

C3 Integrated Multi-campus Project Charter

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| --- | --- |
| Project Name: | CU System – GitHub Enterprise Agreement |

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| --- | --- |
| Requestor: | Todd Schaefer |
| Business Sponsor(s): |  |

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| AMC OIT Sponsor: |  |
| UCB OIT Sponsor: | Orrie Gartner |
| UCCS OIT Sponsor: | Greg Williams |
| UCD OIT Sponsor: | Dan Haggar |
| UIS Sponsor: | Tony Brooks |

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| Created By: | Todd Schaefer |
| Version: | 1.4 |

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**Charter Purpose**

This Project Charter encompasses required information for a multi-campus project to be formally reviewed by AMC, UCB, UCCS, UCD, and UIS IT Governance. The document will be used by these leadership groups to decide if the project will be **authorized** to move to the planning phase(s) for each campus. The charter documents the initial requirements that will satisfy the stakeholder’s needs and expectations. It outlines the known project scope, technical feasibility, schedule, cost, integrated resource needs, and the key assumptions and constraints.

**Instructions**:

1. Replace the [Project Name] in the header with the actual name of the project without brackets
2. Read the Instructions section
3. Complete as much of the document as possible with involvement from the campuses and/or departments that will be participating and assigning resources to the project. Delete any sections that are not applicable.
4. C3 review and approval:
   1. Does the Charter reflect the desired expectations and outcomes?
   2. Have C3 representatives from each impacted campus confirmed work and resource estimates with the appropriate campus supervisors/departments? Resource commitments will not be made until the next step, but the departments that will be doing the work should have provided any included time, cost, and resource estimates.
   3. What is the overall CU-level urgency of this effort?
5. Campus review and approval:
   1. Does the Charter include enough information for the campus to proceed to the Planning Phase?
   2. Does the level of work required require the project to exist in the campus project portfolio or is the work minimal enough to be done operationally?
   3. Will a project manager be required from the campus or can the project be managed centrally?
   4. When will it be possible to start the work given existing resource capacity and other priorities? Can resource commitments be made for the designated timeframes?

**Template History**

|  |  |  |  |
| --- | --- | --- | --- |
| **Ver.** | **Date** | **Author** | **Change History** |
| 1.0 | 3/5/21 | Brent Phillips | Expanded instructions. Baseline version. |
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**Document History**

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| --- | --- | --- | --- |
| **Ver.** | **Date** | **Author** | **Change History** |
| 1.1 | 3/16/2021 | Todd Schaefer | Initial Draft |
| 1.2 | 3/24/2021 | Todd Schaefer | Modify/update sections 1.1, 1.2, 1.3, 1.5 |
| 1.3 | 4/7/2021 | Todd Schaefer | Update sections 1.1, 1.5, 1.9 |
| 1.4 | 5/5/21 | Brent Phillips | Added section 2.1, general clean-up |
| 1.5 | 5/13/21 | Orrie Gartner | C3 updates |

**Acronyms**

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| **Acronym** | **Definition** |
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# Integrated Charter

| **Project Overview** |
| --- |
| **Description:** |
| **CU System GitHub Enterprise Agreement**  Across the University of Colorado System, we are leveraging disparate tools and services to manage our software code, manage software artifacts, create Continuous Integration/Continuous Delivery automation workflows, and secure our environments.  These disparate tools make it challenging to collaborate and share our software code and automation workflows.  With the [GitHub Enterprise](https://github.com/enterprise) service we will replace tools and services such as BitBucket, Artifactory, and Jenkins across the CU System and allow us all to use a common service.  Although the scope of this project is replacing the tools used within each IT organization, this service could be provided to a broader campus audience (all Faculty, Staff and Students) if desired. For example, groups like the CS department in Boulder that have “rigged” cheaper solutions to meet their needs requiring students or TAs to support, will be able to leverage this service if Boulder’s OIT extends the service.  With a CU System GitHub Enterprise centrally managed service, we have the potential to reduce overall annual costs by retiring existing redundant services used within each OIT, while also increasing the features and platform limits for all (e.g. available licenses, SSO, workflow automation thresholds).  Furthermore, it will enable everyone involved in software development and maintenance across the CU System to establish closer relationships and collaborate with each other.  The GitHub service will enhance software code security, improve automation workflows, accelerate software development delivery, expand team collaboration, and provide more opportunities for innovation across the CU System. With CU System leveraging the same service we can learn from each other and share software code to eliminate duplicative coding efforts.  GitHub Enterprise Features:   * SAML single sign-on * 50,000 Actions minutes/month * 50GB of GitHub Packages storage * Advanced auditing * Protected branches * Draft pull requests * Multiple pull request assignees * Multiple pull request reviewers * Scheduled reminders * Automatic code review assignment * Pages and wikis * Repository insights * Multiple issue assignees * Code scanning (replace Jfrog Artifactory for CU Boulder) * Code owners * Dependency review * Required reviews * Required status checks * Audit log API * IP allow list   Based on a CU System stakeholder survey, the following is a breakdown of the initial GitHub Enterprise costs for each organization that is interested in joining this partnership. Each OIT has confirmed their cost share and user count. Again, this project scope is only focused on internal OIT, not outside OIT and so initial count is limited to the staff user count only. Faculty and students are not included at this time. At the end of this project, each campus will manage it’s own Github organization within a centrally managed Github Enterprise service (similar to Zoom model). Should a campus which to extend the service to faculty, students and additional administrative departments beyond the numbers below, they can certainly do so but this is outside the scope of this operational project.  This project will setup the new GitHub service to be managed by the CU Boulder OIT Platform Engineering team and hosted in the cloud and migrate and retire the identified duplicative services.   |  |  |  | | --- | --- | --- | | **Organization** | **Number of Users** | **Total Cost/Year** | | UCD/Anschutz | 150 | $13,477.80 | | UCCS | 23 | $2,066.60 | | UIS | 0 |  | | UCB | 250 | $22,463.00 | | Advancement | 50 | $4,492.60 | |  |  |  | |  |  |  | | Total users | 473 |  | | GitHub Enterprise Annual Cost | $42,500.00 |  | | Cost per user/year | $89.85 |  |   NOTE: UIS is not participating as they leverage the GitLab solution. For a variety of reasons they are unable to move off of GitLab at this time.  For the first six months (April – September, 2021), to co-term with the Microsoft ESS agreement, the cost will be $44.93/user.  Beginning October 1, 2021 the annual cost will be $89.85/user.  At least for now until we have more users join the service.  For comparison, a GitHub Enterprise individual user subscription is $252/user/year.  This project will setup the new GitHub service and rollout, migrate and retire the identified duplicative services within the IT organizations and be run as an operational project on each campus. |
| **Linkage to CU or Campus Goals** |
| By leveraging the GitHub Enterprise service across the CU System we will align with the following [Transformation & Innovation Program](https://www.cu.edu/tip) initiatives:   1. Initiative 2.2 - Establish Standards & Processes to Support More Effective and Efficient Procurement of IT 2. Initiative 4.8 - Rationalize Common Applications to Reduce Redundancy |
| **Results of Previous Efforts (if Completed)** |
| UCB has been pursuing the GitHub Campus Program (free version) for 23 months. GitHub did not allow the terms of service contract to be modified for the Campus Program and so this enterprise approach is being taken. |

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| **Project Benefits/Value** | |
| **Benefit Description** | **Who Benefits?** |
| Potential to save costs with the retirement of other redundant services | CU System |
| The GitHub service will enhance software code security, improve automation workflows, accelerate software development delivery, expand team collaboration, and provide more opportunities for innovation across the CU System. | CU System |

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| **Project Success Criteria** | |
| **Deliverable** | **Measurement Criteria** |
| GitHub Enterprise Agreement established | GitHub Enterprise Agreement accepted and service is procured. |
| GitHub Administrators identified | GitHub Enterprise service administrators/managers for CU System are identified. |
| CU System GitHub Organizations created | Service Administrators create CU System organizations and configure authentication. |

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| **Project Size Estimate** | | |
|  | **Size** | **Reasons** |
| **AMC** | Small | N/A |
| **UCB** | Small/Medium | If identified as the GitHub Administrators, additional effort is required. |
| **UCCS** | Small | Users identified |
| **UCD** | Small/Medium | If identified as the GitHub Administrators, additional effort is required. |
| **Advancement** | Small/Medium | If identified as the GitHub Administrators, additional effort is required. |
| **UIS** | N/A | N/A |

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| **Project Scope** |
| **In Scope:** |
| * Procure GitHub Enterprise service on the Microsoft EES agreement via CDW-G. * Identify GitHub administrators. * Establish and configure GitHub service, including authentication at the organization level. * Onboard new users and migrate existing git service users (BitBucket, GitLab, etc.) * Establish GitHub working group – identify members and schedule quarterly or bi-annual meetings. |
| **Out of Scope:** |
| * The identified GitHub service administrators are not responsible for retiring existing services unless they are the current service managers for these services. * UIS is not participating as they are leveraging the GitLab solution. For a variety of reasons, they are unable to move off of GitLab at this time. * Faculty and students in computer science are out of scope for this project. |

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| **Project Schedule** | |
| **Planning:** | April – May 2021 |
| **Executing:** | May - June 2021 |
| **Known Deadlines:** | None |

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| **Project Budget** | | | | |
| **Description** | **Cost**  **Estimate** | **Approved**  **Budget** | **Funding Source**  **(speedtype, etc)** | **Comments**  **(Customer budget, etc)** |
| **Hardware** | 0 |  |  |  |
| **Software** | $42,500/year |  |  | April – Sept. $21,250 to co-term with Microsoft EES agreement. |
| **Labor** |  |  |  |  |
| **Total** | **$42,500** |  |  |  |

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| **Project Constraints** |

| **Constraint** | **Fixed? (Yes/No)** | **Description** |
| --- | --- | --- |
| **Scope** | No |  |
| **Schedule** | No |  |
| **Budget** | Yes | Annual GitHub Enterprise cost under Microsoft EES agreement. |

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| **Impacted Services** | | | |
| **AMC OIT Services** | | |
| **Service** | **Service Manager** | **Description of Impact** |
|  |  |  |
| **Advancement** | | |
| **Services** | **Service Manager** | **Description of Impact** |
| GitHub Free Service |  | Will transition to the GitHub Enterprise service |
| **UCB OIT Services** | | |
| **Service** | **Service Manager** | **Description of Impact** |
| Atlassian BitBucket | Platform Engineering | Retire service |
| Jfrog Artifactory | Platform Engineering | Retire Service |
| **UCCS OIT Services** | | |
| **Service** | **Service Manager** | **Description of Impact** |
| GitLab Free Service | Eric Schneider | Will transition to the GitHub Enterprise service |
| **UCD OIT Services** | | |
| **Service** | **Service Manager** | **Description of Impact** |
|  |  |  |
| **UIS OIT Services** | | |
| **Service** | **Service Manager** | **Description of Impact** |
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| **Risks** |
| **Risks Undertaking the Project:** |
| Resources involved in this effort are already in high demand and this may take away from other work. Priority of this effort will need to be maintained to allow for consistent progress or momentum may be lost. |
| **Risks NOT Undertaking the Project:** |
| We will continue to limit our ability as CU System to collaborate on and share our software code.  Git service expertise across CU System will continue to be disparate. |

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| **Assumptions, Constraints, and Dependencies** |
| **Assumptions:** |
| * Mechanisms are being developed or are in place for funding and assigning resources to cross campus efforts. * Staff can be dedicated to work on this initial phase in a prioritized manner (not pulled away continually for higher priority local campus work) |
| **Constraints:** |
| * Most of the primary staff involved in composing this charter are already involved in several high priority initiatives that would need to be re-prioritized in order to allow this work to proceed on the identified timeline. |
| **Dependencies:** |
| Dependent on the following business/IT functions on all campuses:   * Purchasing * Identity/Access Management * Networking * Security Operations * Platform Engineering (UCB)   Resources have been identified where possible, but additional dependencies may be discovered as the project proceeds. |

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| **Organizational Change Management Approach** |

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| **All** |  |
| AMC |  |
| UCB | To be coordinated by the Boulder PM |
| UCCS | Most all services are run from OIT. UCCS OIT will request access to our own tenant and migrate own services internally with stakeholder approval. All other accounts will roll out slowly afterward and are not a part of initial project scope. |
| UCD |  |
| UIS | N/A |

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| **Communications Approach** |

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| --- | --- |
| **All** |  |
| AMC |  |
| UCB | To be coordinated by the Boulder PM and OIT Communications team. |
| UCCS | Communication internally to UCCS stakeholders. |
| UCD |  |
| UIS | N/A |

# Planning phase

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| **Campus Level of Involvement** |

|  |  |  |  |
| --- | --- | --- | --- |
|  | **LOE** | **Approach** | **PM** |
| AMC | S | Will be handled operationally | No PM |
| UCB | S/M | Will be handled operationally | OIT Lead: Erin Looney-Triggs |
| UCCS | S | Will be handled operationally | No PM |
| UCD | S/M | Will be handled operationally | No PM |
| UIS | N/A | UIS will not be involved in this phase of the project | N/A |

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| **Approach (High-Level WBS)** |

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| --- | --- | --- | --- | --- | --- | --- | --- |
| **#** | **Activities** | **Activity Timeline** | | | | | |
| 1 | Determine which CU System organizations want to participate in leveraging the GitHub Enterprise service. | X |  |  |  |  |  |
| 2 | Procure GitHub Enterprise service on the Microsoft EES agreement via CDW-G. |  | X |  |  |  |  |
| 3 | Identify GitHub administrators |  | X |  |  |  |  |
| 4 | Establish and configure GitHub service, including authentication at the organization level. |  |  | X |  |  |  |
| 5 | Onboard new users and migrate existing git service users (BitBucket, GitLab, etc.) |  |  |  | X |  |  |
| 6 | Establish GitHub working group – identify members and schedule quarterly or bi-annual meetings. |  |  |  | X |  |  |

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| **Milestones / Checkpoints between Campuses** |

|  |  |  |
| --- | --- | --- |
|  | **Date** | **Milestone / Checkpoint** |
| **All** |  |  |
| AMC |  |  |
| UCB |  |  |
| UCCS |  | Main account needs to be set up with campus tenants first. ADFS after. |
| UCD |  |  |
| UIS |  |  |

| **CU System Resources (People & Environments)** | | | | |
| --- | --- | --- | --- | --- |
| **Project Role** | **Dept** | **Name** | **Weekly Hours** | **Notes** |
|  |  |  |  |  |
|  |  |  |  |  |

| **Advancement Resources** | | | | |
| --- | --- | --- | --- | --- |
| **Project Role** | **Dept** | **Name** | **Weekly Hours** | **Notes** |
| Stakeholder | OIT | Chris Rose | 1 | Status updates, escalations |
| Implementer | OIT | Matt Roush | 8 | Implementation |

| **AMC Resources** | | | | |
| --- | --- | --- | --- | --- |
| **Project Role** | **Dept** | **Name** | **Weekly Hours** | **Notes** |
| Stakeholder | OIT | Chris Wilhelmsen | 1 | Status updates |
|  |  |  |  |  |

| **UCB Resources** | | | | |
| --- | --- | --- | --- | --- |
| **Project Role** | **Dept** | **Name** | **Weekly Hours** | **Notes** |
| Stakeholder | OIT | Jason Hill | 2 | Status updates |
| Stakeholder | OIT | Todd Schaefer | 2 | Status updates, escalations |
| Stakeholder | OIT | Jason Black | 2 | Status updates |
| Stakeholder | OIT | Kunta Hutabarat | 2 | Status updates |
| Stakeholder | OIT | Orrie Gartner | 1 | Status updates, escalations |
| OIT Lead & Implementer | OIT | Erinn Looney-Triggs | 8 | Implementation |
| Implementer | OIT | Will Haines | 8 | Implementation |

| **UCCS Resources** | | | | |
| --- | --- | --- | --- | --- |
| **Project Role** | **Dept** | **Name** | **Weekly Hours** | **Notes** |
| Stakeholder | OIT | Greg Williams | 1 | Status updates, escalations |
| Stakeholder | OIT | Eric Schneider | 1 | Status updates |
|  |  |  |  |  |

| **UCD Resources** | | | | |
| --- | --- | --- | --- | --- |
| **Project Role** | **Dept** | **Name** | **Weekly Hours** | **Notes** |
| Implementer | OIT | Chris Edmundson | 4 | Implementation |
|  |  |  |  |  |

| **UIS Resources (People and Environments)** | | | | |
| --- | --- | --- | --- | --- |
| **Project Role** | **Dept** | **Name** | **Weekly Hours** | **Notes** |
| Stakeholder | OIT | Paul Little | 1 | Status updates |
| Stakeholder | OIT | Adam Newby | 1 | Status updates |
| Stakeholder | OIT | Desmond Grant | 1 | Status updates, escalations |
| Stakeholder | OIT | Lonnie Maynard | 1 | Status updates |

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| --- | --- | --- | --- | --- |
| **Vendor Resources** | | | | |
| **Project Role** | **Vendor** | **Name** | **Email** | **Notes** |
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# Executing Phase

The Executing Approach and Resources required for an Integrated Multi-campus project will generally not be known until the Planning Phase is farther along. Provide an initial overview of the known activities and any know resource changes that will happen in the Executing Phase here with the final approach and resource decisions being made during the Planning phase.

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| **Approach** |

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| --- | --- | --- | --- | --- | --- | --- | --- |
| **#** | **Activities** | **Activity Timeline** | | | | | |
| 1 |  |  |  |  |  |  |  |
| 2 |  |  |  |  |  |  |  |
| 3 |  |  |  |  |  |  |  |
| 4 |  |  |  |  |  |  |  |
| 5 |  |  |  |  |  |  |  |

|  |
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| **Executing Resource Changes** |

|  |  |
| --- | --- |
| **All** |  |
| AMC |  |
| UCB |  |
| UCCS |  |
| UCD |  |
| UIS |  |