Insight

Insight is a data portal created by the School of Arts and Sciences. It merges data from several central systems with information provided by departments to create a single portal where the school’s data can be managed.

Insight is accessible at https://insight.rutgers.edu/.

Access Control in Insight

Background

Access control in Insight consists of four elements: resources, permissions, roles, and users.

- **Resources**: Any part of the system that is access-controlled. This is almost always a specific webpage, an individual element within a webpage, or a type of data.
- **Permissions**: A permission is a set of resources grouped together and given a name.
  - Example: A permission called “Edit Faculty Appointment” would contain the resource representing the “Edit Faculty Appointment” page along with all the other resources needed to get to that page, such as “View Faculty Appointment,” “List Faculty Appointments,” etc.
- **Roles**: A set of permissions. Roles are typically job functions, such as Department Administrator or Scheduling Coordinator. There are two types of roles:
  - Local roles: These are roles defined within Insight. For someone to be assigned a local role, an administrator must first add the person to Insight as a user.
  - Central roles: These are roles defined by our login process based chiefly on LDAP data. These roles are not specific to Insight and are used in a wide array of SAS-IT systems. People logging in are assigned these central roles automatically if they match the criteria defined in the login process. An administrator would first have to add one of these central roles to Insight and then define the permissions for it. Once the central role has been configured, people with that central role can log in to Insight without first having been added to the list of Insight users by an admin. A central role need not be included in the list of Insight’s defined roles.
- **Users**: Individual accounts based on data from LDAP including values such as RUID, NetID, name, email address. Users are assigned to central roles automatically and local roles by an administrator. Users can have multiple roles, and receive all permissions granted to any one of their assigned roles. So, if a user belongs to Role A, which has access to Resource X, and Role B, which does not, the user will be able to access Resource X.

Resources and permissions are defined by the SAS-IT programmers. Local roles and users can be added, edited, or deleted by Insight admin users. Previously such admin users were able to modify the role-permission assignments, but that ability has been rescinded by university directive and is currently available only to SAS-IT staff.
There is one additional layer to this structure used in Insight: SAS-IT can define resources and local roles as being restricted to assigned departments.

- **Example:** The “Edit Faculty Appointment” resource and the “Department Administrator” role are defined as restricted to assigned departments. When a user is assigned the Department Administrator role, the admin must also select from a list those departments the user can access with that role. So, if the user is granted the Department Administrator role for Mathematics and Statistics, the user will be able to edit faculty appointments in Mathematics or Statistics but not in History or Psychology.

- If the user has multiple roles with the “Edit Faculty Appointment” permission, and at least one of those roles is not restricted, the user will be able to edit faculty appointments in all departments.

Roles can also be restricted by discipline, such as the Area Dean role. When a user is assigned the Area Dean role, the admin must select the disciplines the user can access with that role. The user will then be able to access the restricted resources for all departments in that discipline.

**Sensitive Data**

The following are defined as “Sensitive Data.” Each has its own separate access control, so if need be one field can be turned on for a role while leaving the others off.

- **Appointments:** Grade, rank, salary, salary range
- **Courses:** Tuition dollars
- **Employees:** Citizenship, date of birth, ethnicity, gender, home address and phone number, salary history, update history (list of all changes made to the employee record)

**Roles**

- **Chancellor:** all departments, read-only, no HR documents
- **Dean’s Office**
  - Executive Dean: all departments, read-only
  - Academic Deans: all departments, read-only
  - Area Deans: by discipline, no HR documents
  - General Dean’s Office:
- **HR:** all permissions
- **Finance:** all permissions, no HR documents
- **Facilities:** all permissions, no HR documents
- **Director of Administration:** by discipline, all permissions
- **Departments:** by department, no HR documents
  - Director: all permissions
  - Chair: read-only, no sensitive data
  - Admin: no sensitive data
  - Basic Read-only: read-only, no sensitive data
  - Course Scheduling Coordinator: course scheduling module
- **Employees:** view their own data, add/edit their own teaching and space occupancy records
  - **SAS Employee:** central role
- Non-SAS Employee: a non-SAS employee with a record in Insight, or SAS employees who did not receive the SAS Employee central role. The permissions for the Non-SAS Employee role should match those for the SAS Employee central role.

Permissions
The permissions in Insight are very granular, which provides maximum flexibility for tuning the access control. This also necessarily means that, well, there are a lot of permissions: 164 in 23 categories.

Excluding leadership appointments, HR appointments are divided into five groups: faculty, staff, research, fellows, and other (any appointments that Insight’s logic was unable to categorize). For each there are separate permissions for listing, adding, displaying, editing, and deleting appointments, highlighting records that have been edited but have not yet gone through the change management process, listing the teaching assignments associated with the appointment, and editing provisional employees.\(^1\) With eight permissions across each of the five classes of appointments, that’s nearly a quarter of Insight’s permissions alone.

If this level of granularity is not needed, these permissions can be condensed, with, for example, a single “Edit appointment record” position rather than five separate permissions for faculty, staff, etc.

Concepts in Insight

Employees and Appointments
Insight makes a distinction between employees and appointments. University HR systems consider them as one entity, but Insight separates them.

“Employee” refers to the person. Name, RUID, NetID, employee ID number, home address, tenure date, things of that nature.

“Appointment” refers to the job. An appointment has a type (e.g. faculty, staff) and subtype (e.g. Tenured Faculty, Full-Time Staff), a department, a job title, etc. Employees have one or more appointments. If a Dean’s Office staff member teaches a Computer Science class, that employee will have two appointments: a Dean’s Office staff appointment, and a Computer Science faculty appointment.

Wherever possible, ancillary records such as office space occupancy or teaching assignments are tied to the appointment rather than the employee. Using the above example, that employee’s office space would be associated with the Dean’s Office staff appointment and not with the Computer Science faculty appointment or directly with the employee. When teaching assignment data is imported daily from Institutional Research, the records are keyed by employee ID. If an employee has multiple appointments, Insight will attempt to determine with which appointment the teaching assignment should be associated.

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\(^1\) A “provisional employee” is one who has not yet been hired but for whom a record needs to exist for course scheduling or other purposes. If a provisional employee is officially hired, Insight’s daily update will see that person’s new official record and attempt to migrate the provisional employee record to a regular employee record if it can. In the future these records will be linked with the various appointment request forms for NTT’s, PTL/CoAds, TA’s, and GA’s.
Leadership appointments (e.g. chair, vice chair, undergraduate director, graduate director) are not imported from university HR data. These records must be added and modified manually to keep them up to date.

Appointment Types
Appointment types are calculated using this model, following each of the conditions in order. Once a match is made, no further conditions are evaluated. Leadership appointments (e.g. chair, undergraduate director) are not imported.

1. Employee type code 7: Faculty—PTL/COAD
2. Employee type code 9: Fellow
3. Fac/Staff indicator is Faculty; Employee Type Code 1, 6, 7, or 8; Title doesn’t contain “Research” ...
   a. EEO Job group is Senior Level Faculty...
      i. Track Ind is Y...
         1. Tenure date is populated: Faculty—Tenured
         2. Tenure date is blank: Faculty—TT
      ii. Track Ind is blank: Faculty—NTT
   b. EEO Job group is Junior Level Faculty...
      i. Job Class Rank Description contains “Professor” ...
         1. Track Ind is Y: Faculty—TT
         2. Track Ind is blank: Faculty—NTT
   c. Job Class Rank description is Instructor: Faculty—NTT
   d. Employee Type Code 6: Faculty—TA
   e. Employee Type Code 8: Faculty—PTL/COAD
   f. Job Class 99631: Research—Postdoc
   g. Employee Type Code 6 AND Job Class between 99752–99757 AND Title contains “Graduate”: Research—GA
   h. No match: Faculty—Other
4. Fac/Staff indicator is Staff...
   a. Employee Type Code 1: Staff—Full-Time
   b. Employee Type Code 3, 4, or 5: Staff—Hourly
   c. No match: Staff—Other
5. Job Class 99916 AND Title is “Summer Research”: Research—Summer Salary
6. Title contains “Research”, Track Ind is blank, and Rank Description contains either “NTT” or “Instructor”: Research—NTT
7. Job Class 99631: Research—Postdoc
8. Employee Type Code 6: Research—GA
9. Fac/Staff indicator is Faculty: Faculty—Other
10. No match: Unknown

Appointment Instances
A daily synchronization process (“sync”) runs to keep Insight’s data up to date with those of the central systems. Insight does something different with the data; old appointments are archived. In central systems, if an appointment is reappointed, the appointment begin and end dates are updated along
with any other changes, and any vestige of the previous state of the appointment is gone. Insight attempts to maintain that old data, and as part of the sync it must decide when to archive an old appointment and create a new one (“add” an appointment), and when simply to update the data (“sync” the appointment).

At present, we do not have clear guidelines for when this archiving action should occur, so the current conditions are based on best-guess estimates and trial and error. Therefore, this logic may and likely will change at some point in the future. Some of the logic in the process flow below may appear redundant, as it has been tweaked many times over the development process. It is explained below as it exists in the system currently.

Example: An appointment has begin and end dates of February 1 and June 30. Those values change in the central systems to July 1 and November 30. Insight will see the change in dates and create a new appointment record with July 1–November 30. The existing appointment of February 1–June 30 will be moved to the “Past Appointments” section.

The process starts by loading in all the appointments in Insight and all the appointments in the central systems. This is done in blocks of 500 to 2,000 records at a time. It then loops through all the appointment data from the central systems.

1. If the employee does not have any appointments in Insight...
   a. Add the HRDW appointment as a new record.

2. If the employee does not have any appointments in Insight with the same appointment number as the HRDW appointment...
   a. See if the employee has other appointments in Insight. If so...
      i. See if the employee has multiple current appointments in the HRDW marked as primary. Right now, there are three or four such employees. An entry is made in Insight’s sync log file, but as yet no action is being taken.
      ii. Loop through them. For each Insight appointment...
         1. Check is whether the HRDW appointment is active, both the HRDW appointment and the Insight appointment are primary, and the appointment numbers do not match. If so...
            a. If the begin date, assignment status code, appointment type, and departments are the same...
               i. If this employee has not been separated...
                  1. Sync the appointment.
               ii. If the employee has been separated...
                  1. Continue to the employee’s next Insight appointment without adding or syncing.
            b. If the HRDW appointment’s begin date is after the Insight end date...
               i. Add the HRDW appointment as a new record.
            c. If the employee has a separation date in Insight, and the HRDW appointment’s begin date is after the Insight separation date...
               i. Add the HRDW appointment as a new record.
            d. If the appointment numbers don’t match...
i. This isn’t the right appointment. **Continue** to the employee’s next Insight appointment.

e. If we have reached this point without either syncing this appointment, adding a new appointment, or continuing to the next appointment, the system does not know what to do.

   i. It will make an entry in the log file and continue to the next HRDW appointment.

2. If not, **continue** to the employee’s next Insight appointment.

   iii. If all the employee’s appointments have been checked and no match was made,

      1. **Add** the HRDW appointment as a new record.

b. If the employee has no other appointments in Insight,

   i. **Add** the HRDW appointment as a new record in Insight.

3. If the employee does have a Department Profile appointment with the same appointment number...

   a. If the resource type has completely changed (such as from faculty to staff) ...

      i. If the Insight end date is earlier than the HRDW begin date...

         1. **Add** the HRDW appointment as a new record.

      ii. If not,

         1. **Sync** the appointment.

   b. Was the Insight appointment marked as deleted? If so,

      i. Is this employee separated from the university? If so,

         1. **Sync** the appointment.

      ii. If not,

         1. **Sync** the appointment and remove the “deleted” mark.

When Insight goes to sync an appointment, it does some additional checks that may result in adding a new record rather than updating the old one:

- The begin date has changed and is after the Insight end date, and the HRDW assignment status code is not T.
- The begin date has changed, the Insight appointment has an end date, and the HRDW begin date is at least 300 days after the Insight begin date
  o (The value of 300 days was selected arbitrarily)
- The begin date and end dates have both changed
  o The old appointment’s end date is automatically set to the day before the new appointment’s begin date
- The job class has changed to either 05100 or 05200 from something other than 05100 or 05200
  o These job codes are for student workers.
  o To date this check has never been invoked.
User Experience

Users will have to agree to the data policy the first time they log in. Clicking "I Do Not Agree" will log the user out.
My Page

Users whose only role is SAS or Non-SAS Employee will be redirected to their “My” page. All users will have access to their own “My” page, but only those users with no other role will be redirected there upon logging in.

My Page consists of:

- Non-sensitive personal data
- Current and Past Appointments
- Office Space
- Course Scheduling
- Current and past teaching assignments
- HR Documents
  - Documents are not listed. This section simply contains the statement, “To view your personnel files, please make a request with SAS HR.”

The current permissions allow all users to add and modify their own teaching and office space assignments.

<table>
<thead>
<tr>
<th>Regular Employee Info</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employee ID: 1190766</td>
</tr>
<tr>
<td>Last Name: Rutgers</td>
</tr>
<tr>
<td>First Name: Henry</td>
</tr>
<tr>
<td>Middle Init: U</td>
</tr>
<tr>
<td>Doctoral Degree: PhD</td>
</tr>
<tr>
<td>Hire Date: November 18, 1766</td>
</tr>
<tr>
<td>Email Address: <a href="mailto:colhaven@enes.rutgers.edu">colhaven@enes.rutgers.edu</a></td>
</tr>
<tr>
<td>NetID: colhaven</td>
</tr>
<tr>
<td>RUID: (private)</td>
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<table>
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<tr>
<th>Current Appointments</th>
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<tr>
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</tr>
<tr>
<td>Appt. No: 0</td>
</tr>
<tr>
<td>Status: A</td>
</tr>
<tr>
<td>Appointment Type: Staff &gt; FT Staff</td>
</tr>
<tr>
<td>Department: Dean's Office</td>
</tr>
<tr>
<td>Position: Manager</td>
</tr>
<tr>
<td>Job Begin: 01/01/2013</td>
</tr>
<tr>
<td>Appt. Begin: 01/01/2013</td>
</tr>
<tr>
<td>Appt. End: Yes</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Office Space</th>
</tr>
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<tbody>
<tr>
<td>Record ID: 7952</td>
</tr>
<tr>
<td>Campus: College Avenue</td>
</tr>
<tr>
<td>Bldg. No: 3000</td>
</tr>
<tr>
<td>Bldg. Name: Old Quarters</td>
</tr>
<tr>
<td>Floor: 0</td>
</tr>
<tr>
<td>Wing: 012</td>
</tr>
<tr>
<td>Room: 012</td>
</tr>
<tr>
<td>SAS Room Use: Appt RU</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Scheduling</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dept: English Writing Program</td>
</tr>
<tr>
<td>Term: Spring</td>
</tr>
<tr>
<td>Year: 2018</td>
</tr>
<tr>
<td>Issue: Yes</td>
</tr>
<tr>
<td>Comment: test</td>
</tr>
<tr>
<td>Acknowledged Time: 12/22/2018 03:00 PM</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Teaching Assignments</th>
</tr>
</thead>
<tbody>
<tr>
<td>You have had no registered teaching assignments.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Documents</th>
</tr>
</thead>
<tbody>
<tr>
<td>To view your personal files, please make a request with SAS HR.</td>
</tr>
</tbody>
</table>
Main Dashboard
All other users will be directed to the main dashboard. There are three dashboards:

- **Main**: data includes all departments in all disciplines
- **Disciplines**: data includes all departments in the selected discipline
- **Departments**: data includes only the selected department

For users with discipline- or department-restricted roles, the dashboards will only include their allowed departments.

Users can add, move, and delete dashboard widgets. Each dashboard is user-specific, so changes to one user’s dashboard will not affect anyone else’s. There are currently 12 dashboard widgets available: two each for enrollment and space data, and eight for HR data. More widgets will be made available in the future based on suggestions from users.

To add a dashboard widget, click on the empty widget panel that says, “Add Chart Widget”.

Select the chart type. They are organized by category.
Some charts have additional options, such as semesters, fiscal years, or appointment types.
Viewing Appointments

Appointments are listed by type (e.g. faculty, staff). Like the dashboards, there are lists for all appointments by type across SAS, a single discipline, or a single department.

This is the view of the appointment list for an unrestricted user:

And one for a restricted user, who can access only one department:
Departments
The departments homepage is a dashboard, and the data displayed is only for that department.

Department Info
The Department Info tab contains some basic information about the department: various budget and organization codes, the discipline, and the main campus address.

This is also where academic codes (major, minor, and curriculum) are associated with the department. Enrollment and course data for the department are limited to these codes, so modifying them will also change the data displayed on those other tabs. Each code can only be associated with one department at a time, so adding a major code associated with another department will remove it from that department as well.

Leadership
The Leadership tab is where faculty administration appointments are maintained. There are four standard leadership appointment titles: Chair, Vice Chair, Undergraduate Director, and Graduate Director. There can be multiple leadership appointments for each title at the same time, and the same appointment can have multiple titles. There is also a free-form text box where you can enter a custom title.

Leadership appointments are not imported or synced from Central systems.

You can also add department committees. A department committee record consists of the name of the committee and a list of the committee’s members. Members are associated with the committee by appointment record, not employee record.

The Leadership tab also has file attachments enabled. The two default attachment types are Org Chart and By-Laws, though you can select Other and specify the type of attachment.

HR Tabs: Staff, Faculty, Research, Fellows, Other
These tabs contain all the department’s current and past appointments. They are organized by appointment type, so the Staff tab will have Full-Time Staff and Hourly Staff in separate tables, the Faculty tab will have Tenured, Tenure-Track, NTT, PTL/Coad, and TA’s listed separately, and so on. The columns in each table will differ slightly based on the appointment type, but for all of them clicking on the Employee ID will go to the Employee page, and the Payroll Title is linked to the Appointment page.

At the bottom of each tab is a list of Provisional Employees, if any. Provisional employees are employee records that are manually created for employees who have not yet been hired. Provisional employee records have fields for Anticipated Department and Anticipated Appointment Type, and if these are populated the provisional employee will be listed on the corresponding department HR tab. If the sync finds a new employee, it will attempt to migrate the Provisional Employee record to standard appointment and employee records.

When an appointment ends or is archived, it will move to the Past Appointments table at the bottom of the page.

The Other tab is for appointments whose type could not be determined when it was imported from Central.
Teaching
The Faculty and Fellows tabs have links to teaching assignments. Teaching Assignment records are imported from Institutional Research data. Recently Insight started syncing from a new source of course instructor data, but that has not yet been connected to the existing Teaching Assignment module.

Teaching Assignment and Teaching Load records are maintained under the Courses tab. This page will list the records associated with the faculty member or fellow, and the links will go to the Courses tab.

Enrollment
The Enrollment tab is a summary of the department’s undergraduate and graduate enrollment. It is separated by academic year.

Undergraduate enrollment will show the number of declared majors, declared minors, sections scheduled, and credits taught in the Fall and Spring semesters of the selected academic year. There are two separate figures for course enrollments: enrollments and unique students taught. If one student is taking two courses in your department, that student will count as 2 in Number of Enrollments and 1 in Number of Unique Students Taught.

There is also a table for the entire academic year for enrollments by course level: under 100, 100-199, 200-299, 300-399, and 400-499.

Graduate enrollment will have number of sections taught, unique students, and credit taught by semester and by graduate student type (Terminal Masters and Ph.D.).

Below that is Tuition Dollars by Program. This will have tuition dollars for the enrolling and teaching schools for every section of every course taught by the department in the selected academic year. This data is loaded manually and may not be available for the current academic year. Tuition Dollars by Program is considered sensitive data, so it may not be available for all users.

Courses & Teaching
The courses tab contains a list of all courses and sections for the curriculum codes that are associated with the department. The layout is based on the old SAS Enrollment System. Standalone courses have a tan background. When multiple sections share a common meeting, such as a large lecture with separate recitations, the recitations have a light blue background, while the common lecture is highlighted in tan.

The common lecture will not have a section number, registration index number, or stop point listed, and the current and projected enrollment totals will be the sum of those values for all the related sections. Internally Insight refers to these as “course groups.” Crosslisted courses have a gray background.

The Courses & Teaching tab will display the Fall and Spring semesters for the current academic year by default. It can also display the course data for individual semesters going back to Fall 2014.

Note: Summer and winter courses are not included.

To view a section, click the course title. The section page will include basic information about the course (semester, course code, credits) along with meeting times and enrollment figures, including enrollment by the student’s unit of registration. This page will also list teaching assignments and other sections of this course from past, current, and future semesters.
When viewing a joint section (i.e. a course group’s common meeting), the individual sections are listed in a table called “Related Sections,” and the enrollment values will be labeled as “Combined.”

**Note:** A known issue that the course section may not display as expected if it belongs to multiple groups, such as a common lecture with five other sections but a shared recitation with another section. Insight will join sections into course groups if the meet in the same room at the same time. This will be addressed in a future update.

Teaching Assignments
To add a teaching assignment, click the Add Teaching Assignment button. This will open the add form on the same page.

When on a joint section, page, the form will include a drop-down menu to associate the teaching assignment either with the common meeting or one of the individual sections.

Once added, the teaching assignment will be associated with the instructor’s appointment.

Teaching Loads
A teaching load is a minimum teaching requirement. A department-level teaching load applies to all appointments in that department of one or more faculty, research, or leadership appointment types.

A teaching load stipulates that instructors must teach a minimum number of courses. The minimum can either be spread over an entire academic year (counting only the fall and spring semesters), or separate quotas for the fall and spring semesters. When setting the teaching load to a minimum number of courses per semester, each semester can have a different minimum.

The teaching load must also include what kinds of courses count towards the minimum. There are two options: course level (000, 100, 200, 300, 400, or graduate, of which at least one must be selected), and minimum number of credits (0, 0.5, 1, 1.5, 2, 3, or 4). To allow all courses to count towards the teaching load, select all six course levels and set the minimum number of credits to 0.

Additionally, the teaching load can stipulate whether two teaching assignments in the same course counts as one or two towards the minimum. The “same course” is defined as two sections with the same course number.

Finally, select the academic years to which this teaching load applies. This is so that teaching loads can be changed for the current year without affecting previous years. A checkbox controls whether this teaching load gets automatically applied to future academic years when they get added to Insight.

A column called “Load Met” in the list of appointments on the Faculty tab gives quick reference as to whether each instructor has satisfied the teaching load for the current academic year. It will be empty if no teaching load applies to that appointment.

Of course, there are times when exceptions must be made. To change the teaching load for an individual faculty member, click the Teaching Assignments button on the appointment view page. On the left side will be a list of academic years with the teaching loads for each. The course counts will either be in red (does not meet) or green (meets). There are two ways to make exceptions:
• Edit: This will allow you to set a custom teaching load that applies only to this appointment. By default, the teaching load type is set to “Use department’s standard teaching load.” Select minimum number of courses per year or per semester to set a custom load for this appointment, or select “No minimum” if this appointment is exempt from a teaching load.

• Override: Based on the course level and number of credits for the class taught, each teaching assignment may or may not count towards the minimum. Here you can set it so that an individual teaching assignment either automatically counts or automatically does not count towards the teaching load.

Scheduling
TBD

Space
This tab contains a list of all rooms for which Insight considers this department the owner. Rooms in all buildings are listed in the same table. Buttons above the table will limit the table to rooms in individual buildings.

Clicking on a room number will bring up the page for that room. This is identical to the room view at the global level.

Finance
The finance tab is presently empty, except for a file attachment form. Here you can upload finance-related files such as the budget crosswalk.

Documents
This tab will list all personnel documents for employees affiliated with the current department. The document synchronization process is not currently running, so this list will only show documents up to 2014.

The Documents tab is considered sensitive data, so not all users will be able to access it, and not all who can access it will be able to see all data.

Summary
The Summary tab shows a brief overview of the department: certain fields from the Department Info tab, names of those in leadership roles, counts of appointments by type, and enrollment data.

Positions
A position is a way to track a specific job over time. Its attributes are related to the job itself and not necessarily the person holding it. Some of those attributes are the job class, whether it requires a background check, required training, the hiring salary range, and file attachments such as CARFs. A position represents a specific seat; if a department

The incumbent is the person currently working in that position, associated with the appointment. The incumbent can be decoupled from the position when the position becomes vacant again, and later associated with the new incumbent. This makes it possible to see the employees who have held that specific position over time.
If your department has multiple identical positions, the Clone function saves the trouble of having to add each position separately. Complete the Add Position once, and then clone it. This creates a separate record with the same attributes to save some time.

The Apply Merit Increase function is a way to increase the hiring salary ranges for all appointments by the same amount without having to edit each position individually.

Positions are numbered with a 5–2 format, a five-digit position number and two-digit instance number. As with appointments when they are synced, some changes to position records should simply update the values while others require it to be archived and a new instance created. With positions, the choice of whether to update or archive is yours. If you archive the position, the changes you make on the Edit form will not be applied to the current instance, but the new one. The new instance will have the same position number, but the instance number will be incremented by one.

Notes:
- The positions module is somewhat rudimentary and will likely evolve with usage as new business needs are revealed.
- Positions exist only within Insight and are not imported or synced from Central systems.

**Space**

Most data in Insight is a subset of a department record. One exception is space. Insight contains a list of all buildings and all rooms associated with the University. This comprises 100,365 rooms in 1,113 buildings.

The space data in Insight is based on a snapshot export from Central. SAS does not have live access to this data right now, but in the future, we expect that space data will be synced just like other data.

There are two ways to access space data. There is the Space link on the main navigation menu, which will display all the rooms in any building, one building at a time. There is also a Space tab in the department view, which will list all rooms “owned” by that department and can also be refined by building.

**Rooms**

Each room record has the following attributes:

- Building
- Floor/wing
- Room number
- Square footage
- Capacity
- Room Type
- Room Use Code
- Owner

Each room has two room use code and two owner fields. The Rutgers Room Use and Rutgers Owner values come from Central, while the SAS Room Use and SAS Owner values exist only within Insight. (The Rutgers Room Use code has since been replaced by the Room Type code.)

There are 179 room type codes, 192 Rutgers room use codes, and 63 SAS room use codes.

To view a room, first select a campus. The campuses are College Avenue, Busch, Livingston, George H. Cook, Douglass, New Brunswick (downtown), followed by all other campuses (for on-campus buildings)
and cities (off-campus buildings) in alphabetical order. After selecting a campus, select the building from either the other drop-downs. One lists the buildings on that campus or in that city by building number, and one by name. Alternately you can enter the building number or part of the building name in the search box at the top of the page.

Once a building is selected, you will see a list of all the rooms within it. Click the room number to view details for the room. Information about the room is displayed on the left, and a list of occupants is shown on the right.

**Occupants**

An occupant is a record that connects an appointment to a room. Additionally, the occupant record has an optional Occupant Room Use code, which you can select from one of the 63 SAS room use codes, and a comment field. An appointment can have occupant records in multiple rooms, and multiple appointments can have occupant records in the same room. An appointment can have an occupant record in another department’s room.

Occupant records are not synced and must be maintained manually.

**Snapshots**

Just before midnight every day, Insight archives its old data. You can then go back to any date and see what the data looked like then.

Snapshot data is not editable.

**Change Management**

When a record is added, modified, or deleted, all such changes are passed to Insight’s Change Management module. Records that have been added or modified are highlighted in yellow until the changes have been reviewed. Records that have been deleted will not appear, although a help message will be displayed indicating that there are unreviewed deletions.

If a Insight record has been modified, for example an employee’s tenure date changes from 2003 to 2005, and it now conflicts with the data in the central systems, the daily sync will not update the value until the change has been reviewed. It will continue to say 2005 in Insight, highlighted in yellow, even while Central continues to say 2003. If Central data is updated to 2005, so that it now agrees with the unreviewed change, Insight will mark the change as reviewed and approved, and it will no longer be highlighted.

The person reviewing the change first must determine if the change made by the user is correct. If the new tenure date of 2005 is incorrect and the original value of 2003 was correct, the reviewer should reject the change. This will restore the original value of 2003, and that field will no longer be highlighted.

But if the new date of 2005 is accurate, the reviewer should not immediately approve the change. Doing so will remove the highlight, but it also means that the sync will change the value back to 2003 when it runs the next day, as that is what is in the Central systems. So before approving the change, the reviewer should see to it that the record in the Central Systems is updated to the correct value. The reviewer can then approve the change or wait for Insight to mark it approved the next time the sync runs.
The reviewer can and should immediately approve the change if it involves data that is not imported from Central systems, such as file attachments or leadership appointments.

Changes are listed on the Change Management pages divided into two sections, one for department record changes and one for employee record changes. (Here, appointments are considered department records.) Departments with unreviewed changes are highlighted, along with a listing of which tabs have changes that need to be reviewed. Departments that are not highlighted do not have unreviewed changes, but all past changes are still available for display.

Because employee records change so often, and there are over 18,000 of them, it’s impractical to list all employees. Therefore, the employee list on the Change Management page will only contain employees whose records have been modified by an end user. Employees whose records have only been modified by the sync will not be listed here, but their change management histories can be accessed by the Change Management button on their respective Employee pages.

When reviewing an addition or deletion of a record, there will be an option either to approve or reject the addition or deletion. When reviewing a modification to a record, there will be an option to approve or reject each individual update independently (if more than one field has changed). The reviewer does not have to approve or reject all the updates at the same time.

Rejecting an addition will delete the record, and rejecting a deletion will restore it.

Since knowing that a record was simply added or deleted or had one individual field changed doesn’t provide much context, the change screen will also display a summary of the record. The summary will contain the record’s data as it is now, and not necessarily what it was when the change being reviewed was actually made.

Sometimes unreviewed changes can conflict. Assume an employee’s tenure date was changed from 2003 to 2005 (Change #1), and then again from 2005 to 2007 (Change #2).

- While Change #2 remains unreviewed, Change #1 cannot be approved or rejected. These two changes are in conflict.
- If Change #2 is approved, the tenure date is accepted as 2007. Change #1 cannot be approved or rejected, and it will remain permanently unresolved.
- If Change #2 is rejected, the tenure date reverts to 2005. There is no longer a conflict, and Change #1 can now be approved or rejected.

Users with Change Management access in department-restricted roles will only be able to see changes made to department records in their departments and to employee records for employees affiliated with their departments. Users with Change Management access who are restricted from seeing sensitive personal data will not be able to see or review changes made to those fields.