

## Campus Solutions Implementation Project Steering Council Proposal

Date: Thursday, April 2, 2015

Request #: SISRP-1980

Title: Undergraduate Statement of Intent to Register (SIR) Deposit

Author: Lauren Williams and Dana Handler

## This Steering Council Proposal is a Request for: Decision

### DECISION

A decision needs to be made about the Admitted Undergraduate Applicant's transition from Slate to Campus Solutions as well as the system of record for each step of the SIR process.

### CONSIDERATIONS

The SIR process impacts multiple systems, the incoming student experience and several modules. There are a number of important factors to consider.

#	Requirements	Considerations	Area Importance Ranking
1	SIR decisions must be recorded in both Slate & Campus Solution (CS) near real-time.	<p>Integration development will be required to keep these two systems in synch.</p> <p>The SIR process will be developed and supported in CS for Graduate admissions.</p> <p>We need to understand timing considerations (maximum of 15min lag) for each interface to determine business impact.</p>	<p><b>OUA – HIGH</b></p> <p><b>FASO – HIGH</b></p> <p><b>SF –</b></p>
2	Admitted applicants should have the option to quickly and easily be able to complete all the steps to SIR.	<p>Cal Net IDs will not be granted to fall 2016 applicants, however, if CalNet IDs are assigned to applicants for future admit terms the transition from Slate to CS would be smoother.</p> <p>The technical team is investigating the smoothest path for admitted students to log into CalCentral next year.</p>	<p><b>OUA – HIGH</b></p>
3	Financial Aid (FA) awards must be available for the admitted applicant to see on Decision Day.	<p>FA award data will be calculated and maintained in CS which may require a non-Slate login.</p> <p>Decisions will initially be viewed in Slate, prior to creating a CalNet ID using a Slate login.</p>	<p><b>OUA – HIGH</b></p> <p><b>FASO – HIGH</b></p> <p><b>SF –</b></p>
4	Credit Card gateway must be both PCI and UC Berkeley Compliant.	<p>This is already a requirement for the CS gateway for Grad Division Admissions.</p> <p>If payment is accepted through Slate, there is an additional cost to maintain another gateway instance, interface, and additional reconciliation process.</p>	<p><b>SF – HIGH</b></p>

5	The SIR payment must be posted in Student Financials to apply to the Student Services deposit and interface to the general ledger (BFS).	<p>If payment made in Slate, an additional gateway and interface would need to be managed. This could also require a customization in CS, Slate and possibly CyberSource to pass an identifier for the student back to CS.</p> <p>If payment is made in Slate, the EMPLID or UID must exist in order to reconcile accounts.</p> <p>If payment is accepted in CS, delivered quick post functionality will be used to immediately update the Student Account in CS.</p>	<b>SF – HIGH</b>
6	The SIR process is not complete until all 3 steps are done (Honor Code, Conditions of Admission and \$100 deposit).	<p>Both Slate and CalCentral / CS can handle the following constraints:</p> <ul style="list-style-type: none"> <li>- Suppressing partial payments</li> <li>- Sequential steps to complete the SIR process</li> <li>- Ability to control “accept/decline” option by date, program, admit type.</li> </ul>	<b>OUA – HIGH</b> <b>SF –</b>
7	The technical infrastructure must be able to handle high volume peak traffic on decision day(s).	<p>Decisions are released on at a specific hour on 2 highly published dates.</p> <p>Admitted Early: New for Fall 2016 Freshman App Count: 105K – 8% annual increase Transfer App Count: 15K</p> <p>Load testing must occur in Slate, CalNet, CS and CalCentral to ensure performance at peak.</p>	<b>OUA – HIGH</b> <b>Integration – HIGH</b>
8	A functional and technical solution needs to be developed to defer SIR payments for identified population of applicants (non-required deposits).	<p>Business partners will need to develop the criteria to identify this population of applicants and support the appropriate financial transactions.</p> <p>A separate SIR flow and design would be required for this population in the impacted systems.</p>	<b>OUA –</b>

9	All student-facing self-service functionality must support responsive design for mobile use.	Slate is mostly a responsive design for mobile use. The SIR process is a custom solution for UCB and CS and CalCentral will be developed using responsive design for mobile use.	<b>OUA – HIGH</b> <b>SF – HIGH</b> <b>FASO – HIGH</b> <b>UX/Technical – HIGH</b> <b>CS/Technical – HIGH</b>
---	--	--	---

## PROCESS TIMELINE

The entire SIR process occurs for approximately 90 days, beginning Feb. 1<sup>st</sup> and ending June 1<sup>st</sup>.

- Admitted Early Freshman: February 1, 2016
- Freshman SIR Opens: Last Thursday in March 2016
- Freshman SIR Deadline: May 1, 2016
- Transfer SIR Opens: Last week in April 2016
- Transfer SIR Deadline: June 1, 2016

## BACKGROUND

### Participants

#### Proposal Developed By:

Admissions (Undergraduate)

#### Interviewed / Provided Input:

Feedback has incorporated from Admissions, Student Financials, User Experience, Financial Aid, Student Records, Integration, A&E Leadership Team, SIS Technical Leadership and Security teams.

#### Stakeholder Community:

Stakeholders include: Admissions, Student Financials, User Experience, Financial Aid, Student Records, Integration, SIS Technical and Security teams.

### Business Process Highlights

**Applicant Functions in Slate:** After submitting the ApplyUC application, applicants will be prompted to create accounts in Slate for UCB. CalNet accounts will not be created at this time. Slate will be used (by applicants) to monitor their application status, update application data, learn their admission decision and eventually sign up for events. Admitted applicants will continue to use functionality in Slate after they have completed the SIR to view detailed conditions of admission process to sign up for yield events that will continue into the fall.

**Applicant Functions in Campus Solutions (CS):** Admitted students will need to access data in CS to accept (or decline) Financial Aid awards. Post SIR admitted students will need access to CS to view bills and make

payments. In addition, admitted applicants will need to view To Do Items (Checklists) and Holds (Service Indicators) that will be managed in CS.

**Applicant Functions in CalCentral:** CalCentral will be used to simplify and organize the student's tasks and experience. The use of CalCentral is still being explored, however it is the technology that can be used to help bridge the connection between Slate and CS. CalNet authentication or alternative methods are required to access CalCentral. CalNet IDs will only be granted to applicants who have been offered admission to Berkeley for the fall of 2016.

**Office of Undergraduate Admissions (OUA):** OUA will use Slate to manage the 9 month admission process from the receipt of the application in November through the following August when the admitted student is registering for a final yield event. This includes the detailed Conditions of Admission that are assigned to each applicant in Slate during the admissions decision process.

During this same timeframe, OUA will also depend on data in CS. Prior to completing the SIR process, a subset of the admitted population will require the ability to view their Financial Aid (FA) package; this information will be calculated and stored in CS. After the admitted student completes the SIR process, CS will be used to update admissions checklists, (potentially) place or remove holds and clear conditions in order to confirm or retract offers of admission.

The priority of OUA is to allow admitted applicants the ability to SIR quickly and easily once they have been admitted. It is also important that Slate is updated with the SIR decision as quickly as possible to ensure the SIR decision is understood in the verbiage of all yield communications. This is also critical for near real-time reporting as the incoming class solidifies. Admitted applicants will need the ability to view their Financial Aid offer prior to completing the SIR process.

**Financial Aid and Scholarship Office (FASO):** FASO will need the applicants (who are under final evaluation for admission) loaded into CS in order to support the Admitted Early population and simulate FA packaging. FA offers must be packaged and viewable at the same time the offer of admission is announced. It is important that FA data appears to the admitted student in near real-time, as awards can change throughout the cycle. Admitted students will also require the ability to accept or decline an award. This functionality will exist in CS. Deposits will not be required for low income admits, it was suggested that FASO could proactively identify this population in CS. It is also important that FASO is aware of the SIR decision (in CS) as quickly as possible for planning and reallocation purposes.

**Student Financials:** Student Financials will process payments and manage student accounts in CS, including the Graduate Division enrollment deposit (through the CS-gateway to CyberSource). There would be additional maintenance and credit card compliance considerations if undergraduate tuition deposits are accepted through Slate, as it would be an additional payment gateway. Deposits accepted in Slate would also require an interface to update the student account and General Ledger (GL).

**User Experience/CalCentral Team (UX):** The goal of the UX Team is to create a smooth transition from system to system as the incoming classes begins their experience as new Berkeley students. Information should be displayed so the incoming student does not have to log into multiple systems. Incoming student information and next steps must be delivered in a clear and concise manner. For example, the CalNet ID process can be designed as a smooth pass-through service, i.e. take your Slate credentials and create your CalNet ID and passphrase, and then send the student directly to CalCentral. CalCentral uses responsive design and is mobile ready.

WORKING ASSUMPTIONS

#	Assumption	Considerations	Impacted Area
1	Applicants will not receive a CalNet UID until after they have been selected for admission to Berkeley.	Applicants will need to be provisioned in Slate when the ApplyUC application is submitted.  A smooth transition (for the admitted population) is critical. The process to create the CalNet ID must be a combination of both technical and design expertise to ensure a good user experience.	<b>Slate</b> – Initial Provisioning  <b>UX/Technical</b> – Transition design/development  <b>Integration</b> – Bridge between CalNet and Slate  <b>Security</b> – Self Service Access Transition (TBD)  <b>OUA</b> – Slate security/provisioning requirements and business process for applicants
2	There is a technical solution that will allow an admitted applicant the ability to view self-service data stored in CS prior to creating a CalNet ID.  NOTE: Alternative single sign-on capabilities are currently under review.	Option 1 relies on this solution to allow the applicant the easiest path to accept the offer.  Decision days are very high profile event – fail proof integrations will require extensive performance testing to ensure support of heavy traffic.	<b>UX/Technical</b> – Transition design/development  <b>Integration</b> – Bridge between CalNet and Slate  <b>Security</b> – Self Service Access Transition (TBD)  <b>OUA</b> – Transition from Slate to CalNet Functional requirements, business process and communications
3	No process will be created or supported for the UG-SIR deposit to be paid via cash, check, wire transfer, home banking, or other methods.	This is not perceived to be a detriment to international students.  If additional payment options were to be offered, they would be easier to accomplish in CS than Slate.	<b>OUA</b> – International student SIR challenges  <b>SF</b> – If additional payment options are needed

4	The SIR deposit will be non-refundable. If refundable, a process to return the funds to the credit card that paid the fee must be worked out with either Slate or Campus Solutions.	If there are exceptions to this rule, a business process should be documented.	<b>OUA</b> – Exception Processing (if applicable)  <b>FA</b> – Exception Processing (if applicable)  <b>SF</b> – Refund Business Process (if applicable)
5	Graduate Division student SIR will occur in Campus Solutions.		<b>SF</b> – Potentially two online processes to manage for enrollment deposits.

## RECOMMENDED OPTION

### Option 2 – Integrated Solution with CalCentral

**Description:** Students will log into Slate to learn if they have been admitted. Admitted applicants will be instructed to create a CalNet account. After creating a CalNet ID they will log into CalCentral to indicate their acceptance by completing all three SIR actions within Campus Solutions, via CalCentral and their payment will be applied directly to their account in Campus Solutions.

#	SIR Step	System of Record	Applicant Experience in System	Technical Requirements
1	Log into Slate to view decision	Slate	Slate	None, Applicants will have an established account and relationship with the Slate Self Service Portal.
2	Create CalNet ID or Alternative Single Sign-on Functionality	CalNet	Slate > CalNet > CalCentral	Ensure smooth process such as using Slate ID to start the CalNet ID creation process for the admitted student, or not requiring a CalNet creation process. Alternatives in review.
3	Read Honor Code & Accept Terms	Slate	CalCentral	Using the setup and configuration from Slate, CalCentral will expose the Honor Code created in Slate.
4	Review & Accept Conditions of Admission	Slate	CalCentral	Using the setup and configuration from Slate, CalCentral will expose the Conditions of Admissions created in Slate.
5	Review Financial Aid Award	CS	CalCentral	Using the setup and configuration from CS, CalCentral will expose the FA Awards from CS.

6	Pay \$100 Admissions Deposit	CS	CalCentral > CS > CyberSource > CalCentral	Ability to lock the amount required for payment (\$100). Ability to control (by date, Career, admit term, etc.) when the SIR functionality appears to the admitted student. Requires an interface back to Slate to update the SIR flag.
---	------------------------------	----	--	---

**Option 2 - Cross Functional Pros and Cons:**

Team	Pros	Cons
<b>Undergrad Admissions</b>	<p>The Office of Undergraduate Admissions will not need to develop and maintain a credit card account reconciliation process as they do today (<i>BPS will handle</i>).</p> <p>The Office of Undergraduate Admissions will NOT need to confirm, on a quarterly basis, Slate's PCI compliance, through receipt of the certificate (<i>BPS will handle</i>).</p> <p>OUA can manage the Slate configurations and see changes automatically refreshed in CalCentral on a schedule to be determined by OUA.</p>	<p>An interface will be required to update the SIR flag in Slate. There is a 15-60 minute delay updating data into Slate. A delay in the SIR flag update in Slate could result a miscommunication to the incoming student during that window.</p> <p>Admissions scope is already exceeding the available resources for Slate configuration.</p>
<b>Financial Aid</b>	<p>Applicant can view FA Award prior to completing the SIR process.</p> <p>Financial Aid data would be exposed in 2 systems (CS and CalCentral) versus 3 systems (Slate, CS and CalCentral). Reduced security exposure/risk.</p>	
<b>Student Financials</b>	<p>Uses delivered CS functionality for the SIR payment to reflect on student's CS account in real-time; no need to wait for fees to be assessed before applying deposit to account as currently required by legacy process.</p> <p>Graduate and Undergraduate would follow same SIR process.</p> <p>Ability to offer student other payment methods (wire transfer, home banking, check, etc.).</p>	<p>BPS will be assuming credit card reconciliation work not performed today.</p> <p>Students may be charged a credit card convenience fee; this process hasn't been worked out yet to see if an exception could be made.</p>
<b>UX/CalCentral</b>	Establishes the admitted student's	This solution relies on the CalCentral team to



	<p>relationship with CalCentral early in their process as a student.</p> <p>Resources with technical and UX skills to support rapid development. Flexibility to add future enhancements with experienced resources.</p> <p>Some of the code/process developed for the Graduate SIR process could be reused.</p>	<p>create a seamless transition from Slate. They will have already delivered a solution for CS and CyberSource through CalCentral for Grad Div.</p>
<b>Technical</b>	<p>System of record for SIR process is CS which more easily enables other Student Financials post-SIR processes.</p> <p>IT resources more adequately staffed to perform development and reduce project risk. Project currently has less than 2 FTE that are configuring Slate for the first time with an expanded scope. In comparison, we have an experienced team of 4 FTE developers for CalCentral and 10 FTE for Campus Solutions.</p>	<p>All CS Self Service fluid solutions rely heavily on the technical team. See the technical requirements for this option above.</p> <p>Potential risk if CalNet or CalCentral fails due to high volume traffic on decision days. Must perform end-to-end load testing to mitigate this risk.</p> <p>This option will require an interface from CS to Slate that must update the SIR flag in Slate as quickly as possible.</p>

**Cost**

	<b>Technical Resource Impact</b>	<b>Functional Resource Impact</b>	<b>Change Impact</b>
<b>Development</b>	<b>Low</b>	<b>Medium</b>	<b>Medium</b>
<b>Production Support</b>	<b>Low</b>	<b>Medium</b>	<b>Low</b>

Low = 40 hours, Medium = 160 hours, High = 160+ hours

## OPTIONS CONSIDERED AND NOT RECOMMENDED

### Option 1 – Integrated Solution within Slate

**Description:** Applicants log into Slate on decision day to complete the SIR steps, without logging into another system or creating their CalNet ID.

#	SIR Step	System of Record	Applicant Experience in System	Technical Requirements	Technical Effort (H, M, L)
1	Log into Slate to view decision	Slate	Slate	None, applicants will have an established account and relationship with the Slate Self-Service Portal.	Low
2	Review Financial Aid Award	CS	Slate	Account provisioning process that would allow the applicant access to CS prior to creating a CalNet ID. Interface to allow CS FA award package to display through Slate in a secure method.	Medium / High
3	Read Honor Code & Accept Terms	Slate	Slate	Slate delivered configuration	Low
4	Review & Accept Conditions of Admission	Slate	Slate	Slate delivered configuration	Low
5	Pay \$100 Admissions Deposit	CS CyberSource	Slate > CS > Cybersource > Slate	Account provisioning process that would allow the applicant access to CS prior to creating a CalNet ID. Interface to allow CS bill payment to display through Slate in a secure method.	High

### Option 1 - Cross Functional Pros and Cons

Team	Pros	Cons
Undergrad	The admit can log into one system to	Potential risk of a glitch in a highly publicized

<p><b>Admissions</b></p>	<p>complete all SIR steps, allowing them to SIR immediately without having to create a CalNet account.</p> <p>The Office of Undergraduate Admissions will NOT need to confirm, on a quarterly basis, Slate's PCI compliance, through receipt of the certificate (<i>BPS will handle</i>).</p> <p>The Office of Undergraduate Admissions will not need to develop and maintain a credit card account reconciliation process as they do today (<i>BPS will handle</i>).</p> <p>OUA can manage the Slate configurations.</p>	<p>process, if integrations fail due to high volume traffic on decision day.</p> <p>An interface to Slate will be required to update the SIR flag, as information from CS will complete the 3<sup>rd</sup> step of the process.</p> <p>A delay in the SIR flag update in Slate could result a miscommunication encouraging the admit to pay the deposit when they have already paid.</p> <p>All Slate configurations performed in live production environment. Higher risk of error requiring tight change management and ample testing to mitigate.</p>
<p><b>Financial Aid</b></p>		<p>Technical requirement to display FA Award data in Slate. Higher data security risks and technical complexity.</p>
<p><b>Student Financials</b></p>	<p>No need to configure or maintain a payment gateway specific to Slate.</p> <p>No integration necessary to update the Student Account or General Ledger. Uses delivered CS functionality.</p> <p>SIR payment will reflect on student's CS account in real-time; no need to wait for fees to be assessed before applying deposit to account as currently required by legacy process.</p> <p>Ability to offer student other payment methods (wire transfer, home banking, check, etc.).</p>	<p>Complex technical requirement to allow SIR deposit payment functionality to securely integrate to CS and CyberSource and return the applicant to Slate with different authentication methods in these systems.</p> <p>A technical solution will need to be developed in CS Self-Service to ensure partial payments are not accepted for the deposit.</p>
<p><b>UX Portal</b></p>	<p>No CalCentral development required for the SIR process. Delivered Slate functionality manages three concurrent requirements (Conditions of Admission, Honor Agreement, Deposit) without modifications.</p> <p>Mobile capabilities for accepting offer on phone/iPad delivered w/Slate</p>	<p>Complex technical requirement to securely display CS functions (FA Award and deposit payment) in Slate with limited first-time resources for Slate configuration and expanding scope.</p>
<p><b>CalNet</b></p>	<p>This process would eliminate the high volume stress on the CalNet provisioning</p>	<p>A technical provisioning solution must be developed to allow the applicant access to CS</p>

	system, as admits would not be required to create the CalNet ID prior to accepting the offer.	prior to creating a CalNet ID.

**Option 1 - Cost**

L

	Technical Resource Impact	Functional Resource Impact	Change Impact
Development	High	Medium	Medium
Production Support	Medium	Medium	Low

w

Low = 40 hours, Medium = 160 hours, High = 160+ hours

**Note:** Option 3 was researched to allow applicants to SIR immediately if they didn't want to see their financial aid package or create a CalNet account and proceed to CalCentral/CS to see their financial aid package. The complexity and duplication of development eliminated this as a viable option.

**Recommendation**

After the analysis of all 3 options, the SIS Project Team recommends **Option 2 - Integrated Solution within CalCentral** which is now planned to be in production for early admits in February 2015 (previously end of March 2015). Both options have the ability to provide a good user experience for admits that meet the critical known business requirements. The primary reasons for recommending Option 2 are that: 1) we are better resourced with proven technologies to reduce the risk of not making deliverable dates given existing resources, 2) our existing limited knowledge of Slate capabilities at this time on campus, 3) an expanded scope for Slate that includes SIR, SIR payment and possibly other yet unknown functionality required by other modules (transfer credit and financial aid under review), 4) an earlier deadline for production, 5) reduced security risks by limiting interfaces to fewer systems, 6) reduced time to develop solutions that are already required for Graduate admissions.

**Decision of Steering Council**

[Indicate the decision reached]

**Communication Needed**

[Indicate the communication necessary]

Sender	Receiver	Message	Who's Affected

## Glossary – Addendum A

### **Statement of Intent to Register (SIR):**

Comprised of three sequential actions; Acceptance of the University Honor Code agreement, Acceptance of Conditions of Admission, and the submission of the \$100 deposit. In some cases, the deposit will be waived.

### **Conditions of Admission:**

One of the three SIR actions; a contract that is attributed to a student based upon the population or student type (e.g. freshman, transfer, domestic, international, Summer Bridge, etc.). In addition to the contract, details about specific final term enrolled coursework are incorporated for each transfer student. The conditions of Admission will be stored in Slate.

### **Admissions Checklist:**

Managed in CS after the SIR process is complete. A high-level checklist displayed in CalCentral based on the detailed conditions of Admission stored in Slate.

### **University Honor Code agreement:**

One of the three SIR actions. Honor code establishes that the student agrees to act with honesty, integrity and respect.

### **SIR Deposit :**

One of the three SIR actions; currently \$100; a pre-payment of registration fees for the student's first term of enrollment.

### **CyberSource:**

A third party for online and credit card payment gateway, fraud management and payment security service. CyberSource is used by Slate and may be used at Berkeley to manage on-line payments.

### **Higher One:**

A third party service provider, for online payment and bill presentment. Higher One is another option to manage Berkeley's on-line payments in CS, which could be satisfied with the SIS/GL integration and cashiering functionality.

### **Clearing Conditions:**

Applicants are reviewed and admitted based on self reported data. After an admitted applicant has completed the SIR process, they are required to submit official documentation (per their conditions) so OUA can clear the conditions of their admissions offer. This process is expected to occur in CS, as official transcript information will be stored in CS for Transfer Credit, Registration and Advising purposes.

### **Financial Aid Simulation:**

Pre-packaging of Financial Aid awards for the population under final consideration for admission. This process will be managed in CS.

### **iFrame Technology:**

Allows framed functionality from a particular system to exist in another system.

**API Technology:**

Application Programming Interface which is the technology that we are using to integrate data between systems.

**Fluid/Mobile Ready:**

The terms “Fluid” and “Mobile Ready” refer to ability to automatically re-size the display of information, based on the screen size of the device (such as a smartphone or iPad).