Carnegie Mellon Billing Use Case

The Carnegie Mellon Student Bill Use Case

Each month Carnegie Mellon University creates bills for each of 10,000 students that represent all the charges for that month. These bills are suitable for reading online and for printing. Each student can see all of their own bills and can delegate a viewing of their bills to anyone with a CMU login or a login from a federated institution. A student can also designate that a copy of the monthly bill be mailed to a specified email address. In addition there are less than 100 local-billing administrators on campus that can also see individual student bills. The local-billing-administrator's access is based on college or department or degree enrollment of the student. When a student is enrolled in two departments or in two degree programs both local-billing-administrators will be able to view the students bill.   For example there maybe one billing-administrator for the Tepper College of Business but a separate billing-administrator within that college for the Evening MBA program. At the University level there are fewer than 5 university-billing administrators whom can see any student bill they desire. They are also responsible for designating local-billing-administrators. Note that a local-billing administrator has no powers of delegation.

Actors/Roles

- University-billing-administrator - can view the bills of all students, can designate local-billing-administrators for a set of bills, can view student delegations of bill viewing.
- Student - can view their own bills and delegate viewing of their own bills.
- Student-delegate - can view the bills of any student that delegates "viewing" to them.
- Local-billing-administrator - can view the bills of any student that is enrolled in a department, college, or degree granting program over which they have been delegated "viewing" privileges.

Privileges

- View-own-bills - a student can view their own bills
- View-all-bills - the University billing administrator can view all student bills
- View-student-delegations - who has a student delegated viewing of their bills to ? Today this is indicated by an email address, but it is intended that we will provide online viewing via a parential CMU account or a federated account.
- View-selected-bills - we plan to specify bill group membership rules that specifies what bills can be viewed whether by date range or by department or degree program membership.   Currently when bills are emailed only the current month's bill is emailed. Currently the view-selected-bills privilege granted to local billing administrator allows a delegate to see all of a students bills or all the student bills where dept = x or degree-program = y etc are specified.
- Designate-local-billing-administrator - This delegation is currently permanent but in a future release , the delegation will have to be re-attested at a fixed time period.
- Designate-viewer-of-own-bills - Currently this delegation is valid as long as the email address   specified by the student is valid. In future releases this email address will have to be re-attested by the student. When we provide on-line viewing of bills , the student will have to re-attest the validity of the account at a fixed time period

Privilege	View-own-bills	View-all-bills	View-student-delegations	View-selected-bills	Designate-local-billing-administrator	Designate-viewers-of-own-bills
University-Billing-Administrator	_	x	x	_	x	_
Student	x	_	x	_	_	x
Student-Delegate	_	_	_	x	_	_
Local-billing-administrator | _	_	_	_	x	_	_

Proposed Solutions

perMIT Solution, Grouper Solution,   Rice Solution (pending)