAC) for various ECU roles/accounts in Clockwork.	High
Risk 4: No consistent privacy notice for the collection of student personal information for the purposes of SAS activities has been provided in past documentation. A FIPPA collection notice that complies with requirements of the legislation must be made available prior to the collection of any student personal information by ECU. Without a notice in place, ECU would be in non-compliance with FIPPA and not have the appropriate authority in place to collect, use and disclose the student personal information for SAS-related purposes.	Work is already underway to complete an audit of the privacy-related language in SAS documents / webpages and ensure consistency and compliance with FIPPA requirements.  A FIPPA collection notice will be made available prior to any collection of student personal information via Clockwork.	High
Risk 5: ECU will be hosting our portion of the data / business flow on EduCloud. EduCloud is in the process of being de-commissioned, with the platform anticipated to be fully retired in 2026. Given the sensitivity of the information stored on EduCloud for the purposes of Clockwork, an environment with minimum equivalent controls must be in place and assessed via a PIA prior to launch / migration of Clockwork data and processes to ensure the privacy and security of the data.	IT and Privacy are aware of these requirements and will be working in advance of the migration to ensure robust controls are in place.	Low

Please ensure Parts 7 and 8 are attached to your submitted PIA.



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#### Part 8 – Program Area Signatures

*This PIA is based on a review of the material provided to the Privacy Office as of the date below. If, in future any substantive changes are made to the scope of this PIA, a PIA Update must be completed and submit it to Privacy Office.*

<i>Department Manager</i>	Signature	Date
<b>Sandeep Sidhu</b> <i>Chief Information Officer</i>		
<b>Adrian Tees</b> <i>Privacy Officer</i>		

A final copy of this PIA (with all signatures) must be delivered to [privacy@ecuad.ca](mailto:privacy@ecuad.ca) for record keeping.



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#### APPENDIX A – DATA SYNC REQUIREMENTS

##### Overview

The Clockwork Data Sync pulls student data in from an external source. It is a one-way sync that is meant to be used to provide access to student data and course registrations contained in the school's main database system. One of the options of configuring the Data Sync is to provide read-only web services that Clockwork can access when it needs to lookup data for a particular student. The web services will be written and maintained by the school, and web service security will also be handled by the school. The preferred data returned will be in JSON format, however we can also work with XML. Identify what data fields are required. The minimum data fields required for the data sync to function are student number, first name, and last name. The department will decide which additional fields they may require for normal operation and reporting.

##### Step 1: Identify what data fields are required

The first step in the process is for the disability department to indicate which fields they require, and for the IT/Registrar department to indicate which of those fields requested are available.

The following fields are commonly used by most schools (required fields are marked with \*):

- student number \*
- net id (the username the student uses to login to the web modules) \*
- first name \*
- middle name
- last name \*
- birthdate
- gender
- phone number (home)
- phone number (cell)
- email address
- permanent address (address, city, postal, province/state, country)
- local address (address, city, postal, province)
- Emergency contact name
- Emergency contact phone
- GPA
- Expected graduation date
- Academic Information (session, program, faculty, level, full-time/part-time)

The names of fields and data types are not important to the Clockwork scripts, so providing native field names and data types from the school's system is acceptable.

##### Step 2: Create three web services to access the required information

Three web services is the standard method used:

1. Data web service (student number parameter, returns data from previous section)



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2. Courses web service (student number parameter, returns list of student's registered courses current or future – see below)
3. Username lookup web service (username parameter, returns student number) Create a web service to provide student's course registrations

#### **Step 3: Create a web service to provide student's course registrations**

Clockwork will query the student course registration web service using the student number. The following minimum information is required:

- Student number \*
- Course start date \*
- Course end date \*
- Term \*
- Subject \*
- Course code \*
- Section \*
- Instructor id / username \*
- Instructor name \*
- Instructor email \*

The following information is optional and preferred if possible:

- Campus
- Timetable (Day of week, Start time, End time, Location)
- Final exam date
- Final exam start time
- Final exam end time
- Final exam location

The names of columns and data types are not important to the Clockwork scripts, so providing native column names and data types from the school's system is acceptable.

#### **Step 4: Create a web service to lookup a student number by username**

Clockwork will pass the student's username (net id) as the parameter to execute the web service. The web service should return the student number. The following minimum information is required:

- Student number \*
- Username (net id) \*

#### **Step 5: Provide TechnoPro a summary of web services**

The next step will be for TechnoPro to create the scripts required to pull in the information and test. In order to do this a summary of what has been made available is required. The summary should provide a list of the three web services that are available; along with what parameters are expected, and what data fields and data types are available in each web service. TechnoPro will require access to the server that will be running the scripts (see below) in order to setup and test the web service. This can be accomplished through a phone session using remote desktop sharing software that TechnoPro will provide.



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#### **Step 6: Staff will test the functionality**

After the system has been setup and tested, the staff in the department will be provided instructions on how to use the system and will perform final testing to ensure that all systems are functional and that all expected data is present.

#### **Step 7: Setting up the nightly sync scripts**

The system requires a nightly sync to run. The nightly sync will access the stored procedures for each active student in Clockwork (not all students in the school) to see if any information in Clockwork needs to be updated. The scripts can run from any machine but are normally run from a server. This can be the same machine that runs the Clockwork web application or the SQL Server database. TechnoPro will setup the nightly scripts; the following outlines the basic steps:

- A Windows Task will be created that will run a "Clockwork Job". The task will be configured to run off-hours
- The appropriate scripts will be configured to run as part of the Clockwork Job

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