

Blue Waters NDA Process

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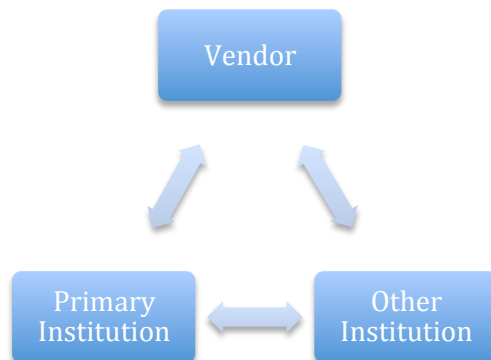
For the past five years, the Blue Waters Project has been subject to strict confidentiality requirements. These requirements, many of which were derived through the University of Illinois' (UIUC) relationship with IBM, have been closely managed and monitored. In addition to personnel at UIUC other Blue Waters partners and collaborators who need the same IBM confidential information to carry out their tasks are also subject to these same non-disclosure requirements. The process for executing the necessary non-disclosure agreements when multiple parties are involved has been refined over time. This process has been streamlined as much as possible within the guidelines of University policy and vendor needs. Despite attempts to streamline the process, execution of the non-disclosure agreements can take a long time – in a few cases over one year. On average, it takes four – five months to complete the entire NDA process. The time to completion is often slowed due to lack of response, unfamiliarity with the process, or difficulty identifying proper contracts personnel. However, once the agreements have been executed, adding other people from an institution to the agreements can be done quickly – sometimes within one day.

Description of Agreements

Overview

In order to be able to exchange necessary information a multi-way agreement has to be set up. First consider the situation of three organizations, a primary institution (P), a vendor (V) and another institution/organization (O) who all have project responsibilities that require confidential information (hardware and software design and performance expectations, schedule, costs, performance testing, etc.) in order to carry out their responsibilities. In this case, a three-way exchange has to be set up.

Consider the case where the vendor enters into non-disclosure agreements with each institution, which is the standard practice. This allows for sharing information with each of the two institutions, but it may or may not allow the institutions to provide reciprocal information back to the vendor (e.g. co-design feedback information.) Most vendors tend to be cautious using suggestions or comments that come from these relationships with institutions unless there is a



pre-defined way of doing so without future intellectual property issues. Typically, in the standard mode, the two institutions (Primary and Other) cannot share information, even if they both received the same information from the vendor.

Consequently, another agreement is needed to allow the Primary and the Other institutions to not only share their own confidential information but also relevant information they both have from the

vendor. Furthermore, this third agreement may include terms thereby allowing the parties to use the feedback information in a pre-agreed manner.

The original number of institutions (N) involved in the Blue Waters agreements was five (Illinois, LSU, RENC1, IBM, LANL). These institutions were part of the original proposal with LSU, RENC1, and LANL as subawardees. In this case the agreements were set up five years before deployment, and allowed each of the institutions to have bi-lateral talks as well as with the vendor. In the past two years, the number has grown to over 50 as science teams have been selected and awarded, new work was identified and individuals changed institutions. As such, slight modifications were made to agreements to accommodate different associations to the Blue Waters project.

Agreement for the Exchange of Confidential Information (AECI)

The AECI is an agreement with IBM and is currently included in the Illinois/IBM contract. Before the contract existed, there was a similar agreement. This agreement sets in place the requirements for handling and controlling access to IBM's confidential information, most of which is also subject to US Export Control regulations. An AECI is required to obtain any IBM confidential information. IBM administers this agreement and works directly with partner and collaborating institutions.

The agreement also specifies that IBM has a right to use Illinois' "feedback". Feedback is responses, suggestions, analysis, etc. that Illinois makes to IBM.

Collaboration Agreement (CA)

The CA is an agreement with the University of Illinois and other institutions. This agreement allows the University of Illinois to communicate confidential information about the Blue Waters project, which includes IBM confidential information, with identified individuals at either partner, subaward, or collaborating institutions. Much of the language, including the Export Control requirements, in the CA mirrors the language in the IBM AECI. This agreement also includes an attachment for "Authorization to Receive Export controlled Confidential Information". In some instances, a Statement of Work for funded work is also provided as an attachment. In other cases, such as for approved science teams, there is not funding from Illinois, but rather a common interest in joint, unilaterally funded activities (.e.g. code improvements, co-design feedback, etc.)

Both the AECI and CA must be executed in order for NCSA to provide third parties with any IBM confidential information or with information that may be derived or expose IBM information (e.g. schedule information).

Process

IBM and the University of Illinois handle the execution of the AECI and CA independently, yet in parallel. Representatives from IBM and from the University of Illinois will work directly with Grants and Contracts / Sponsored Research Office (SRO) at the other institutions. To expedite the process, it is crucial that the third party promptly identifies and communicates to NCSA the appropriate contracts personnel who will execute the NDAs. It is also useful if the PIs talk to their SRO and make them aware of this project and the importance of executing both the CA and AECI. With proper and efficient communication, these documents can be executed quickly.

Due to the large number of institutions involved as PRACs and the importance of the prepared agreements, both IBM and the University of Illinois ask that the agreements be executed "as is" without any significant modifications.

Complications

The above-described process has presented numerous complications. Most of these have been addressed and have improved, while a few others are unavoidable. These complications include (resolution listed below each item):

- Lack of understanding of and resistance to export control on the part of institutions
- Unauthorized parties signing the agreements. Often, principle investigators or workers would sign an agreement binding their institution when they had no authority to do so
 - Solution: IBM's initial contact letter calls out the requirement that only authorized persons may sign the agreement.
- Confusion between the UIUC and the IBM agreements
 - Solution: A supplemental hand out accompanies the agreements specifying what the agreements are
- Slow response from the third party grants and contract office
 - Solution: Copy the PI on correspondence and follow up with the PI to ensure the correct person in Grants/Contracts has been contacted
- Coordinating status information between NCSA and UIUC OSPRA for each agreement
 - Solution:
 - A wiki is used to track all correspondence and status information
 - Bi-weekly telecons are held between NCSA and UIUC OSPRA
 - A process was instituted whereby the CA is sent by NCSA and the process only is turned over to OSPRA to handle if the third party has questions or negotiations are needed.
- Legal limitations at other institutions to sign the agreements (inability to accept export controls for example).
- The Blue Waters agreements require that individuals be identified (not just institutions)
 - Solution: Individuals are identified right away in the response, and can be added with a straight-forward process
- Difficulty keeping track of who is approved and who is not
 - Solution: A master spreadsheet is used to track all of the required documents for each person
 - AECI (PRAC vs non-PRAC)
 - UIUC CA
 - Export Control Attachment
 - Name(s) listed on IBM's Attachment #1 or PRAC Attachment
 - Solution: Color coding is used to show if someone is fully approved.
- Clearance is dependent on two agreements (UIUC's and IBM's)
 - Solution: IBM posts progress, status, and copy of executed agreements to the wiki
 - Solution: As needed telecons are held to review outstanding issues
- There is little incentive for IBM to issue the AECIs – so progress from IBM is very slow at times. This was particularly true in the first three years when IBM felt more vulnerable and also had not done something this broad
- Having many parties share others information. IBM identified some possible legal precedent that implies even if every one signs AECIs, and does not disclose the information, the fact so many people have it and are doing bi-lateral exchanges about it may jeopardize the intellectual property.
 - Solution: For large numbers of institutions and organizations, such as the 25 science teams (each science team often includes persons from multiple institutions), there is a restriction that they can only exchange information with other science teams (e.g. optimization best practices, algorithm choices, ...) in some "supervised" forum with either Illinois or IBM facilitating the discussion. Workshops, shared wiki spaces, and teleconferences satisfy this requirement.
- Language issues arise when the AECI and/or CA involve organizations outside the US. Some countries may require the agreement to be in their native language.

- Solution: Engage professional translators who can arrange for accurate legal translation.
- Individual contractors may not have enough at stake to make vendors feel comfortable with AECIs. Often large vendors insist on coming to agreements with organizations, not individuals.
 - Solution: If an individual is contracted by Illinois (being paid for services) then Illinois passes on the confidentiality responsibility via its contract with the individual. Adding the contractor under the UIUC umbrella and it is viewed as a small risk.
- Government staff often do not want or cannot sign AECI/CA.
 - Solution: This is handled in the Blue Waters contract with IBM that specifies that NSF government staff and their official reviewers have access to all the confidential information. Note – NSF still has to ensure that they are adhering to export control regulations when sharing information with individuals.

Lessons Learned

1. Due to the number of agreements and people involved, negotiating and modifying the NDAs was discouraged. Modifications were only made if the modification was deemed trivial and if the outcome did not result in the need to do any extra monitoring or alter standard practices. That being said, there have been several versions of the standard document to add improvements, but they do not require changes to the previously executed agreement.
2. The first collaboration agreement used with the Science Teams covered more than what was needed. The intention was to have a comprehensive agreement in place in the event that it would be needed later, or so the agreement could be simplified if necessary. The extra, and unnecessary language added confusion and extra delays as parties wanted to negotiate over language that wasn't necessary. A shorter version of the agreement was later implemented.
3. Clearly identify points of contact and roles in managing the agreements were needed to remove the guesswork and to provide accountability.. For example, the Applications Project Manager always sends the agreements out to the PRACs, and one person in OSPRA always manages the agreements once there are questions or negotiations from the third party and she finalizes the agreements.
4. A central repository for tracking progress and final documents is essential. The Blue Waters wiki serves this purpose.
5. For certain, very sensitive information, Illinois and IBM has agreed to a more limited set of people who have access to the information on a "need to know" basis. This is implemented with wiki access control lists and has proven workable. The relative amount of information in this category is very small.

Conclusions

While it took a while to refine, the process described above has been successful and is now relatively straightforward. Of the N organizations currently involved M% have completed or are in the process to complete both the AECI and the CA. The process described has been satisfactory to both IBM and to Illinois and has allows a necessary exchange of information.

The basic question for the ESC is can this model be extended to a) more participants and b) to additional vendors. The basic assessment is yes. While there will be work for each organization involved, the Blue Waters process can be extended to any number of organizations. In terms of including exchanges of information with other vendors, it is likely that another form of the AECIs has to be created to cover vendor-to-vendor exchanges. It would be best if these could have much in common and also if the vendor to other organization AECI could be the same.