

STATE OF NORTH CAROLINA Department of Public Instruction NCDPI	REQUEST FOR PROPOSAL NO. 40-IAMMS	
	Bids will be publicly opened: October 5, 2012 @ 3:00pm EST	
	Contract Type: Open Market	
Refer ALL Inquiries to: Mike Beaver Telephone No. 919-807-3683	Date Issued: August 20, 2012 Commodity: Identity and Access Management Managed Service for the North Carolina Education Cloud	
E-Mail: Michael.Beaver@dpi.nc.gov	Using Agency Name: NC Department Public Instruction (NCDPI)	
(See (page 2) for delivery instructions)	Agency Requisition No. RQ16026923	

OFFER AND ACCEPTANCE: This solicitation advertises the State's needs for the services and/or goods described herein. The State seeks proposals comprising competitive bids offering to sell the services and/or goods described in this solicitation. All proposals and responses received shall be treated as offers to contract. The State's acceptance of any proposal shall be demonstrated by execution of the acceptance found below, and any subsequent Request for Best and Final Offer, if issued. Acceptance shall create a contract having an order of precedence among terms as follows: Special terms and conditions specific to this RFP, Specifications of the solicitation documents, except as amended, the State's General Terms and Conditions for Goods and Related Services, as may be amended by the Supplemental Terms annexed hereto, if any, Best and Final Offers, if any and the awarded Vendor's proposal.

EXECUTION: In compliance with this Request for Proposal, and subject to all the conditions herein, the undersigned offers and agrees to furnish any or all services or goods upon which prices are bid, at the price(s) offered herein, within the time specified herein. By executing this bid, I certify that this bid is submitted competitively and without collusion.

Failure to execute/sign bid prior to submittal shall render bid invalid. Late bids are not acceptable.

BIDDER:		
STREET ADDRESS:	P.O. BOX:	ZIP:
CITY & STATE & ZIP:	TELEPHONE NUMBER:	TOLL FREE TEL. NO
PRINT NAME & TITLE OF PERSON SIGNING:	FAX NUMBER:	
AUTHORIZED SIGNATURE:	DATE:	E-MAIL:

Offer valid for two-hundred (200) days from date of bid opening unless otherwise stated here: _____ days

ACCEPTANCE OF BID: If any or all parts of this bid are accepted, an authorized representative of NCDPI shall affix their signature hereto and this document and the provisions of the special terms and conditions specific to this Request for Proposal, the specifications, and the State's General Terms and Conditions shall then constitute the written agreement between the parties. A copy of this acceptance will be forwarded to the successful Vendor(s).

FOR NCDPI USE ONLY Offer accepted and contract awarded this ____ day of _____, 20__, as indicated on attached certification, by _____ (Authorized representative of NCDPI).
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ISSUING AGENCY: Department of Public Instruction
301 N. Wilmington Street
Raleigh, North Carolina 27601

USING AGENCY: Department of Public Instruction
301 N. Wilmington Street
Raleigh, North Carolina 27601

DELIVERY INSTRUCTIONS: Vendor shall deliver two (2) **signed originals** and eight (8) **copies** of the Proposal to Issuing Agency in a sealed package with Company Name and RFP Number clearly marked on the front. Vendor shall also submit eight (8) **signed, executed electronic copies** of its proposal on read-only CD/DVD(s) or USB Drives. The files on the discs should not be password-protected and should be capable of being copied to other media.

Sealed bids, subject to the conditions made a part hereof, shall be delivered to the location address below no later than the date and time stated on the cover page of this document for furnishing and delivering the commodity as described herein. Proposals for this RFP must be submitted in a sealed package with the Execution of Proposal signed and dated by an official authorized to bind the Vendor's firm. Failure to return a signed execution of proposal shall result in disqualification. All proposals shall comply with Section VI, Proposal Content and Organization. A proposal response is considered "delivered" only when it physically arrives in Room B04 at 301 N. Wilmington Street, Raleigh, North Carolina.

DELIVER TO:
BID NUMBER: 40-IAMMS Department of Public Instruction Attn: Mike Beaver, Contract Manager 301 North Wilmington St., Room B04 Raleigh, NC 27601

Proposals will not be accepted by electronic means. This RFP is available electronically at <http://www.ips.state.nc.us/ips/pubmain.asp>. All inquiries regarding the RFP requirements are to be addressed to the contact person listed on Page One.

Written questions concerning this RFP will be received until August 31, 2012 at 5:00 PM Eastern Standard Time. They shall be sent via e-mail to: Michael.Beaver@dpi.nc.gov or faxed to (919) 807-3660. Please insert “**Questions 40-IAMMS**” as the subject for the email. The questions are to be submitted in the following format:

Citation	Vendor Question	The State’s Response
Bid Section, Page Number		

The State will prepare responses to all written questions submitted, and post an addendum to the Interactive Purchasing System (IPS) <http://www.ips.state.nc.us/ips/pubmain.asp>. Oral answers are not binding on the State.

Vendor contact regarding this RFP with anyone other than Mike Beaver may be grounds for rejection of said Vendor’s offer.

Addendum to RFP: If a pre-bid conference is held or written questions are received prior to the submission date, an addendum comprising questions submitted and responses to such questions, or any additional terms deemed necessary by the State will be posted to the Interactive Purchasing System (IPS), <http://www.ips.state.nc.us/ips/deptbids.asp>, and shall become an Addendum to this RFP. Vendors’ questions posed orally at any pre-bid conference shall be reduced to writing by the Vendor and provided to the Purchasing Officer as directed by said Officer.

Critical updated information may be included in these Addenda. It is important that all Vendors bidding on this proposal periodically check the State website for any and all Addenda that may be issued prior to the bid opening date.

Basis for Rejection. Pursuant to 9 NCAC 06B.0401, the State reserves the right to reject any and all offers, in whole or in part; by deeming the offer unsatisfactory as to quality or quantity, delivery, price or service offered; non-compliance with the requirements or intent of this solicitation; lack of competitiveness; error(s) in specifications or indications that revision would be advantageous to the State; cancellation or other changes in the intended project, or other determination that the proposed requirement is no longer needed; limitation or lack of available funds; circumstances that prevent determination of the best offer; or any other determination that rejection would be in the best interest of the State.

NOTICE TO VENDORS: The State objects to and will not be required to evaluate or consider any additional terms and conditions, or exceptions to terms and conditions as stated in this solicitation submitted with a Bidder’s response. This applies to any language appearing in or attached to the document as part of the Bidder’s response. By execution and delivery of this Request for Proposal and response(s), the Bidder agrees that any additional terms and conditions, whether submitted purposely or inadvertently, shall have no force or effect.

Late Proposals. Regardless of cause, late proposals will not be accepted and will automatically be disqualified from further consideration. It shall be the Vendor’s sole risk to ensure delivery at the designated office by the designated time. Late proposals will not be opened and may be returned to the Vendor at the expense of the Vendor or destroyed if requested.

Table of Contents

SECTION I. INTRODUCTION	5
SECTION II. BIDDING INFORMATION	7
A. Instructions to Vendors	7
B. General Conditions and Proposals	8
C. Evaluation Process	14
SECTION III. SCOPE OF WORK AND SPECIFICATIONS	20
SECTION IV. COST PROPOSAL	46
SECTION V. OTHER REQUIREMENTS AND SPECIAL TERMS	49
SECTION VI. PROPOSAL CONTENT AND ORGANIZATION	54
SECTION VII. NORTH CAROLINA OFFICE OF INFORMATION TECHNOLOGY GENERAL TERMS AND CONDITIONS	56
Supplemental Terms and Conditions for Services	68
SECTION VIII. ATTACHMENTS, APPENDICES OR EXHIBITS	76
Attachment A – Certification of Compliance with Executive Order #24	76
Attachment B – American Recovery & Reinvestment Act / Race to the Top Contract Provisions	77
Appendix A – Proof-of-Concept Overview	80
I) Introduction	80
II) PoC Requirements	80
III) Sample Data	86

Section I. Introduction

The North Carolina Education Cloud (NCEdCloud) initiative is at its core an outsourcing program. The NCEdCloud program transitions school districts' server, storage, and application infrastructure to commercial cloud hosting providers and establishes an NCEdCloud administrator to oversee the commercial providers and to manage the process of moving services (e.g. educational applications, resources, etc.) into and out of the cloud. More detailed information about the NCEdCloud program and projects can be found at <http://cloud.fi.ncsu.edu>. Specific information on the Identity and Access Management (IAM) Project can be found at <http://cloud.fi.ncsu.edu/projects/iam.php>. At this website, you will also find a document [referred to in this RFP as The IAM Plan] that provides a comprehensive set of information regarding identity management issues in the North Carolina K-12 Education system, and a plan for developing a statewide Identity and Access Management Service to address these issues.

The purpose of this RFP and any resulting contract award is to solicit proposals to contract with a Vendor to provide an *Identity and Access Management Managed Service* (IAM-MS) for the North Carolina Education Cloud, which shall provide every K-12 student, teacher, staff member, parent/guardian, and school community member in North Carolina an account, with a single username and password that will enable access to cloud-based learning resources. The IAM-MS will have three major components: a centralized data repository with all user identity information collected in a single location, a central directory service that provides a master authentication and authorization resource, and federation software that enables Single Sign-On (SSO) functionality for users.

NCDPI is looking to purchase an IAM solution as a vendor-managed *Software as a Service* (SaaS) offering, which is essentially, Identity and Access Management as a Service (IAMaaS). The intent is for a 5-year arrangement, a 3 year commitment with two 1 year extensions. However, each one year extension requires approval by the NC Office of Information Technology Services State CIO.

The IAM-MS shall create and manage all identities from North Carolina's 115 Local Education Agencies (LEAs), 100+ Charter Schools, etc., using a set of initial authoritative source systems (as described in Section III, Work Statement) that will change during the initial contract period. Source system data shall be integrated and populate a central data repository containing a single record for each user. Accounts shall be provisioned from the central data repository into a centralized LDAP directory with a mechanism provided for each LEA and charter school to be able to pull only its users' data to a local directory at its institution. The project shall implement SSO and self-service password reset. The solution shall be scalable and cost-efficient. Another important aspect is the on-boarding/integration of cloud-based applications or services with the IAM-MS.

NCDPI is seeking proposals and pricing from qualified firms for providing the services described in this RFP. NCDPI is seeking a Vendor for these services using its own resources or through subcontracts with other Vendors. However, the Vendor remains solely responsible for the work performed by its subcontractors. Vendors are encouraged to suggest any creative approach to meet the IAM-MS requirements while keeping costs low and allowing for long term fiscal and operational sustainability.

Funding

North Carolina applied for and was awarded funds through a Race to the Top (RttT) federal grant. North Carolina is one of only 12 recipients of the 2010 federal RttT grants, bringing nearly \$400 million to the state's public school system for use over the next four years. RttT is a collaborative effort across the North Carolina Department of Public Instruction, and guided by the State Board of Education and the Governor's Education Transformation Commission. Receipt of this grant, designed to spur public school innovation, is a key component of North Carolina's work to continue its momentum for school improvement. The following is the legislation that created ARRA and the resulting RttT awards: *American Recovery and Reinvestment Act of 2009 (ARRA)*, Section 14005-6, Title XIV, (Public Law 111-5). More information can be found about ARRA stabilization funding at the following URL: <http://www2.ed.gov/policy/gen/leg/recovery/statutory/stabilization-fund.pdf>.

Section II. Bidding Information

A. Instructions to Vendors

Additional acronyms, definitions and abbreviations may be included in the text of the RFP.

- 1) Proposals submitted electronically, or via facsimile (FAX) machine will not be accepted.
- 2) EXECUTION: Failure to sign under EXECUTION section will render proposal invalid.
- 3) TIME FOR CONSIDERATION: Unless otherwise indicated on the first page of this document, Vendor's offer shall be valid for 90 days from the date of proposal opening
- 4) FAILURE TO MEET PROPOSAL REQUIREMENTS: While it is not anticipated that the awarded Vendor will fail to meet the proposal requirements, if such should occur, the right is reserved to further evaluate the responses to this RFP and then to recommend an award to the next Vendor response that represents the best interest of the State.
- 5) PROMPT PAYMENT DISCOUNTS: Vendors are urged to compute all discounts into the price offered. If a prompt payment discount is offered, it will not be considered in the award of the contract except as a factor to aid in resolving cases of identical prices.
- 6) MISCELLANEOUS: Masculine pronouns shall be read to include feminine pronouns and the singular of any word or phrase shall be read to include the plural and vice versa.
- 7) VENDOR REGISTRATION AND SOLICITATION NOTIFICATION SYSTEM: Vendor Link NC allows Vendors to electronically register with the State to receive electronic notification of current procurement opportunities for goods and services available on the Interactive Purchasing System at the following web site: <https://www.ips.state.nc.us/IPS/Vendor/Vndrmess.asp>
- 8) ORGANIZATION: Vendors are directed to carefully review Section VI herein and fully comply with the content and organizational requirements therein.
- 9) E-PROCUREMENT: **This is not an e-procurement solicitation.** See paragraphs 57 and 58 of the attached Information Technology Terms and Conditions for Goods and Related Services. The Terms and Conditions made part of this solicitation contain language necessary for the implementation of North Carolina's statewide e-procurement initiative. It is the Vendor's responsibility to read these terms and conditions carefully and to consider them in preparing the offer. By signature, the Vendor acknowledges acceptance of all terms and conditions including those related to e-procurement.
 - a. General information on the e-procurement service can be found at <http://eprocurement.nc.gov/>
 - b. Within two days after notification of award of a contract, vendor shall register in NC E-Procurement @ Your Service at the following web site: <http://eprocurement.nc.gov/Vendor.html>
 - c. As of the RFP submittal date, the Vendor shall be current on all e-Procurement fees. If the Vendor is not current on all e-Procurement fees, the State may disqualify the Vendor from participation in this RFP.

B. General Conditions and Proposals

- 1) Definitions, Acronyms and Abbreviations. Generally, see 9 NCAC 06A.0102 for definitions. The following are additional defined terms:
 - a) **24x7:** A statement of availability of systems, communications, and/or supporting resources every hour (24) of each day (7 days weekly) throughout every year for periods specified herein. Where reasonable downtime is accepted, it will be stated herein. Otherwise, 24x7 implies NO loss of availability of systems, communications, and/or supporting resources.
 - b) **Access Management:** The tools, methods, or processes that are used to grant, update, or revoke an individual's rights to "access" electronic resources.
 - c) **Application Onboarding & Integration with Service:** This is the process of integrating a new target service or application (or a new System of Record) with the Managed IAM Service. It may involve authentication to the service, the creation of a specific SAML assertion (unique attributes) or provisioning service accounts into the application.
 - d) **Audit Logging, Reports:** All transactions and configuration changes, as well as workflow requests and approvals for changes to user data and access shall be logged and available for audit reporting.
 - e) **Authentication/SSO:** The process of verifying an electronic user is who they say they are by the presentation of a username and a "shared secret" – usually a password or digital certificate. Single Sign-On (SSO) is part of the authentication requirement with multi-factor a future requirement.
 - f) **Authorization:** The determination of the right of a user to access a particular resource. Usually through membership in a Group, having a particular Role, or through other entitlements.
 - g) **Central Data Repository (Person Registry):** A data store of identity data about unique individuals. All data about each subject is stored in a single record. A subset of the data is used to populate/provision directories.
 - h) **Central Directory (LDAP):** The location of electronic "identities" where user authentication frequently takes place, as well as where user attributes are stored for determining access. Shall be LDAP-compatible.
 - i) **Community Members:** Those users not found in the traditional systems of record (e.g. Student System, Employee). See Guest System.
 - j) **Data Match & Merge:** The consolidation of user data from multiple Systems of Record into a single record per user. Usually stored in a Person Registry (data store).
 - k) **Delegated Admin:** The ability of authorized individuals to access certain administrative functions needed to support their user community. For example the ability of a school district's technology director (or designee) to manually reset a password or move an individual into or out of a group. The administrator would only be allowed to access users in their school district.
 - l) **Federation:** Used here, the implementation of a federating application to (on request) generate SAML assertions for user access to internal or external resources offered by a "Service Provider".
 - m) **Goods:** Includes intangibles such as computer software; provided, however that this definition does not modify the definition of "goods" in the context of N.C.G.S. §25-2-105 (UCC definition of goods).

- n) **Guest System:** A way of providing access to cloud services for those users not found in the traditional systems of record (e.g. Student System, Employee). Controls shall be in place to prevent the creation of duplicate accounts, or use of the Guest System as a way to “short-circuit” the normal on-boarding process for new users.
- o) **IAM-MS:** Identity and Access Management Managed Service
- p) **ITS:** Office of Information Technology Services.
- q) **Managed Service:** Within the context of this RFP, similar to “Software as a Service” (SaaS) – a software delivery model in which software and associated data are centrally hosted, operated, and managed in the cloud – however, the scope and service delivery model is much more robust than SaaS. Can also be described as a fully outsourced service infrastructure.
- r) **NC DPI:** North Carolina Department of Public Instruction
- s) **NCWISE:** North Carolina Window of Information on Student Education is the Student Information System of record
- t) **Ongoing Support and Administration:** With respect to the IAM Managed Service, the vendor’s responsibility to ensure the continual availability and maintenance of the service as specified in a Service Level Agreement (SLA). In addition, normal administrative tasks as requested by the customer, including the creation or modification of provisioning workflows and configuration of their associated policies or rules, change management, etc.
- u) **Open Market Contract:** A contract for the purchase of goods or services not covered by a term, technical, or convenience contract.
- v) **Provisioning of Access:** The act of granting entitlements, roles or group membership to a subject.
- w) **Provisioning of Accounts:** The process of creating (and updating) directory entries for users based on new or changed records in the Person Registry. *Accounts* indicates a corresponding login credential (username/password).
- x) **Provisioning Rules:** The configuration of provisioning workflows. This would include the “conditions” or “requirements” under which accounts or access to services might be established, changed or removed. Based on customer Policies.
- y) **Reasonable, Necessary or Proper:** as used herein shall be interpreted solely by the State of North Carolina.
- z) **Request Workflows:** The creation of workflow requests (usually for access to some resource or service), which once initiated by a user requires the approval of some individual or individuals having a particular authority (role) before being executed.
- aa) **RFP:** Request for Proposal

- bb) **RttT:** Race to the Top
- cc) **SaaS:** While there are many interpretations of Software as a Service – the context used in this RFP is described as a software delivery model in which applications, running on cloud infrastructure, are purchased on a subscription basis.
- dd) **SEA:** State Education Agency (e.g. NCDPI)
- ee) **System Integration** – The business function of design and planning for the Managed Service as well as development, installation, configuration, testing and user acceptance, and transition to the live production environment.
- ff) **The State:** Is the State of North Carolina, and its Agencies.
- gg) **UID:** The DPI system for unique statewide student and staff identifiers.
- hh) **User:** Individuals who have a NC Education Cloud account
- ii) **User Self-Service:** The ability of a user to obtain, change or reset their password electronically. Some form of identify-verification shall take place prior to actions being performed. Additionally, the ability for users to initiate a workflow process to request access to services or update contact information.
- jj) **Vendor:** Company, firm, corporation, partnership, individual, etc., submitting a response to a solicitation.

- 2) Read and Review. It shall be the Vendor's responsibility to read this entire document, review all enclosures and attachments, and comply with all requirements and the State's intent as specified herein. If a Vendor discovers an inconsistency, error or omission in this solicitation, the Vendor should request a clarification from the State's contact person listed on the front page of the solicitation. Questions and clarifications shall be submitted in writing and may be submitted by personal delivery, letter, fax or e-mail within the time period identified hereinabove.
- 3) Vendor Responsibility. The Vendor(s) will be responsible for investigating and recommending the most effective and efficient technical configuration. Consideration shall be given to the stability of the proposed configuration and the future direction of technology, confirming to the best of their ability that the recommended approach is not short lived. Several approaches may exist for hardware configurations, other products and any software. The Vendor(s) shall provide a justification for their proposed hardware, product and software solution(s) along with costs thereof. Vendors are encouraged to present explanations of benefits and merits of their proposed solutions together with any accompanying services, maintenance, warranties, value added services or other criteria identified herein.
- 4) Oral Explanations. The State will not be bound by oral explanations or instructions given at any time during the bidding process or after award. Vendor contact regarding this RFP with anyone other than the Agency contact or procurement officer named on Page 2 above may be grounds for rejection of said Vendor's offer. Agency contact regarding this RFP with any Vendor may be grounds for cancellation of this RFP.
- 5) Insufficiency of References to Other Data. **Only information that is received in response to this RFP will be evaluated.** Reference to information previously submitted or Internet Website Addresses (URLs) will not suffice as a response to this solicitation.
- 6) Conflict of Interest. Applicable standards may include: N.C.G.S. §§ 147-33.100, 14-234, 133-32. The Vendor shall not knowingly employ, during the period of this contract, nor in the preparation of any response to this solicitation, any personnel who are, or have been, employed by a Vendor also in the employ of the State and who are providing services involving, or similar to, the scope and nature of this solicitation or the resulting contract.
- 7) Contract Term. A contract awarded pursuant to this RFP shall have an effective date as provided in the Notice of Award. The term shall not exceed **three** (3) years, and will expire upon the anniversary date of the effective date unless otherwise stated in the Notice of Award, expiration or termination of the Race to the Top federal grant, or unless terminated earlier. The State retains the option to extend this contract for **two** (2) additional **one** (1) year periods at its sole discretion pending approval by the NC Office of Information Technology Services State CIO.
- 8) Effective Date. This solicitation, including any Exhibits, or any resulting contract or amendment shall not become effective nor bind the State until the appropriate State purchasing authority/official or Agency official has signed the document(s), contract or amendment; the effective award date has been completed on the document(s), by the State purchasing official, and that date has arrived or passed. The State shall not be responsible for reimbursing Vendor for goods provided nor services rendered prior to the appropriate signatures and the arrival of the effective date of the Contract. No contract

shall be binding on the State until an encumbrance of funds has been made for payment of the sums due under the contract.

- 9) Recycling and Source Reduction. It is the policy of this State to encourage and promote the purchase of products with recycled content to the extent economically practicable, and to purchase items which are reusable, refillable, repairable, more durable, and less toxic to the extent that the purchase or use is practicable and cost-effective. We also encourage and promote using minimal packaging and the use of recycled/recyclable products in the packaging of goods purchased. However, no sacrifice in quality of packaging will be acceptable. The Vendor remains responsible for providing packaging that will protect the commodity and contain it for its intended use. Vendors are strongly urged to bring to the attention of the purchasers at the Statewide IT Procurement Office those products or packaging they offer which have recycled content and that are recyclable.
- 10) Historically Underutilized Businesses. Pursuant to General Statute 143-48, 143-128.4 and Executive Order #13, the State invites and encourages participation in this procurement process by businesses owned by minorities, women, disabled, disabled business enterprises and non-profit work centers for the blind and severely disabled. Additional information may be found at: <http://www.doa.nc.gov/hub/>
- 11) Clarifications/Interpretations. Any and all amendments or revisions to this document shall be made by written addendum from the IT Procurement Office. Vendors may call the purchasing agent listed on the first page of this document to obtain a verbal status of contract award. If either a unit price or extended price is obviously in error and the other is obviously correct, the incorrect price will be disregarded.
- 12) Rights Reserved. While the State has every intention to award a contract as a result of this RFP, issuance of the RFP in no way constitutes a commitment by the State of North Carolina, or the procuring Agency, to award a contract. Upon determining that any of the following would be in its best interests, the State may:
 - a) waive any formality;
 - b) amend the solicitation;
 - c) cancel or terminate this RFP;
 - d) reject any or all proposals received in response to this document;
 - e) waive any undesirable, inconsequential, or inconsistent provisions of this document, which would not have significant impact on any proposal;
 - f) if the response to this solicitation demonstrate a lack of competition, negotiate directly with one or more Vendors;
 - g) not award, or if awarded, terminate any contract if the State determines adequate State funds are not available; or
 - h) if all responses are deficient, determine whether Waiver of Competition criteria may be satisfied, and if so, negotiate with one or more Vendors.

- 13) Alternate Bids. Vendor may submit alternate bids for various levels of service(s) or products meeting specifications. Alternate bids shall specifically identify the RFP requirements and advantage(s) addressed by the alternate bid. Any alternate proposals shall be clearly marked with the legend as shown herein. Each proposal shall be for a specific set of services or products and bid at specific pricing. If a Vendor chooses to respond with various service or product offerings, each shall be bid with a different price and a separate proposal response. Vendors may also provide multiple proposals for software or systems coupled with support and maintenance options, provided, however, all proposals shall satisfy the specifications.

Alternate bids shall be clearly marked

“Alternate Bid for ‘Name of Vendor’”

and numbered sequentially with the first bid if separate proposals are submitted.

This legend shall be in bold type of not less than 14-point type on the face of the bid, and on the text of the alternative proposal.

- 14) Co-Vendors. Vendors may submit offers as partnerships or other business entities. Such partners or other “co-Vendors”, if any, shall disclose their relationship fully to the State. The State shall not be obligated to contract with more than one Vendor. Any requirements for references, financial statements or similar reference materials shall mean **all** such partners or co-Vendors.
- 15) Submitting a Proposal. Each Vendor submitting a proposal warrants and represents that:
- a) The proposal is based upon an understanding of the specifications and requirements described in this RFP.
 - b) Costs for developing and delivering responses to this RFP and any subsequent presentations of the proposal as requested by the State are entirely the responsibility of the Vendor. The State is not liable for any expense incurred by the Vendors in the preparation and presentation of their proposals.
- 16) All materials submitted in response to this RFP become the property of the State and are to be appended to any formal documentation, which would further define or expand any contractual relationship between the State and Vendor resulting from this RFP process.
- 17) A proposal may not be unilaterally modified by the Vendor for a two hundred (200) day period following the delivery of the proposal, or of any best and final offer.

C. Evaluation Process

- 1) "Best Value" procurement methods are authorized by N.C.G.S. §143-135.9. The award decision is made based on multiple factors, including: total cost of ownership, meaning the cost of acquiring, operating, maintaining, and supporting a product or service over its projected lifetime; the evaluated technical merit of the Vendor's proposal; the Vendor's past performance; and the evaluated probability of performing the requirements stated in the solicitation on time, with high quality, and in a manner that accomplishes the stated business objectives and maintains industry standards compliance. The intent of "Best Value" Information Technology procurement is to enable Vendors to offer and the Agency to select the most appropriate solution to meet the business objectives defined in the solicitation and to keep all parties focused on the desired outcome of a procurement.
- 2) Source selection. A trade-off/ranking method of source selection will be utilized in this procurement to allow the State to award the contract to the Vendor providing the Best Value, and recognizing that Best Value may result in award other than the lowest price or highest technically qualified offer. By using this method, the overall ranking may be adjusted up or down when considered with, or traded-off against other non-price factors.
 - a) The evaluation committee may request clarifications, an interview with or presentation from any or all Vendors as allowed by 9 NCAC 06B.0307. However, the State may refuse to accept, in full or partially, the response to a clarification request given by any Vendor. Vendors are cautioned that the evaluators are not required to request clarifications; therefore, all offers should be complete and reflect the most favorable terms. Vendors should be prepared to send qualified personnel to Raleigh, North Carolina, to discuss technical and contractual aspects of the proposal.
 - b) Evaluation Process Explanation. An evaluation committee including State Agency employees will evaluate all proposals. All proposals will be initially classified as being responsive or non-responsive. If a proposal is found non-responsive, it will not be considered further. All responsive proposals will be evaluated based on stated evaluation criteria. Any references in an answer to another location in the RFP materials or Proposal shall have specific page numbers and sections stated in the reference.
 - c) To be eligible for consideration, a Vendor shall meet the intent of all requirements. Compliance with the intent of all requirements will be determined by the State. Responses that do not meet the full intent of all requirements listed in this RFP may be deemed deficient. Further, a serious deficiency in the response to any one requirement may be grounds for rejection regardless of overall score.
 - d) Vendors are advised that the State is not obligated to ask for, or accept after the closing date for receipt of proposal, data that is essential for a complete and thorough evaluation of the proposal.

- 3) Best and Final Offers (BAFO). If negotiations or subsequent offers are solicited, the Vendors shall provide BAFOs in response. Failure to deliver a BAFO when requested shall disqualify the non-responsive Vendor from further consideration. The State may establish a competitive range based upon evaluations of proposals, and request BAFOs from the Vendors within this range; e.g. "Finalist Vendors". The State will evaluate BAFOs and add any additional weight to the Vendors' respective proposal. Additional weight awarded from oral presentations and product demonstrations during negotiations, if any, will be added to the previously assigned weights to attain their final ranking.
- 4) Evaluation Method. The State will evaluate Vendor proposals utilizing Best Value trade off methodology pursuant to 9 NCAC 06B.0302. An award will be made to the Vendor with the offer that meets the requirements of this RFP and represents the Best Value for the State. Vendor proposals will be evaluated based on Evaluation Criteria consistent with Best Value procurement as listed in table below in the order of relative importance.
- 5) Evaluation of vendor qualifications and response to criteria categories as identified below will substantially impact the evaluation process, and will be evaluated for the following (see the Proposal Evaluation Method Table section below for more details on specific criteria and their relative point values):
 - a) Compliance with Section III. Scope of Work and Specifications.
 - b) Satisfactory demonstration of any Desired Proposal Specifications.
 - c) Strength of references relevant or material to technology area(s) or Specifications.
 - d) Submission of all materials required by the RFP.
 - e) Compliance with the proposal and organization section.

Vendor may be disqualified from any evaluation or award if Vendor or any key personnel proposed, has previously failed to perform satisfactorily during the performance of any contract with the State, or violated rules or statutes applicable to public bidding in the State.

6) Evaluation Criteria.

Vendor proposal will be evaluated by the State using the criteria summarized in the table below. The State's consideration will be based on "how well" the proposal demonstrates the vendor can meet the Agency's needs as described in this solicitation.

Proposal Evaluation Method: Scoring and Weighting

REQUIREMENTS FOR EVALUATION: Proposals shall not be considered if the proposed IAM-MS does not meet the intent of **ALL THE “REQUIREMENTS FOR A PROPOSED IAM-MS SOLUTION TO BE CONSIDERED”** identified in this solicitation in *Section III. Scope of Work and Specification, Item 8a*. The requirements will be evaluated on a "YES/NO" basis. A Bidder shall demonstrate they satisfy ALL the requirements in order to be further evaluated.

EVALUATION POINT SUMMARY: The following is a summary of evaluation criteria identifying points assigned to each item. These weighed factors will be used in the evaluation of the Vendor proposals.

Proposals will be ranked using the evaluation factors and their relative importance or weight as defined in the solicitation document. The relative overall ranking of any offer may be adjusted up or down when considered with, or traded-off against, other non-price factors. For example, an offer with the lowest price when compared to other offers would normally receive the best ranking in the price evaluation category. However, if other non-price evaluation factors received low rankings, the overall ranking of the offer would be reduced.

The RFP evaluation committee may establish a competitive range among bidders and then proceed with negotiations, BAFOs, etc. with only those bidders in the competitive range (e.g. “Finalist Vendors”). **Only finalist Vendors will be invited to Face-to-Face and Proof-of-Concept interviews.** If during the Face-to-Face interview and Proof-of-Concept process new information is discovered that is deemed by the evaluation committee to be significant, the committee may increase or decrease the points previously awarded.

RIGHT TO REJECT: State reserves the right to reject any or all proposals, to waive any irregularities or informalities in the proposals received and to change the described evaluation process if circumstances dictate this, or it is otherwise in the best interests of State to do so. In the event a proposal is rejected, or in the event a proposer's offer is not rejected but does not result in a contract award, State shall not be liable for any costs incurred by the proposer in connection with the preparation and submittal of the proposal.

Criteria:	Maximum Weighted Points:
Technical Solutions Proposed with Functional/Business features and Capabilities Review of submitted response proposal in terms of how well it addresses our specific and unique needs for an IAM-MS. <i>See Section III. Scope of Work and Specifications</i>	250

<p>Cost. The evaluation of each Vendor’s cost proposal will be conducted using the following formula:</p> $\frac{\text{Lowest Responsive Bid Total Cost} \times 250}{\text{This Vendor’s Bid Total Cost}}$ <p>Total Cost is based on Line 8 from Cost Proposal Template.</p> <p>Alternative Cost Proposals based upon an Alternative Project Work Plan will not be included in the initial evaluation for the selection of finalist Vendors.</p> <p><i>See Section IV. Cost Proposal.</i></p>	250
<p>Project Work Plans, Implementation Approach, and Timeline for Completion. Up to 150 points may be awarded based on the quality of Vendor’s project work plan, how well organized and detailed the plans are, timelines proposed to meet the State’s deadlines, how the vendor addresses contingencies, the extent of the Vendor’s staff support (including access to internal developer resources as may be needed), the efficiency, agility and responsiveness of the Vendor’s team with respect to the proposed plan’s implementation, quality control, etc.</p> <p><i>See Section III. Scope of Work and Specifications, Item 8a Requirement 28, Item 8b.</i></p>	150
<p>Relevant Identity Management experience with endeavors of this type and magnitude. Up to 100 points may be awarded based on evaluation of the Vendor’s experience and success in providing and customizing a system that is similar to the specifications of this project, with particular focus on large scale and K-12 end user populations.</p> <p><i>See Section III. Scope of Work and Specifications, Item 8.</i></p>	100
<p>Financial Information. Up to 50 points may be awarded based on the Vendor’s evidence of financial stability as listed in</p> <p><i>See Section V. Other Requirements and Special Terms, Item 2.</i></p>	50
<p>Assigned Key Personnel Experience. Up to 50 points may be awarded for relevant experience of key personnel based upon the resumes and experience narratives submitted. Documented work experience on similar implementations is sought (e.g. size of user base, education-focused, K12-focused, IAMaaS, etc.).</p> <p><i>See Section III. Scope of Work and Specifications, Item 8x.</i></p>	50
<p>References. Up to 50 points for references may be awarded upon an evaluation of Vendor’s work for previous clients receiving similar services to those requested in this RFP.</p> <p><i>See Section III. Scope of Work and Specifications, Item 8y.</i></p>	50
<p>Proof-of-Concept (ONLY Finalists) to demonstrate capabilities. Up to 100 points may be awarded for this part of the evaluation.</p> <p><i>See Appendix A. Proof of Concept Overview.</i></p>	100
<p>TOTAL</p>	1000

7) The Procurement Manager will make every effort to adhere to the following schedule:

Action	Responsibility	Completion Date
Issue of RFP	NCDPI	August 20, 2012
Deadline To Submit Written Questions	Vendors	August 31, 2012
Response to Written Questions/RFP Amendments	NCDPI	September 14, 2012
Submission of Proposal	Vendors	October 5, 2012
Proposal Evaluation and Selection of Finalists	Evaluation Committee	November 2, 2012
Face-to-face interviews and/or Proof-of-Concept Demonstrations by Finalists	Vendors, Evaluation Committee	November 5-16, 2012
Selection of Finalist for BAFO	Evaluation Committee	November 30, 2012
Negotiations/Best and Final Offers from Finalist(s) (at the sole discretion of the State)	Evaluation Committee designees and selected Vendor(s)	December 7, 2012
Contract Award	State Purchasing Agent	December 21, 2012
Protest Deadline	Vendors	15 days after award

- 8) Award Of Contract. Qualified proposals will be evaluated and acceptance may be made in accordance with Best Value procurement practices as defined by GS §143-135.9 and applicable administrative rules. The responsive Vendor whose proposal is most advantageous to the State, taking into consideration the evaluation factors herein, will be recommended for contract award. Unless otherwise specified by the State or the Vendor, the State reserves the right to accept any item or group of items on a multi-item proposal.
- 9) The State has implemented links to the Interactive Purchasing System (IPS) that allow the public to retrieve proposal award information electronically from our Internet web site: <http://www.ips.state.nc.us/ips/pubmain.asp>. Click on the IPS BIDS icon, click on Search for BID, enter the Agency prefix-proposal number 40-IAMMS, and then search. This information may not be available for several weeks dependent upon the complexity of the acquisition and the length of time to complete the evaluation process.
- 10) Protest Procedures: Protests of awards exceeding \$25,000 in value shall be submitted to the issuing Agency at the address given on the first page of this document. Protests shall be received in this office within fifteen (15) calendar days from the date of the contract award and provide specific reasons and any supporting documentation for the protest. **All protests will be governed by Title 9, Office of Information Technology Services, Subchapter 06B Sections .1102 - .1121.**

Section III. Scope of Work and Specifications

- 1) Enterprise Architecture Standards: The North Carolina Statewide Technical Architecture is located at the following website: (<http://www.ncsta.gov>). This provides a series of domain documents describing objectives, principles and best practices for the development, implementation, and integration of business systems. Agencies and Vendors should refer to these Architecture documents when implementing enterprise applications and/or infrastructure. While much of the enterprise architecture standards outline frameworks around developing software applications, it also outlines standards around security and the handling of Personally Identifiable Information (PII) of students and staff of NC.
- 2) Hosting and NCID: The IAM Managed Service described in this RFP is a vendor-managed Software as a Service (SaaS) solution. Any hosting requirements are the responsibility of the vendor and shall be included in the annual cost of the service. This RFP is requesting proposals for a service that follows the same model. However, the IAM-MS components and data must be located, operated, and stored within the United States. Hosting facilities that are directly peered with NCREN are preferable to reduce potential latencies. The overall reliability, accessibility, and responsiveness related to hosting of the IAM-MS' are of paramount importance.

NCID is an existing State infrastructure that provide application authentication for approximately 200,000 state employees and constituents. It is the State's enterprise identity management (IDM) service and it is operated by the North Carolina Office of Information Technology Services. The state prefers vendors to make use of this infrastructure if it makes good business and technical sense. Additional information regarding this service can be found in the ITS Service Catalog¹ and the NCID Web site². NCID uses the NetIQ/Novell IDM³ and NAM⁴ software to provide Identity & Access Management services. NCID currently has three (3) primary models of integration – Proxy Authentication, Directory Synchronization and Web Services for NCID. Proxy Authentication will integrate via a reverse proxy architecture using Novell's Linux Access Gateway to authenticate access to protected web sites. Directory Synchronization involves using a Novell IDM driver to synchronize user names and passwords to the integration application's LDAP directory. Supported LDAP directories are (a) Novell eDirectory and (b) Microsoft Active Directory. Web Services integration uses WSDL (Web Services Description Language) calls. A high-level walkthrough of the NCID integration process is available⁵.

Identity Federation and the use of SAML2 assertions is required functionality of the IAM Managed Service. This will enable federated access to any SAML2-enabled service or target application, and allow users of other Identity Providers (e.g. NCID when SAML2 is implemented) access to NC Education Cloud services when authorized by NC Education Cloud policy. If requested, the IAM vendor shall advise the State's NCID team on the required technical configurations needed to accomplish this federation. Federation with NCID shall be with SAML 2.0 assertions. More specifics for NCID are provided on the NCID Training & Documentation web page⁶.

¹ <http://www.its.nc.gov/serviceCatalog/default.aspx> (see Identity Management - NC Identity Management under the main menu item Application Services)

² <https://www.ncid.its.state.nc.us/>

³ Currently version 4.01, vendor documentation at <https://www.netiq.com/documentation/idm401/>

⁴ Currently version 3.1, vendor documentation at <https://www.netiq.com/documentation/novellaccessmanager31/>

⁵ <https://www.ncid.its.state.nc.us/Online%20Forms/NCID%20Integration%20Phases%20Diagram.pdf>

⁶ <https://www.ncid.its.state.nc.us/TrainingAndDocumentation.asp>

- 3) Equivalent Items: Whenever a material, article or piece of equipment is identified in the specification(s) by reference to a manufacturer's or Vendor's name, trade name, catalog number or similar identifier, it is intended to establish a standard, unless otherwise specifically stated as a brand specific requirement (no substitute items will be allowed). Any material, article or piece of equipment of other manufacturers or Vendors shall perform to the standard of the item named. Equivalent bids shall be accompanied by sufficient descriptive literature and/or specifications to provide for detailed comparison. Samples of items, if required, shall be furnished at no expense to the State and if not destroyed in the evaluation process, may be returned to the Vendor at the Vendor's expense.
- 4) All bids shall include specifications and technical literature sufficient to allow the State to determine that the service meets all requirements. This technical literature will be the primary source for bid evaluation. If a requirement is not addressed in the technical literature it shall be supported by additional documentation and included with the bid. Bid responses without sufficient technical documentation may be rejected.
- 5) The State may, in its sole discretion, investigate any substitute or equivalent goods irrespective of any representation made by a Vendor or manufacturer.
- 6) Specifications: Any deviation from specifications indicated herein shall be clearly identified as an exception and listed on a separate page labeled "Exceptions to Specification"; otherwise, it will be considered that items offered are in strict compliance with these specifications, and Vendor will be held responsible. Any deviations shall be explained in detail. **The Vendor shall not construe this paragraph as inviting deviation or implying that any deviation will be acceptable. Offers of alternative or equivalent goods may be rejected; and if offered, shall be supported by independent documentary verification of equivalence to the specified goods.**
- 7) Work Statement: The *Identity and Access Management Managed Service* (IAM-MS) for the North Carolina Education Cloud shall provide every K-12 student, teacher, staff member, parent/guardian, and school community member in North Carolina an account, with a single username and password that will enable access to cloud-based learning resources. The IAM-MS will have three major components: a centralized data repository with all user identity information collected in a single location, a central directory service that provides a master authentication and authorization resource, and federation software that enables Single Sign-On functionality for users.

The purpose of this section is to summarize for potential vendors the list of IAM functionality that shall be provided within this Managed Service, in order to provide the North Carolina Educational Cloud this foundational component.

To start, Figure 1 shows the "Big Picture" of where the IAM Managed Service fits with respect to the other roles of the overall IAM Project.

Figure 2 shows what the NC Education Cloud project is looking to purchase - a complete "IAM as a Managed Service" solution. The IAM-MS shall contain data match/merge and central data repository (person registry) functionality. At some point, a planned data integration service could provide this functionality.

Additionally, policy and business practices would be provided to the Managed Service Provider - to be implemented through provisioning and workflow functions.

We are looking to purchase everything as a (single) Service, including data integration, a person registry of identity data, a centralized directory environment, its design and the provisioning of accounts into it, simple group and role management, as well as all the other functionality listed in the Managed Service “block” shown in Figure 2.

Our position in procuring a managed Identity and Access Management Managed Service is that we will have identity data provided from a small number of source data sets. These will feed the IAM-MS.

All account provisioning, group and role management (aside from what is already defined in the authoritative source systems), access management (based on user attributes or request/approval workflow generated entitlements), and the provisioning of service accounts into a variety of shared infrastructure and cloud services (provided they have provisioning APIs), will be handled by the Managed Service.

Target Services (as described in Figure 3 and Table 1) will utilize the IAM-MS for a variety of functions from authentication and user attributes (group membership, roles, entitlements, policy), to federation and data and audit reporting. User attributes will be used by many of the services to make authorization (access) decisions.

The Managed Service provider will also handle the Identity Provider (IdP) side of onboarding of Cloud Services. Configuration of the IdP’s SSO and/or Federated Identity Management components (SAML assertions generated) will also be a responsibility of the Managed Service provider.

Figure 4 depicts the anticipated help desk escalation process. Support tickets are anticipated to flow as needed to the IAM Managed Service Provider (successful vendor Bidder) from the IAM Service Manager.

Figure 5 depicts the IAM-MS Data Source Integration flow. Initially, the North Carolina Window of Information on Student Education (NCWISE) and Uniq-ID for Staff (UID) from the Department of Public Instruction (DPI) are the authoritative data sources for student data (and possibly some parent data), and staff data, respectively. The IAM-MS shall actively monitor the authoritative data source system for new user data files. When new user data files are produced, the system can begin the data integration process.

Example: A new user data file is generated by the authoritative data system and transferred to the Managed File Transfer Service (MFTS) at 7am. The IAM-MS system should immediately detect that a new user file is available and start the data analysis and update process (to determine any deltas from the previous data files).

The IAM-MS will not have *direct* access at the start of the project to the authoritative data source systems (NCWISE and UID). The IAM-MS will have to access a copy of the user identity data from these systems through the NCDPI Managed File Transfer System (MFTS). The MFTS is essentially a secure FTP server system. On a periodic basis, the user data is extracted from the authoritative sources into a tab-delimited, flat text file format, then zipped up and put into a folder on the MFTS that the IAM-MS has access to. This task is completed by the authoritative data source systems and MFTS services. There will be one file for the student user data and one file for the staff user data. An MFTS file naming convention has been provided to the IAM team to assist with the MFTS process. The NCWISE data includes approximately 1462 data fields for each record, as documented in the NCWISE data dictionary. The MFTS file

naming convention is located in Appendix H of the IAM Plan. The current data extracts' field definitions for NCWISE and UID are located in Appendix I and J of the IAM Plan, respectively.

As the project progresses, the authoritative source systems will change and the IAM Managed Service provider will be required to adapt the system accordingly (e.g. NCWISE transition to Pearson PowerSchool).

Table 1 depicts a more detailed list of target applications currently under consideration, along with URLs for further information. It has not been finalized whether all of them will be targeted, and what priorities might be assigned. However these applications are likely to be among those initially integrated with the IAM-MS. This table is provided for the bidders to use in proposing their IAM-MS solution.

Table 2 shows recent counts of North Carolina school districts, schools, students, and personnel. These approximate counts will need to be supported by the IAM-MS, as well as parent/guardian and community member (guest) accounts. Accordingly, up to three million identities might be activated within the first year of the project.

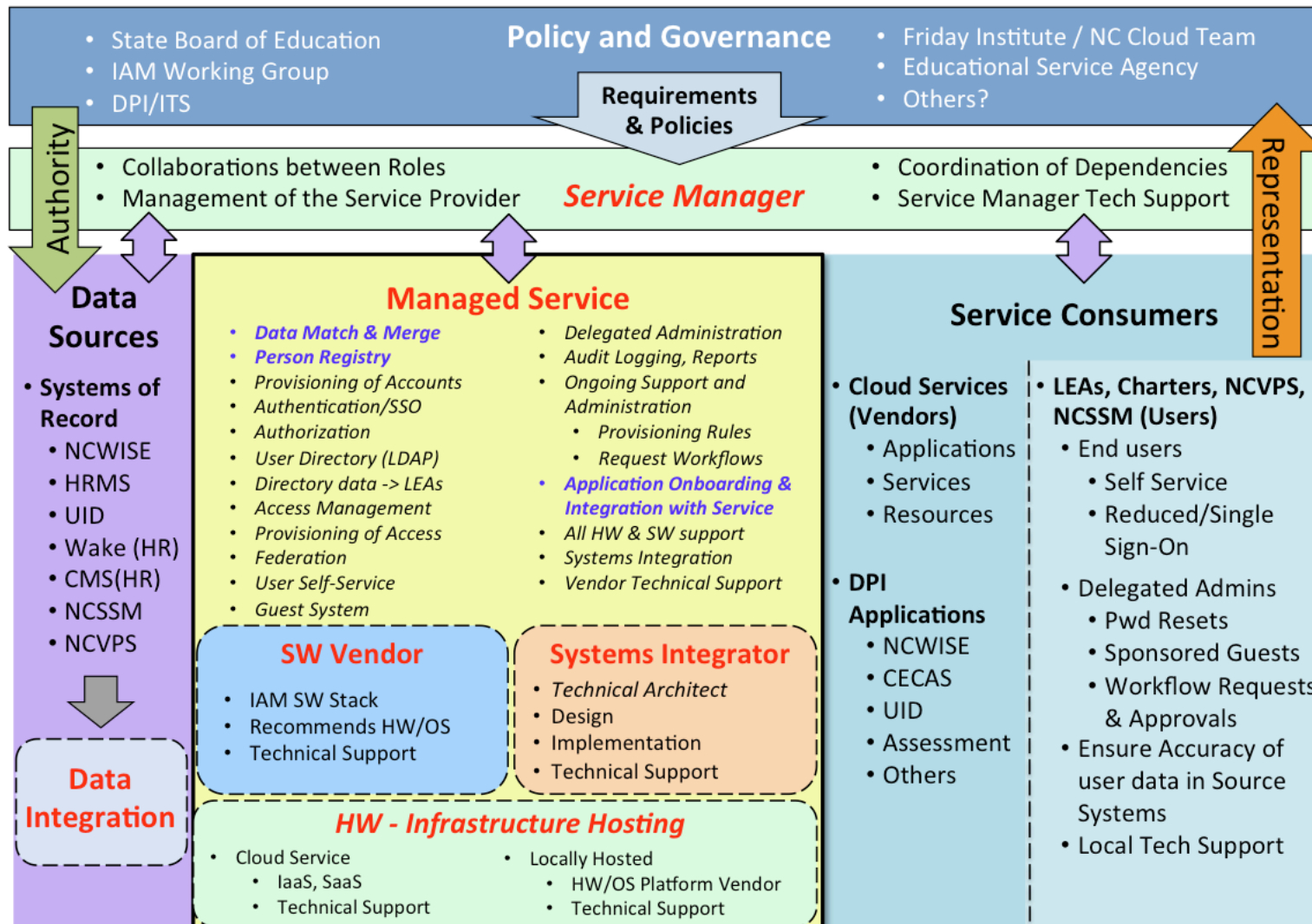


Figure 1: The Big Picture

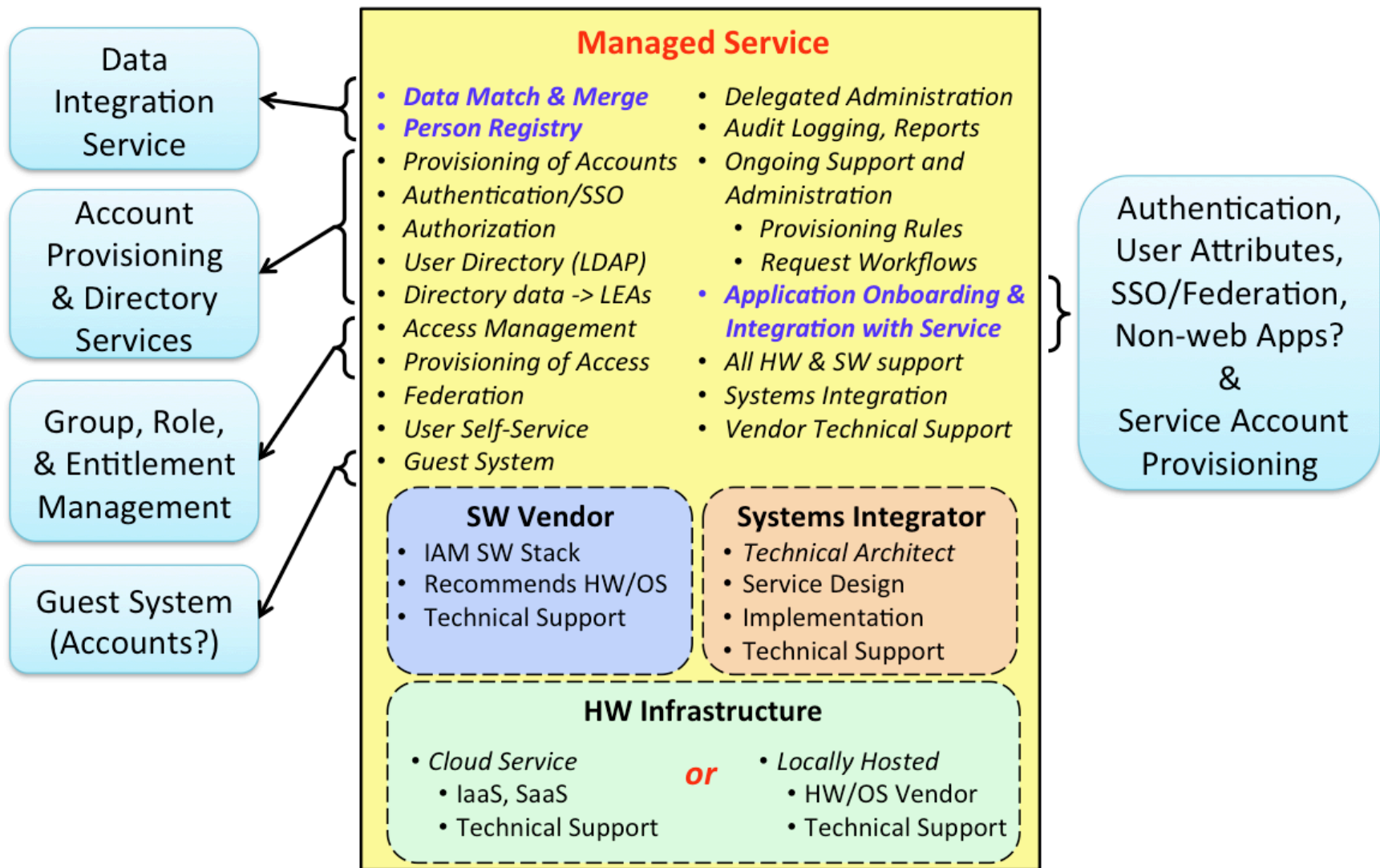


Figure 2: IAM Managed Service Required Functionality

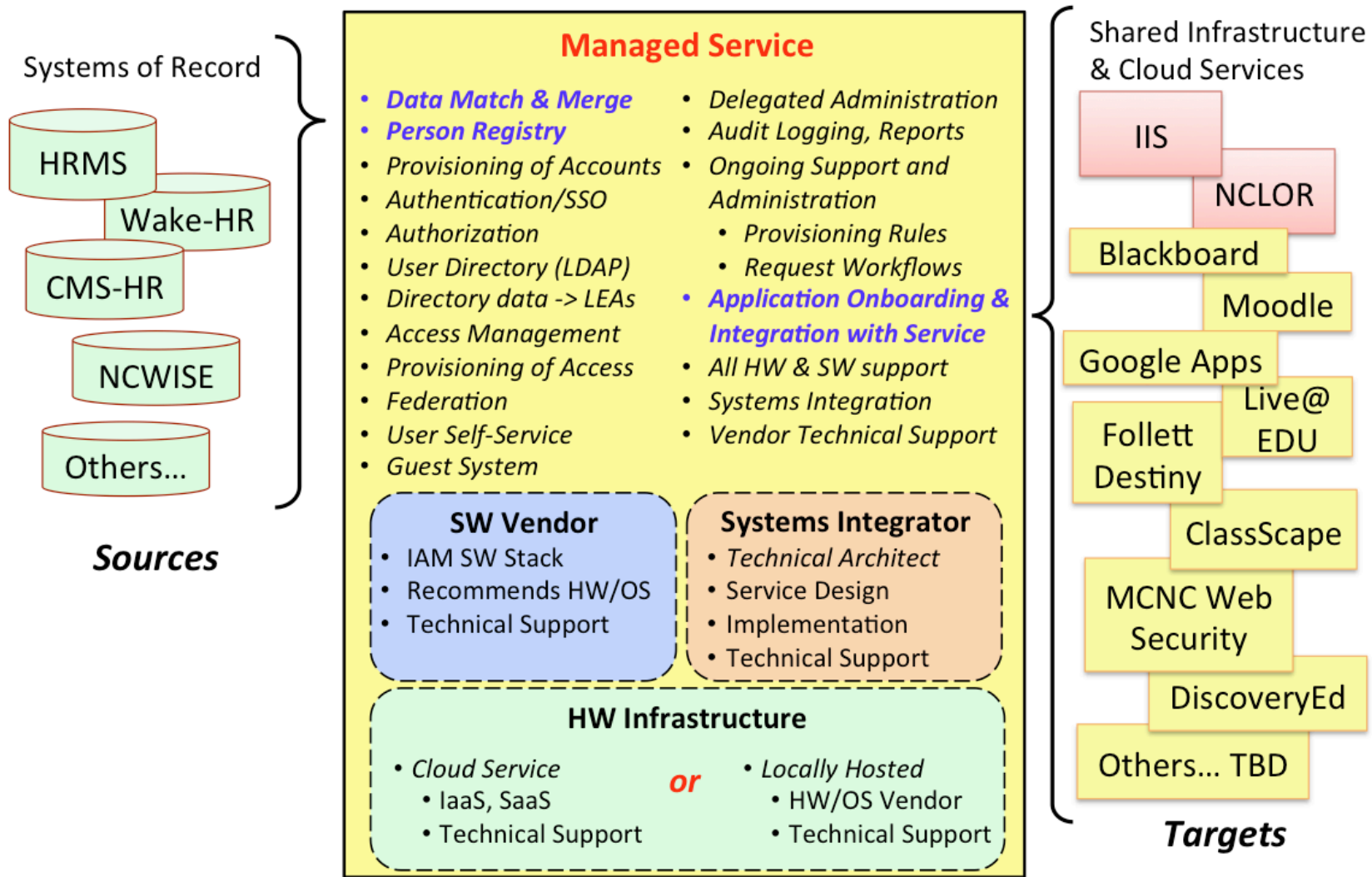


Figure 3: Sources and Targets

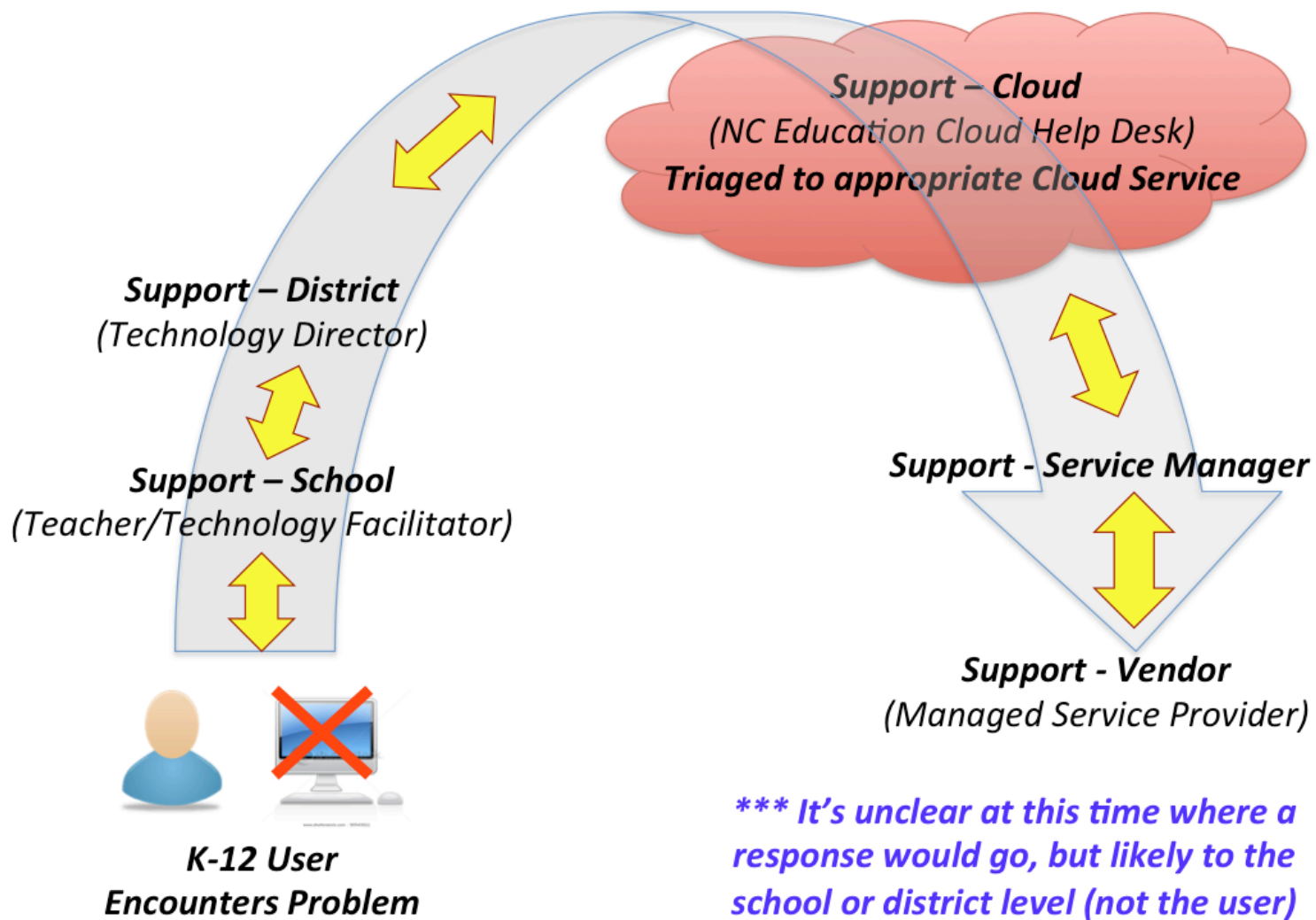


Figure 4: Help Desk Escalation Process

IAM Data Source Integration Flow

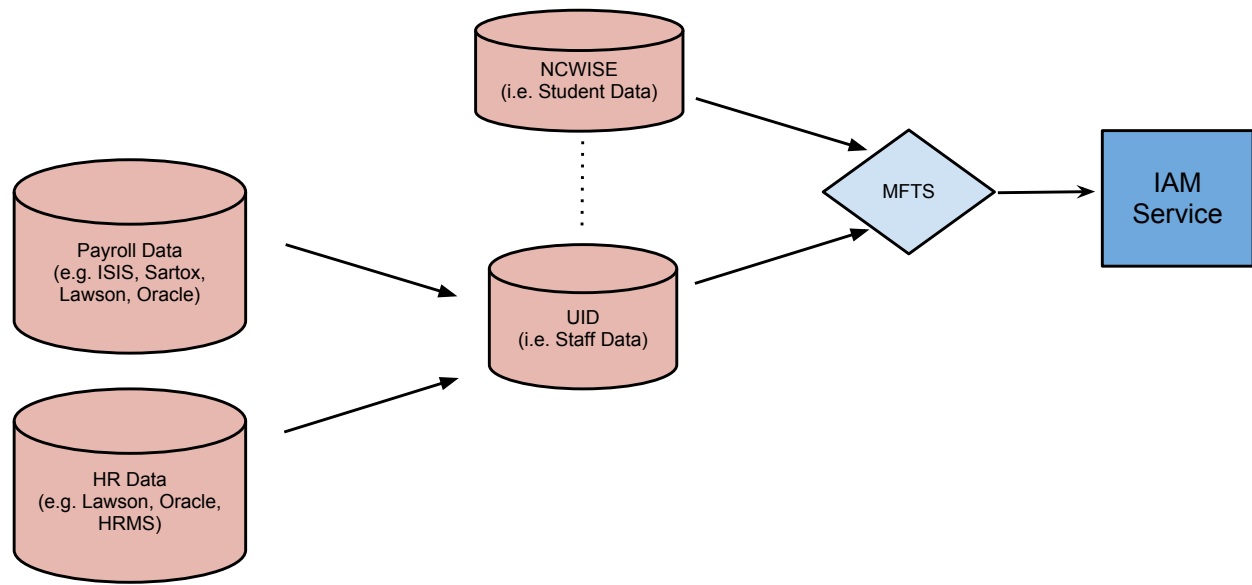


Figure 5 IAM-MS Data Source Integration Flow

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Table 1: Target Applications

Application	What is it?
Blackboard	Blackboard is a proprietary Course Management System (CMS), also known as a Learning Management System (LMS). http://www.blackboard.com/
ClassScape	ClassScape is an online assessment system that facilitates learning by focusing on curricular objectives. ClassScape enables teachers to monitor individual student and class performance on the North Carolina Standard Course of Study (NCSCS) goals and objectives. ClassScape is a program of the Center for Urban Affairs and Community Services (CUACS) at NC State University. http://www.classscape.org/
DiscoveryEd	Provides dynamic digital content to school districts, including Interactive digital textbooks, Engaging standards-aligned content, Comprehensive professional development, Assessment Services, Virtual Experiences, and Learning Communities. http://www.discoveryeducation.com/
Follett Destiny	Software for Library Automation. "Destiny® Library Manager™ library software is a centralized K-12 resource management tool that helps libraries in your district work more efficiently, while creating engaging and collaborative learning environments that promote and support student achievement. http://www.follettsoftware.com/library-automation-software
Google Apps for Education	Gmail: Email storage and search tools that help your students find information fast and instant messaging from right inside their accounts. Google Calendar: Students can organize their schedules and share events and calendars with others. Google Talk: Students can call or send instant messages to their contacts for free anytime, anywhere in the world. Google Docs: Share documents, spreadsheets, and presentations. Collaborate in real-time with your team or with your whole school. You can publish final documents to the entire world, too. Google Sites: Work together to keep related documents, web content and other information in one place, on one site. Google Video for education: A video hosting and sharing solution that enables schools and other organizations to use video as an effective medium for internal communication and collaboration. http://www.google.com/apps/intl/en/edu/k12.html
MCNC Web Security (Zscaler)	The MCNC Internet access service includes integrated, cloud-based web security functionality for Web Content Filtering and Advanced Security Protection. It can be used by an LEA to replace or compliment an existing content filtering solution. MCNC has partnered with Zscaler to provide the web security solution. Zscaler has extended their security cloud by installing two ZENs on the NCREN network that will be dedicated to handling MCNC client traffic. Each LEA has their own (virtual) cloud-based "instance". MCNC (www.mcnc.org) might be considered the "owner" as MCNC provides the service to subscribing LEAs. http://www.zscaler.com/

Microsoft Live @ EDU / Office 365 for Education	Email, Calendar & Contacts. Virtual classes, Online Meetings, Video and Voice Chat. Class & Group Sites. Online Documents. http://www.microsoft.com/liveatedu and http://www.microsoft.com/liveatedu/learn-about-office-365.aspx
Moodle	Moodle is an Open Source Course Management System (CMS), also known as a Learning Management System (LMS) or a Virtual Learning Environment (VLE). It has become very popular among educators around the world as a tool for creating online dynamic web sites for their students. http://moodle.org/
SchoolDude	SchoolDude.com is a provider of online tools for management of school operations. SchoolDude's entire suite supports a wide range of software that streamlines every aspect of a school's functional areas – including enterprise-wide technology, facilities, energy, and event management support services. http://www.schooldude.com/
IIS	The Instructional Improvement System (IIS) is one of Governor Perdue's Career and College: Ready, Set, Go! projects being developed through North Carolina's Race to the Top grant award. The IIS will provide portals for students, teachers, parents, and school and district administrators to access data and resources to inform decision-making related to instruction, assessment, and career and college goals. http://www.dpi.state.nc.us/acre/improvement/
SAS® Curriculum Pathways®	SAS delivers online curriculum resources with a proven impact on increasing student learning and teacher effectiveness – at no cost to US middle and high schools, virtual schools, home schools and other teaching and learning environments. SAS Curriculum Pathways is designed to enhance student achievement and teacher effectiveness by providing Web-based curriculum resources in all the core disciplines, to educators and students in grades 6-12. http://www.sas.com/govedu/edu/curriculum/index.html
SAS® EVAAS® for K-12	As the most comprehensive reporting package of value-added metrics available in the educational market, SAS EVAAS for K-12 provides valuable diagnostic information about past practices and reports on students' predicted success probabilities at numerous academic milestones. By identifying which students are at risk, educators can be proactive, making sound instructional choices and using their resources more strategically to ensure that every student has the chance to succeed. http://www.sas.com/govedu/edu/k12/evaas/index.html
NCLOR	The North Carolina Learning Object Repository (NCLOR) is built on top of Pearson's Equella Product. EQUELLA is a digital repository that provides one system to house your teaching and learning, research, media and library content. The NCLOR collects documents, audio/video clips, simulations, learning modules, assessments, and more – virtually any type of learning resource that can be digitized and processed. Teachers from around the state can then search the NCLOR, find materials appropriate to the classes they are teaching, and use them as is or modify them to suit their needs. http://explorethelor.org/about-the-nclor/

Table 1 Target Applications

Table 2: North Carolina Facts and Figures 2011-12



FACTS AND FIGURES 2011-12

Web Address: <http://www.ncpublicschools.org>

SCHOOLS

Number of Administrative Units (2011-12)		
County Units	100	87.0%
City Units	15	13.0%
TOTAL	115	

Number of Public Schools (2011-12)		
Elementary (Grades PK-8)	1,828	72.8%
Secondary (Grades 9-12)	417	16.6%
Secondary (Grades 9-13 Early College)	67	2.7%
Combined	100	4.0%
Charter Schools	100	4.0%
TOTAL SCHOOLS (Public & Charter)	2,512	

STUDENTS

Average Daily Membership (2011-12)			
	PUBLIC	CHARTER	TOTAL
Grades K-8	1,010,300	37,321	
Grades 9-12	425,862	7,508	
TOTAL	1,436,162	44,829	

Ethnic Distribution (Fall 2011)			
	PUBLIC	CHARTER	TOTAL
American Indian	1.4%	1.0%	
Asian	2.5%	2.2%	
Black	26.3%	26.7%	
Hispanic	13.5%	5.8%	
White	52.5%	60.8%	
Pacific Islander	0.1%	0.1%	
Other	3.7%	3.4%	

High School Graduates' Intentions (2010-11)		
Enroll in Four-Year Institutions	42,088	45.9%
Enroll in Two-Year Institutions	35,123	38.3%
Enroll in Other Schools	1,519	1.7%
Military Service	4,376	4.8%
Employment	6,753	7.4%
All Others	1,867	2.0%
TOTAL	91,726	

PERSONNEL

Public School Full-Time Personnel (Fall 2011)		
State Funded	130,594	74.4%
Federal Funded	18,650	10.6%
Local Funded	26,386	15.0%
TOTAL	175,630	

Highest License Held by Classroom Teachers (2010-11)		
Pending License Approval	0.1%	
Vocational	1.1%	
Bachelor's Degree	71.0%	
Master's Degree	27.3%	
Sixth Year Level	0.3%	
Doctorate	0.2%	
TOTAL	100.0%	

PERFORMANCE (2011)

SAT Scores:				
	VERBAL	MATH	TOTAL	WRITING
North Carolina	493	508	1001	474
United States	497	514	1011	489
4 Year Cohort Graduation Rate				77.9%
5 Year Cohort Graduation Rate				77.7%
Dropout Rate (Grades 7-12)				2.3%

ESTIMATED AVERAGE TEACHERS' COMPENSATION (2010-11)

North Carolina Average	\$46,791
United States Average	\$55,623
North Carolina's Rank	41

EXPENDITURES

Current Expense Expenditures (2010-11)		
State	\$7,277,494,587	61.3%
Federal	\$1,909,891,466	16.1%
Local	\$2,675,887,290	22.6%
TOTAL	\$11,863,273,343	

Salaries and Benefits (2010-11)		
State	\$6,768,745,070	68.6%
Federal	\$1,430,361,571	14.5%
Local	\$1,665,466,618	16.9%
TOTAL	\$9,864,573,259	

Capital Outlay (all funds) \$789,622,008

2010-11 Per Pupil Expenditure in Average Daily Membership: (Current Expenses Only)		
State	\$5,162	61.3%
Federal	\$1,355	16.1%
Local	\$1,898	22.6%
TOTAL	\$8,414	

Administrative Units by Size and Per Pupil Expenditure			
	2010-11 FINAL AVERAGE DAILY MEMBERSHIP	2010-11 TOTAL PER-PUPIL EXPENDITURES	
Largest - Wake County	142,351	\$8,804	
Medium - Columbus County	6,415	\$15,988	
Smallest - Tyrrell County	565	\$8,414	

AUXILIARY SERVICES

Transportation (2010-11)		
Number of Buses Operated	13,706	
Number of Pupils Transported Daily (includes contract transportation)	788,560	
Average Bus Mileage Per Day	73	
State Cost (includes contract transportation and bus replacement)	\$397,188,541	
Annual State Cost Per Pupil Transported on Buses	\$482	

Textbooks (2010-11)

Total Textbook Sales (incl. books, consumables and teacher resources)	\$16,509,075
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Average Cost of Textbook	MATH	READING	SCIENCE	SOCIAL STUDIES
Elementary	\$44.14	\$35.62	\$42.61	\$39.38
Middle School	\$55.63	\$84.55	\$53.99	\$56.00
High School	\$66.26	\$86.13	\$59.72	\$68.30

Child Nutrition (2010-11)

	BREAKFAST	LUNCH
Number of Schools Serving	2,428	2,483
Average Number Served Daily	339,882	887,629
Average Cost (includes indirect cost)	\$1.89	\$2.94

Data compiled by the Division of School Business, Financial & Business Services, NC Department of Public Instruction, Raleigh, NC 27601-2625, December 2011 | In compliance with federal laws, NC Public Schools administers all state-operated educational programs, employment activities and admissions without discrimination because of race, religion, national or ethnic origin, color, age, military service, disability, or gender, except where exemption is appropriate and allowed by law.



William C. Harrison, Ed.D.
Chairman
State Board of Education



June St. Clair Atkinson, Ed.D.
State Superintendent
Department of Public Instruction

8) Technical Requirements and Specifications. The technical requirements and specifications are divided into two main areas. The first item a) *Requirements for a Proposed IAM-MS Solution to be Considered*, lists the minimum requirements that must be met by the proposer's solution to be further considered. Responding vendors shall acknowledge and address each. The second area, *remaining items b)-aa*), list additional requirements for the responder to provide more detail on their proposed solution.

a) **Requirements for a Proposed IAM-MS Solution to be Considered**. Vendor shall *acknowledge* the proposed service will meet each of the specified requirements in the following table, and address each item, **numbered and in the same order listed**, with narratives and examples of how they will satisfy these requirements.

Requirements for a Proposed IAM-MS Solution to be Considered		Reply "YES" or "NO" to each requirement
1	Vendor shall comply with the proposal and administrative requirements of this solicitation.	
2	Data processed, stored, and maintained by the IAM-MS shall NOT leave the borders of the United States. This includes online storage as well as data backups and archived data.	
3	The IAM-MS shall create, manage and update all identities from North Carolina's 115 school districts ("LEAs"), and 100+ Charter Schools, using a set of initial authoritative source systems that will change over time . Initial formats will include tab or comma delimited files, with other formats likely to follow.	
4	The IAM-MS shall scale to at least 3 million identities within the first year and up to 10 million identities over the next 10 years.	
5	The IAM-MS shall integrate and maintain identities for the following types of users: teachers, staff, students, parents/guardians, and community members.	
6	The solution shall provide open standards-based interfaces so that current and future applications are easily integrated.	
7	All end user interfaces for the IAM-MS shall be simple, easy to understand, web interfaces (e.g. for self-service maintenance tasks such as password resets, login screens, etc.)	
8	The IAM-MS shall enable administrators to implement policy rules that limit authorization to cloud-based digital resources . These policy rules shall be implemented in configurable workflows, which can specify identity-provisioning procedures. Self-service workflows shall be supported so that access is automatically granted if policy rules are met (e.g. appropriate attribute values, group memberships, etc.) or if approved by a designated authority.	
9	The IAM-MS shall provide a central data repository (person registry) containing all of the identities. The IAM-MS shall also provide a central directory. Vendor shall be responsible for schema design and implementation for centralized directory that shall be included as part of the IAM-MS.	

10	The IAM-MS shall provide a method for updating a local directory at each LEA (and charter school) with global user identity data from the central directory service. This could include newly provisioned, modified, or de-provisioned identities, contact data, or other user attributes. Supported local directories shall include Active Directory, eDirectory, and OpenLDAP. Pulling to the local directory shall be possible in real- or near-real-time (where appropriate), or by using a batch process. Data available to an LEA/charter school will ONLY be data on identities associated with that LEA/charter school, while all other data would not be accessible. Data updates will only be one-way: from the central directory service to a local directory service, but not from local to central.	
11	The IAM-MS shall allow authorized administrators from each school system to validate and sanity check identity information for that system's users.	
12	The IAM-MS shall allow administrators to implement policies for different user groups regarding user IDs, password generation that are time-sensitive: for example, administrators can require users to select passwords that contain at least one number, letter and special character, and passwords shall be set within a certain period of time.	
13	The IAM-MS shall allow configuration of user groups, roles, entitlements, workflows, and approval groups, to substantiate rules about authorization and access to digital resources.	
14	The IAM-MS shall allow the creation of self-service workflows and approval groups for automated provisioning and de-provisioning. The provisioning system is enabled to allow administrators to configure self-service password reset; or specify approvals prior to access.	
15	The provisioning system in the IAM-MS shall automatically control access to data and services based on a person's role, group memberships, or entitlements, but allow exceptions to be specified (white lists and/or black lists).	
16	Supported (de)provisioning methods for applications or cloud service internal accounts supported by the IAM-MS shall include: 1) Rule-based automated (direct) provisioning. Typically this would be done through a connector that communicates with an application-provided API. 2) Manual (indirect) provisioning through encrypted transfers of CSV files, spreadsheets, etc.	
17	Authentication methods supported by the IAM-MS shall include: 1) Identity federation using SAML2 standard (possible example implementations include Shibboleth, ADFS, etc); and 2) Centralized User Authentication and Authorization Management (the app calls back to the IAM-MS via web service, or by using an LDAP call to the directory)	

18	The IAM-MS shall use encryption for transport of user data to, from, and between the IAM-MS components, including but not limited to where users enter usernames and passwords. Passwords are encrypted in database.	
19	The IAM-MS shall be secure , having undergone vulnerability and penetration testing to ensure that script injections and other malicious code entries are not possible. The IAM-MS shall be integrated into solutions that monitor vulnerability and penetrations.	
20	The IAM-MS shall have complete log files and audit trails for policy enforcement that detail who has accessed and/or modified which data, made or approved requests (and when), and cleanly tracks how a user moved through the system. Log data shall be available in user reports, and access to the raw log data shall also be available.	
21	The IAM-MS shall have fault-tolerant failover functionality: The master system and LDAP directory have copies that can be automatically failed over to when the master is broken or otherwise unavailable. IAM-MS is monitored 24/7/365 for successful operation, to facilitate appropriate failover when necessary.	
22	While the design of the IAM-MS shall be for 100% uptime, the service shall have a Service Level Agreement (SLA) specifying at least 99.9% uptime on a quarterly basis. Thus no more than 2.19 hours total per quarter of unscheduled downtime would be acceptable according to the SLA. This 99.9% minimum uptime requirement shall apply to the portions of the service that enable users to perform self-service operations (such as password updates), and to authenticate and gain access to cloud-based applications. Scheduled downtime (e.g. software updates, maintenance, etc.) will be kept to a minimum and shall be coordinated in advance.	
23	The IAM-MS shall comply, if applicable, with Federal, State and Local privacy laws and regulations including FERPA and ADA Section 508.	
24	The IAM-MS shall have a Guest System with a simple GUI, that includes workflows to allow sponsor-approved user self-registration and data updates in the identity manager. For example, this might be utilized by an LEA or Charter School's newly registering community members, and possibly by parents or a user's sponsor(s). The interface shall also enable subsequent data updates by the registrant, after the initial account has been granted. For example, the registrant may return later to update the originally entered information. Subsequent data updates shall be routed through the existing sponsor for approval, prior to propagation through the system. The Guest System shall not allow accounts to be provisioned for users that already exist in one of the authoritative source systems. Therefore, it shall utilize the same "match and merge" procedures that are used by the Data Integration process to prevent the creation of duplicate records or accounts.	

25	<p>Delegated administration: LEA administrators with appropriate permissions shall be granted sufficient access to maintain their LEA's data in the IAM-MS, including but not limited to the following items:</p> <ol style="list-style-type: none"> 1) Manual and exception local group, role, membership, and entitlement management 2) Reset user passwords 3) Disable accounts (e.g. emergency, security) 4) Create system usage reports 5) Download LEA-specific data 6) Add (request), approve and deactivate Guest (sponsored) accounts 	
26	<p>IAM-MS Vendor shall describe:</p> <ol style="list-style-type: none"> 1) IAM-MS Software Stack; 2) HW/OS Configuration; 3) Hosting Environment; 4) Technical Support 	
27	<p>Proof-of-Concept Demonstration / Face-to-Face Interview. The Bidder if invited shall meet the evaluation team in Raleigh, NC, at their own expense, to provide a Proof-of-Concept demonstration of IAM-MS capabilities and help validate their written responses. The exact location, date(s) and time(s) shall be determined later. To the extent possible, Bidder's scheduling constraints shall be taken into consideration. Further details on the PoC are described in an attachment to this solicitation.</p>	
28	<p>Project Work Plan, Implementation Approach, and Timeline for Completion. Vendor is requested to create and describe a more detailed version of the tasks listed below in "b" within their RFP response (<i>Section III. Scope of Work and Specification, Item 8b</i>). Please provide any proposed modifications to the phases listed, in detail, along with recommendations for remaining tasks or work steps into which the project should be sub-divided, and recommended target dates for completion of each step. What specific checkpoints and milestones would you propose for dividing the work, at what time-scale? What criteria do you propose to evaluate these checkpoints and milestones for success?</p> <p>NOTE: A Technical Implementation Plan shall be delivered to NCDPI within the first 90 days following the RFP award that contains specific detailed tasks and responsibilities of the project teams.</p>	
29	<p>IAM-MS provider shall provide 24/7/365 IAM-MS system monitoring, responses to unscheduled outages, system administration/ IAM-MS operation/maintenance, and IAM-MS technical support (Help Desk) availability as described in SLA. Help desk shall respond to unscheduled outages and service inquiries from the IAM-MS Service Manager.</p>	
30	<p>IAM-MS Managed Service Provider shall provide application onboarding and integration with IAM-MS.</p>	

- b) **Project Work Plan Outline Requirements.** An overall plan shall be developed as a basis for executing subsequent steps as the project progresses. It is important the IAM-MS is always available, responsive, and able to handle peak loads. The project plan shall include recommendations pertaining to resources required for successful completion of the project including staffing and the proposed hosting infrastructure. Hosting facilities directly peered with the NCREN network are preferable, given the potential reduced latencies between the IAM-MS and the target K-12 institutions. However, of paramount importance is the IAM-MS overall reliability, accessibility, and responsiveness - even under peak load conditions. Essential to the process of this task is the preparation of a sound approach to attaining the objectives of the project.

The following is a preliminary overview of the major high-level tasks involved for developing the end product/service of this project. The vendor is not, however, constrained from modifying or supplementing this list with additional steps, sub tasks or elements deemed necessary to permit the development of alternative approaches.

i) **Year 1: Build and Implementation**

Within the first 90 days after award, develop detailed Technical Implementation Plan with sub-phases noted below, with steps of each sub-phase to include: Requirements | Design | Install | Configuration | System Acceptance Testing | User Acceptance Testing | Steady State

Sub-phase – Detailed Technical Implementation Plan Development

Sub-phase – Data Integration from Source Systems

Sub-phase – Identity Management

Sub-phase – Access Management

Sub-phase – Identity Federation

Sub-phase – On-boarding of Target Applications

IAM-MS Pilots

Migrations

At the end of Year 1, the IAM-MS provider shall have completed:

- a) User data integrated from source systems into unique user records for all LEAs and charter schools
 - i. User records from any LEA or charter school shall be searchable and viewable
- b) User accounts are provisioned for all participating LEAs and charter schools
 - i. Every participating LEA and charter school shall have associated identities
 - ii. User accounts from any participating LEA or charter school shall be searchable and viewable
- c) All user self-service, delegated administration, and access to directory data, functions as described in this RFP
 - i. Users can perform self-service password changes and resets
 - ii. Delegated administrators for each LEA and Charter School can generate and approve requests for appropriate workflows, reset user passwords and disable accounts for their staff and students
 - iii. LEA data can be obtained from the IAM-MS by authorized users (methods dependent upon vendor implementation)
- d) Cloud-ready target applications shall be on-boarded as they become available
 - i. It is expected that five (5) target applications will be available in Year 1.
- e) Pilot onboarding shall be completed for
 - i. LEA and charter school early adopters
 - ii. Target applications
- f) A fully functioning IAM-MS (meets all RFP requirements)**

ii) **Years 2 and ongoing: Full Production and Operation**

- a) Ongoing IAM-MS maintenance, enhancements, support, operations
- b) Ongoing migrations for new LEAs, Charter Schools, etc.
- c) Ongoing updates to handle changing authoritative source systems
- d) Ongoing On-boarding of new Target Applications and Services

- c) Vendor shall describe how their proposed IAM-MS will scale as needed to support up to three million users within the first year. A concern for NCDPI is the system's capacity to handle peak load for a fully deployed system with heavy amounts of transactions occurring in a short duration of time due to patterns of user activity. These patterns include, for example, various applications used by students and teachers, the submission of attendance, concurrent standardized testing periods, grade reporting, semester registration, etc. The Vendor shall provide NCDPI with the specific details and assurances that their solution is scalable and will meet whatever peak full loads that might be encountered, provided that the specific hardware and software upgrades that will be necessary to meet this fully loaded environment are obtained. DPI prefers that the system be supported by an elastic infrastructure that seamlessly adjusts to demand, growing to support peak demands and shrinking to support the steady state. Vendor shall provide system design assurances to accommodate the number of concurrent users from a total user population of three million – there shall be no software or hardware threshold limitation that prevent these users from being satisfactorily supported by the IAM-MS.
- d) Vendor shall describe the overall security architecture for the proposed IAM-MS.
- e) The proposed system shall prevent unauthorized access to data. Vendor's RFP response shall describe their prevention plan, along with a proposed remediation plan in case system breaches are detected. In case of data breach, how would affected users be notified, and what process would be used for damage control?
- f) Vendor shall describe their change management system. How are technical and configuration changes staged into the production IAM-MS? How and when are changes communicated, and to whom? What are the expected timelines for system changes, and how will they be implemented to avoid downtime? What test procedures will be in place to help ensure continued proper system functioning during and after changes? What contingencies are in place in the event a rollback to a previous state/version/configuration is required?
- g) Vendor shall list and describe the IAM-MS connectors available for consuming data from authoritative data sources and for provisioning accounts to and interacting with target applications. For the application side, of particular interest are those listed in "Table 1: Target Applications." What is the expected process and timeline for adding new connectors to the system? Is there a limit to the number of connectors (including newly developed connectors) that could be used in vendor's proposed system? Are there associated cost implications and if so, what are they?
- h) Vendor shall describe how they propose to handle users with more than one role or affiliation type (e.g. parent and teacher). How would such a user's access be controlled based on the specific context? (e.g., Jane Doe is a parent of Sally Doe in District X, and a teacher of John Smith in District Y).
- i) Vendor shall describe how they propose to handle users that exist in more than one location (LEA) – a variation of the previous use case. For example a School Nurse that is

employed in two different school districts (District X and District Y) and works in each on different days of the week. Access to both sets of student data would likely be similar, but having a multi-valued field for LEA (School District) might be a challenge.

- j) Vendor shall describe how they would perform account reconciliation between the IAM-MS user records and user records already provisioned in cloud service systems. This process ensures that there are like accounts (matches) between systems. Orphaned accounts – those that exist only on the Cloud Service side – will need to be disabled or reviewed to see what action needs to be taken.

Example: An LEA is already providing GoogleApps or Microsoft Live@EDU services to its user community, prior to joining the NC Education Cloud. The IAM-MS system shall have a mechanism to identify all those pre-provisioned user accounts, and associate them with identities in the system. Furthermore, as part of this process, the IAM-MS system should be able to utilize any account renaming API(s) that might be provided by the external service, to synch up the users names in the service with the user naming convention employed by the IAM-MS.

Please describe account reconciliation processes you've implemented for these or other example applications.

- k) Vendor shall describe their understanding of and experience with the unique needs of the K-12 community. How does this target user base differ from other populations, and what differentiates your proposed IAM-MS solution to make it the best choice? What specific K-12 oriented experience can you bring to bear?
- l) Vendor shall describe their expertise in developing directory schemas, in particular as focused on the K-12 community. How and why are you best suited to design a schema to address K-12 needs? What are the most difficult parts of this aspect of the project? What is your approach and expectations for time frames?
- m) Vendor shall describe its proposed approach to data integration from the current and future authoritative source data systems. For example: expected level of effort, specific challenges, timelines, roles, responsibilities, etc. Also, please describe similar data integration experience the Vendor will bring to bear on this project.
- n) Vendor shall describe their view of how SAML Identity Providers (IdPs) would be architected for this project. Are there any specific constraints that would be implied due to the user base and throughput requirements? How does the division of the K-12 system into autonomous units (LEAs, Charter Schools) affect the architecture – e.g. would there be one IdP per autonomous unit, or one "uber" IdP for all schools? Would an "uber"-IdP even be possible for the initially targeted services?
- o) Vendor shall describe their vision for the web-based user-interfaces to be provided to different categories of users, e.g. various levels of administrators vs. end-users. What would be their "look-and-feel"? What elements would be available to the end-user? What are important factors and constraints in your design?

- p) Vendor shall describe their view of the most significant risks they perceive in this project, and how their proposed solution is best suited to mitigate those risks.
- q) Vendor shall describe their proposed support infrastructure, people, processes and procedures. Would your solution include a dedicated engineer and a dedicated project manager that can be personally contacted by the IAM Service Manager in case of problems?
- r) Vendor shall describe their proposed IAM-MS system architecture.
- s) Vendor shall describe their suggested metrics for evaluating satisfactory IAM-MS performance levels. Which test metrics should be used, and what values would indicate success?
- t) Vendor shall describe the proposed system logging, auditing, and related functionality.
- u) Vendor shall describe the proposed system physical architecture and hardware requirements, including virtual infrastructure requirements if virtualization is an option for their proposed system.
- v) Vendor shall describe the proposed system reporting capabilities.
- w) Vendor shall describe the proposed network requirements. The proposal shall provide a diagram and a description of its proposed network infrastructure that is required to obtain acceptable availability and performance levels with the proposed IAM-MS. Provide specific details on how the proposed IAM-MS affects the network infrastructure and integration with the state and LEA applications.
- x) Project Team Organization and Staffing. Within the proposal, the Vendor shall provide an organizational chart of their proposed project team. The organization chart shall include Vendor personnel and the recommended number of corresponding customer roles/skillsets. This provides NCDPI an understanding as to how the Vendor envisions utilizing its own staff and interacting with other personnel resources.

NCDPI is interested in the Vendor's experience concerning state and district personnel and resources required for a successful deployment of the proposed application both for initial rollout and ongoing support. Please list the required state and district personnel (and non-state-designees) including, but not limited to, IAM Service Manager personnel, functional area specialists, project managers, database administrators, building-level support specialists, trainers, application specialists, systems integrator, network support and help desk personnel. Please indicate for each role the number of personnel required, a narrative of the duties and responsibilities for all personnel, and estimated time for both the initial rollout and ongoing support. Please keep in mind that the Vendor will be responsible for data integration and target application onboarding with minimal NCDPI personnel support.

Within the proposal, the Vendor shall define the roles and responsibilities of each of its assigned staff, including a skills summary for each of the proposed staff that explains how the staff person's professional background and qualifications qualify them to serve on the

project. Vendor shall describe how many FTE's are anticipated to be assigned to the project, along with a breakdown of their anticipated roles. The Vendor shall identify key personnel to staff the project who possess demonstrated expertise in the IAM-MS technologies and data conversion areas. The Vendor shall provide brief biographical narratives and professional qualifications of key personnel proposed for this project. Key personnel include the Vendor's principal dedicated account manager and the principal systems/integration architect, along with their direct reports.

Vendor shall submit resumes and experience narratives describing relevant experience of key personnel that are anticipated to be assigned to this project. Documented work experience on similar systems will be evaluated more favorably than experience with non-related systems.

The Vendor shall designate key personnel to DPI with contact information before execution of the contract. The DPI Program/Project Manager has the right to approve and reject any key personnel designated by the Vendor. The Vendor shall give DPI at least thirty days' advance notice of any changes to key personnel, when possible.

- y) NCDPI is looking for the Vendor to demonstrate its experience with similar implementations in both size and scope to those proposed for this project. Please provide references of customers with the current software release fully implemented, preferably in an education setting. Please do not provide references for customers using a product other than the one you are proposing.

Vendor shall have implemented the respective system within the last three (3) years. Customer references whose business processes and data needs are similar to those performed by NCDPI in terms of functionality, complexity, and transaction volume are encouraged.

For each reference, the Vendor shall provide the following information:

- i) Customer name
- ii) Customer address
- iii) Current telephone number of a customer employee most familiar with the project
- iv) Time period over which each project was completed
- v) Brief summary of project
- vi) List of products installed and operational
- vii) Number of technical staff support, maintaining and managing product
- viii) Number of students in school district or state supported by project (if appropriate)
- ix) Number of school sites supported by project (if appropriate)
- x) Any other project related information vendor believes would be helpful in evaluating this reference

- z) Project Control. The Vendor will carry out this project under the supervision of the NC Department of Public Instruction (“DPI”), or under the supervision of the IAM Service Manager as may be designated by DPI (“designee”).

Although there will be continuous liaison with the Vendor team, the client Agency’s project director or designee will meet at a minimum weekly in the initial stages of the project, with the Vendor’s project manager, for the purpose of reviewing progress and providing necessary guidance to the Vendor in solving problems which arise. As the project progresses, meeting frequency may be reduced at the discretion of the Agency’s project director or designee.

The Vendor shall submit brief written weekly summaries of progress which outline the work accomplished during the reporting period; work to be accomplished during the subsequent reporting period; problems, real or anticipated, which should be brought to the attention of DPI’s project director or designee; and notification of any significant deviation from previously agreed upon work plans.

Within five (5) working days of the award of the Contract, the Vendor shall submit to the DPI project director (or designee) a work plan for final approval. This final implementation plan shall be consistent with prior proposals by the Vendor, and considered for acceptance by the State, and shall include the following:

- i) The Vendor’s project organizational structure.
- ii) The Vendor’s staffing table with names and titles of personnel assigned to the project. This shall be consistent with staffing of accepted proposal. Necessary substitutions due to change of employment status and other unforeseen circumstances may only be made with prior approval of the State.
- iii) The project breakdown showing sub projects, activities and tasks, and resources required and allocated to each.
- iv) The time phased plan in the form of a graphic display, showing each event, task and decision point in your work plan.

aa)The IAM-MS shall comply with and observe numerous federal/state regulatory and compliance rules due to its interaction with sensitive, personally identifiable information (PII) and various legislation regarding individuals with disabilities. Vendor shall describe the approach their IAM-MS solution will use to ensure conformance with the requirements of these regulations, if applicable:

- i) Americans with Disabilities Act (ADA): 42 U.S.C 12101 et. seq.
- ii) Children's Internet Protection Act (CIPA): 47 CFR 54.520
- iii) Children's Online Privacy Protection Act of 1998 (COPPA): 15 U.S.C 650 et. seq.
- iv) Family Educational Rights and Privacy Act of 1974 (FERPA or the Buckley Amendment): 20 U.S.C. 1232g
- v) Health Insurance Portability and Accountability Act (HIPAA) of 1996: 42 U.S.C. 1320d
- vi) Individuals with Disabilities Education Act (IDEA): 20 U.S.C. 1400 et. seq., 34 CFR Part 300, 303
- vii) Federal Information Security Management Act (FISMA): 44 U.S.C 3541
- viii) North Carolina Identity Theft Protection Act: N.C. GS14-113.20 - GS14.113.23

9) Desirable Technical Specifications:

Other sections of this RFP describe the requirements of the IAM-MS. To a great extent, *The IAM Plan* has informed the development of this RFP. Contents of the plan that are not explicitly included within this RFP are considered “desirable” for the IAM-MS.

This plan describes the State’s current view of the desired IAM-MS and associated roles such as the IAM Service Manager, Policy and Governance, etc. Are there any additional features of your proposed solution, which are not requirements in this RFP, but are listed in The IAM Plan? Please feel free to elaborate.

Section IV. Cost Proposal

A) Overview:

- 1) The cost proposal shall be for the delivery of a fully functioning *Production IAM Managed Service* (IAM-MS) as described in this RFP.
- 2) The Vendor responding to this RFP shall be able to deliver a solution that meets all of the RFP requirements or represents a partnership of vendors who can collectively deliver the solution.
- 3) The State of North Carolina shall procure a subscription-based (e.g. annual fee) managed service (Software as a Service - SaaS) for the delivery of an Identity and Access Management Service. "Ownership" of any of the components making up this system (e.g. hardware, software, etc.) is not a goal of the project.
- 4) Bidders shall assume a combined active population of three (3) million users, made up of students, teachers, parents and other staff and guests.
- 5) Planning, implementation and configuration costs shall include the development of the technical implementation plan, the integration and onboarding of the Initial Source Systems, and the Target Systems listed in Table 1 of this RFP. Cost for the *data integration* of source systems (matching and merging of user data records) shall be priced individually in the detailed breakdown of item 1a below. ***As the priority and availability of Target applications has not yet been determined, assume that five (5) Target applications will be onboarded, having the following characteristics:***
 - One (1) email application with an API for provisioning user accounts, three (3) web applications using SAML assertions for authentication and consuming user attributes for the provisioning of internal user profiles (accounts), and one (1) application which maintains its own internal accounts and requires access to the NC Education Cloud directory for authentication via an LDAP bind.*
- 6) Proposed pricing for the IAM-MS items as described below and listed on the **Cost Template** shall be the full price for the successful delivery/completion of each item. Charges for work performed by solution partners or other internal vendor groups shall be included in these cost responses. Cost amount shall be the TOTAL "all-in" price – including development, hardware, software, support, hosting, and all other aspects of the proposed IAM-MS.

B) Cost Amounts:

- 1) The vendor shall provide and describe the following proposal costs (based on the assumptions listed above and meeting the stated requirements for this RFP).
 - a) A single dollar amount for the **planning, installation and configuration** of a production-ready, IAM Managed Service as described in this RFP. Proposed costs should be provided for the *Data Integration* of the Source Systems and each of the five (5) Target Applications indicated in the Cost Template. *This response should reflect all the planning, functionality, software, hardware infrastructure, hosting, training, and development costs (e.g. provisioning and de-provisioning, request/approval workflows, source and target system integration, data repository, central directory, federation implementation, and all testing and remediation, etc.), needed to deliver IAM as a Service (IAMaaS).*
 - b) A single dollar amount representing the **annual recurring fee for a Production IAM Managed Service** as implemented in “1a” above (payments to be made in monthly or quarterly installments) and to include all monitoring and support, software and hardware upgrades as needed, professional services development, workflows and target/source system on-boarding activities, etc. as described elsewhere in this RFP. Assume ten (10) system-wide target systems/services onboarded per year.
 - c) A single dollar amount for the sum of 1a and 1b.
- 2) Vendor should also list and describe any costs incurred in developing and delivering this IAM Managed Service that are not being charged to the customer - for completeness in evaluating all vendor responses.
- 3) Vendors who propose an Alternative cost response shall submit a separate document labeled “ALTERNATIVE COST RESPONSE”.

IAM Managed Service Cost Template

Item	Cost Description	Dollar Amount	Additional Comments
1	<p>Planning, Installation and Configuration (Production Ready)</p> <p>The total "one-time" dollar amount to create the Technical Implementation Plan, establish the hardware and software infrastructure, install the IAM-MS and configure it to perform all functionality listed in the RFP. At the completion of this phase, the IAM-MS would be production ready, and LEA and Charter School pilots with the initial set of five (5) Target Systems/Services could begin.</p> <p><i>Please provide itemized estimated costs for the following efforts (These should be part of the overall Planning, Implementation & Configuration Total above):</i></p>		
2	Data Integration Cost		
3	Target email with API (Onboarding)		
4	Three Web Target Services (SAML) Cost = 3x One App		
5	Target using LDAP Authentication (Onboarding)		
6	<p>Annual Fee (Subscription) for Production IAM-MS</p> <p>This is the recurring cost that will be charged annually (paid monthly or quarterly) for maintenance and support of the IAM Managed Service. It shall include all hardware and software charges and upgrades, the onboarding of, and changes to, any of the Source and Target systems, as well as changes to the overall IAM-MS (workflow additions, changes, self-service, etc.) and user populations (new or changed groups, roles, entitlements, etc.). As stated previously, assume ten (10) system-wide target systems/ services will be onboarded per year.</p>		
7	Total Costs for project (as described in Section IV)		
8	Total (of lines 1 and 6)		
9	<p>Scaling Factors for Annual Service Fee</p> <p>Please identify what factors (if any), would result in a significant increase to the annual fee over time, and how they would impact the cost (e.g. Additional active users, number of Target Systems, Workflow request/changes, etc.)</p>		
10	Comments:		

Section V. Other Requirements and Special Terms

- 1) VENDOR UTILIZATION OF WORKERS OUTSIDE U.S.: In accordance with NC General Statute 147-33.97, the Vendor shall detail in the bid response, the manner in which it intends to utilize resources or workers. The State of North Carolina will evaluate the additional risks, costs, and other factors associated with such utilization prior to making an award for any such Vendor's proposal. The Vendor shall provide the following for any proposal or actual utilization or contract performance:
- a) The location of work performed under a state contract by the Vendor, any subcontractors, employees, or other persons performing the contract and whether any of this work will be performed outside the United States
 - b) The corporate structure and location of corporate employees and activities of the Vendors, its affiliates or any other subcontractors
 - c) Notice of the relocation of the Vendor, employees of the Vendor, subcontractors of the Vendor, or other persons performing services under a state contract outside of the United States
 - d) Any Vendor or subcontractor providing call or contact center services to the State of North Carolina shall disclose to inbound callers the location from which the call or contact center services are being provided

Will any work under this contract be performed outside the United States?

Where will services be performed: _____ YES _____ NO _____

SPECIAL TERMS AND CONDITIONS:

- 2) Financial Statements – the Vendor shall provide evidence of financial stability with its response to this RFP as further described herein below. As used herein, Financial Statements shall exclude tax returns and compiled statements.
- a) For a publicly traded company, Financial Statements for the past three (3) fiscal years, including at a minimum, income statements, balance sheets, and statement of changes in financial position or cash flows. If three (3) years of financial statements are not available, this information shall be provided to the fullest extent possible, but not less than one year. If less than 3 years, vendor shall explain the reason why they are not available.
 - b) For a privately held company, when certified audited financial statements are not prepared: a written statement from the company's certified public accountant stating the financial condition, debt-to-asset ratio for the past three (3) years and any pending actions that may affect the company's financial condition.
 - c) The State may, in its sole discretion, accept evidence of financial stability other than Financial Statements for the purpose of evaluating Vendors' responses to this RFP. The State reserves the right to determine whether the substitute information meets the requirements for Financial Information sufficiently to allow the State to evaluate the sufficiency of financial resources and the ability of the business to sustain performance of the contract award. Scope Statements issued may require the submission of Financial Statements and specify the number of years to be provided, the information to be provided, and the most recent date required.

- 3) Disclosure of Litigation – The Vendor’s failure to fully and timely comply with the terms of this section, including providing reasonable assurances satisfactory to the State, may constitute a material breach of this Contract.
- a) The Vendor shall notify the State in its bid proposal, if it, or any of its subcontractors, or their officers, directors, or key personnel who may provide services under any contract awarded pursuant to this solicitation, have ever been convicted of a felony, or any crime involving moral turpitude, including, but not limited to fraud, misappropriation or deception. Vendor shall promptly notify the State of any criminal litigation, investigations or proceeding involving Vendor or any subcontractor, or any of the foregoing entities’ then current officers or directors during the term of this Contract or any Scope Statement awarded to Vendor.
 - b) Vendor shall notify the State in its bid proposal, and promptly thereafter as otherwise applicable, of any civil litigation, arbitration, proceeding, or judgments against it or its subcontractors during the three (3) years preceding its bid proposal, or which may occur during the term of any awarded to Vendor pursuant to this solicitation, that involve (1) services or related goods similar to those provided pursuant to any contract and that involve a claim that may affect the viability or financial stability of the Vendor, or (2) a claim or written allegation of fraud by the Vendor or any subcontractor hereunder, arising out of their business activities, or (3) a claim or written allegation that the Vendor or any subcontractor hereunder violated any federal, state or local statute, regulation or ordinance. Multiple lawsuits and or judgments against the Vendor or subcontractor shall be disclosed to the State to the extent they affect the financial solvency and integrity of the Vendor or subcontractor.
 - c) All notices under subsection A and B herein shall be provided in writing to the State within thirty (30) calendar days after the Vendor learns about any such criminal or civil matters; unless such matters are governed by the ITS General Terms and Conditions annexed to the solicitation. Details of settlements which are prevented from disclosure by the terms of the settlement shall be annotated as such. Vendor may rely on good faith certifications of its subcontractors addressing the foregoing, which certifications shall be available for inspection at the option of the State.
- 4) Criminal Conviction – In the event the Vendor, an officer of the Vendor, or an owner of a 25% or greater share of the Vendor, is convicted of a criminal offense incident to the application for or performance of a State, public or private Contract or subcontract; or convicted of a criminal offense including but not limited to any of the following: embezzlement, theft, forgery, bribery, falsification or destruction of records, receiving stolen property, attempting to influence a public employee to breach the ethical conduct standards for State of North Carolina employees; convicted under State or federal antitrust statutes; or convicted of any other criminal offense which in the sole discretion of the State, reflects upon the Vendor’s business integrity and such vendor shall be prohibited from entering into a contract for goods or services with any department, institution or agency of the State.
- 5) Security and Background Checks – The Agency reserves the right to conduct a security background check or otherwise approve any employee or agent provided by Vendor, and to refuse access to or require replacement of any such personnel for cause, including, but not limited to, technical or training qualifications, quality of work or change in security status or non-compliance with the Agency’s security or other requirements.
- 6) Assurances – In the event that criminal or civil investigation, litigation, arbitration or other proceedings disclosed to the State pursuant to this Section, or of which the State otherwise becomes aware, during the term of this Contract, causes the State to be reasonably concerned about:

- a) The ability of the Vendor or its subcontractor to continue to perform this Contract in accordance with its terms and conditions, or
 - b) Whether the Vendor or its subcontractor in performing services is engaged in conduct which is similar in nature to conduct alleged in such investigation, litigation, arbitration or other proceedings, which conduct would constitute a breach of this Contract or violation of law, regulation or public policy, then the Vendor shall be required to provide the State all reasonable assurances requested by the State to demonstrate that: the Vendor or its subcontractors hereunder will be able to continue to perform this Contract in accordance with its terms and conditions, and the Vendor or its subcontractors will not engage in conduct in performing services under this Contract which is similar in nature to the conduct alleged in any such litigation, arbitration or other proceedings.
- 7) Confidentiality of Data and Information – All financial, statistical, personnel, technical and other data and information relating to the State’s operation which are designated confidential by the State and made available to the Vendor in order to carry out this Contract, or which become available to the Vendor in carrying out this Contract, shall be protected by the Vendor from unauthorized use and disclosure through the observance of the same or more effective procedural requirements as are applicable to the State. The identification of all such confidential data and information as well as the State’s procedural requirements for protection of such data and information from unauthorized use and disclosure shall be provided by the State in writing to the Vendor. If the methods and procedures employed by the Vendor for the protection of the Vendor’s data and information are deemed by the State to be adequate for the protection of the State’s confidential information, such methods and procedures may be used, with the written consent of the State, to carry out the intent of this section. The Vendor shall not be required under the provisions of this section to keep confidential, (1) information generally available to the public, (2) information released by the State generally, or to the Vendor without restriction, (3) information independently developed or acquired by the Vendor or its personnel without reliance in any way on otherwise protected information of the State. Notwithstanding the foregoing restrictions, the Vendor and its personnel may use and disclose any information which it is otherwise required by law to disclose, but in each case only after the State has been so notified, and has had the opportunity, if possible, to obtain reasonable protection for such information in connection with such disclosure.
- 8) Project Management – All project management and coordination on behalf of the Agency shall be through a single point of contact designated as the Agency Project Manager. Vendor shall designate a Vendor Project Manager who will provide a single point of contact for management and coordination of Vendor’s work. All work performed pursuant to this Contract shall be coordinated between the Agency Project Manager and the Vendor Project Manager.
- 9) Meetings –The Vendor is required to meet with Agency personnel, or designated representatives, to resolve technical or contractual problems that may occur during the term of the Contract. Meetings will occur as problems arise and will be coordinated by Agency. The Vendor will be given reasonable and sufficient notice of meeting dates, times, and locations. Face to face meetings are desired. However, at the Vendor’s option and expense, a conference call meeting may be substituted. Consistent failure to participate in problem resolution meetings, two (2) consecutive missed or rescheduled meetings, or failure to make a good faith effort to resolve problems, may result in termination of the Contract.
- 10) Transition Assistance – If this Contract is not renewed at the end of this term, or is canceled prior to its expiration, for any reason, the Vendor shall provide for up to six (6) months after the expiration or cancellation of this Contract, all reasonable transition assistance requested by the State, to allow for the expired or canceled portion of the Services to continue without interruption or adverse effect, and to facilitate the orderly transfer of such services to the State or its designees. Such transition assistance will be deemed by the parties to be governed by the terms and conditions of this Contract, (notwithstanding

this expiration or cancellation) except for those Contract terms or conditions that do not reasonably apply to such transition assistance. The State shall pay the Vendor for any resources utilized in performing such transition assistance at the most current rates provided by the Contract for Contract performance. If the State cancels this Contract for cause, then the State will be entitled to off set the cost of paying the Vendor for the additional resources the Vendor utilized in providing transition assistance with any damages the State may have otherwise accrued as a result of said cancellation.

- 11) Quality Assurance, Performance and Reliability – The State shall reserve the right to perform audits and performance evaluations of the IAM-MS on a periodic basis.
 - a) Conformance to any Service Level Agreement
 - b) Satisfactory completion of acceptance testing
 - c) Project Assurance, Performance and Reliability Evaluation
 - d) Security and compliance audits
- 12) Unanticipated Tasks – In the event that additional work shall be performed that was wholly unanticipated, and that is not specified in this Contract, but which in the opinion of both parties is necessary to the successful accomplishment of the contracted scope of work, the procedures outlined in this article will be followed. For each item of unanticipated work, Vendor shall prepare a work authorization in accordance with the State’s practices and procedures.
 - a) It is understood and agreed by both parties that all of the terms and conditions of this Contract shall remain in force with the inclusion of any work authorization. A work authorization shall not constitute a contract separate from this Contract, nor in any manner amend or supersede any of the other terms or provisions of this Contract or any amendment hereto.
 - b) Each work authorization shall comprise a detailed statement of the purpose, objective, or goals to be undertaken by Vendor, the job classification or approximate skill level or sets of the personnel required, an identification of all significant material then known to be developed by Vendor’s personnel as a Deliverable, an identification of all significant materials to be delivered by the State to Vendor’s personnel, an estimated time schedule for the provision of the services by Vendor, completion criteria for the work to be performed, the name or identification of Vendor’s personnel to be assigned, the Vendor’s estimated work hours required to accomplish the purpose, objective or goals, the Vendor’s billing rates and units billed, and the Vendor’s total estimated cost of the work authorization.
 - c) All work authorizations shall be submitted for review and approval by the procurement office that approved the original Contract and procurement. This submission and approval shall be completed prior to execution of any work authorization documentation or performance thereunder. All work authorizations shall be written and signed by Vendor and the State prior to beginning work.
 - d) The State has the right to require Vendor to stop or suspend performance under the “Stop Work” provision of the General Terms and Conditions for Goods and Related Services.
 - e) Vendor shall not expend Personnel resources at any cost to the State in excess of the estimated work hours unless this procedure is followed: If, during performance of the work, the Vendor determines that a work authorization to be performed under this Contract cannot be accomplished within the estimated work hours, the Vendor will be required to complete the work authorization in full. Upon receipt of such notification, the State may:
 - i) Authorize the Vendor to expend the estimated additional work hours or service in excess of the original estimate necessary to accomplish the work authorization, or
 - ii) Terminate the work authorization, or

- iii) Alter the scope of the work authorization in order to define tasks that can be accomplished within the remaining estimated work hours.
- iv) The State will notify Vendor in writing of its election within seven (7) calendar days after receipt of the Vendor's notification. If notice of the election is given to proceed, the Vendor may expend the estimated additional work hours or services.

Section VI. Proposal Content and Organization

- 1) This section should contain all relevant and material information relating to the Vendor's organization, personnel, and experience that would substantiate its qualifications and capabilities to perform the services and/or provide the goods described in this RFP. If any relevant and material information is not provided, the offer may be rejected from consideration and evaluation. Proposals will be considered and evaluated based upon the Vendor's full completion and response to the following, and any additional requirements herein, or stated in a separate Exhibit.
- 2) Information and Descriptive Literature. Vendor shall furnish all information requested; and if response spaces are provided in this document, the Vendor shall furnish said information in the spaces provided. Further, if required elsewhere in this proposal, each Vendor shall submit with their proposal sketches, descriptive literature and/or complete specifications covering the products offered. References to literature submitted with a previous proposal will not satisfy this provision. Proposals that do not comply with these requirements may be rejected.
- 3) Proposal Content. Demonstrate compliance with all conditions, requirements and terms of performance.
 - a) Clearly state your understanding of the problem(s) presented by this RFP.
 - i) Response to requirements and desired technical specifications
 - ii) Cost proposal
 - b) Detailed description of Vendor's firm should include all of the following:
 - i) Full name, address, and telephone number of the organization;
 - ii) Date established;
 - iii) Background of firm;
 - iv) Ownership (public company, partnership, subsidiary, etc.);
 - v) If incorporated, state of incorporation shall be included.
 - vi) Number of full-time employees on January 1st for the last three years or for the duration that the Vendor's firm has been in business, whichever is less.
- 4) Proposal Format. The proposals should be organized in the exact order in which the requirements and/or desirable performance criteria are presented in the RFP. The Execution page of this RFP shall be placed at the front of the Proposal. Each page should be numbered. The proposal should contain a table of contents, which cross-references the RFP requirement and the specific page of the response in the Vendor's proposal. All proposals should be typewritten on standard 8 ½ x 11 paper (larger paper is permissible for charts, spreadsheets, etc.) and placed within a binder with tabs delineating each section.
- 5) Vendors shall adhere to the following general instructions in order to bring clarity and order to the proposal and subsequent evaluation process:
 - a) Elaborate proposals in the form of brochures or other presentations beyond that necessary to present a complete and effective proposal are not desired.
 - b) The response should be complete and comprehensive with a corresponding emphasis on being concise and clear.
- 6) Proposal Organization: The proposal should be organized and indexed in the following format and shall contain, at a minimum, all listed items in the sequence indicated.
 - a) Letter of Transmittal - Each proposal shall be accompanied by a letter of transmittal that provides the following information:

- i) Identify the submitting organization;
 - ii) Identify the name, title, telephone and fax number, along with an e-mail address of the person authorized by the organization to contractually obligate the organization;
 - iii) Identify the name, title, telephone and fax number, along with an e-mail address of the person authorized to negotiate the contract on behalf of the organization;
 - iv) Identify the names, titles, telephone and fax number, along with an e-mail address of the person to be contacted for clarification;
 - v) Acknowledge receipt of any and all amendments to this RFP.
- b) Table of Contents
 - c) Proposal Summary. A proposal summary may be included by Vendors to provide the Evaluation Committee with an overview of the technical and business features of the proposal; however, this material will not be used in the evaluation process unless specifically referenced from other portions of the Vendor's proposal
 - d) Introduction. The introduction shall summarize the contents of the proposal in a way that gives readers a broad understanding of the entire proposal. Clearly state your understanding of the problem(s) presented by this RFP. Please describe the kinds of customers you typically serve. For example, are your customers small organizations or very large ones? Do you have a particular geographic or industry focus? Describe how you will define whether or not the IAM-MS implementation has been successful. How will benefits be measured and realized?
 - e) Response to Section III. Scope of Work and Specifications
 - f) Completed Cost Response
 - g) Financial Information
 - h) Conflict of Interest:
 - i. Provide a statement that no assistance in preparing the response was received from any current or former employee of the State of North Carolina whose duties relate(d) to this RFP, unless such assistance was provided by the state employee in his or her official public capacity and that neither such employee nor any member of his or her immediate family has any financial interest in the outcome of this RFP;
 - ii. State if the Vendor or any employee of the Vendor is related by blood or marriage to an Agency employee or resides with an Agency employee. If there are such relationships, list the names and relationships of said parties. Include the position and responsibilities within the Vendor's organization of such Vendor employees; and
 - iii. State the employing State Agency, individual's title at that State Agency, and termination date.
 - i) Copy of Vendor's License and Maintenance Agreements
 - j) Other Supporting Material Including Technical System Documentation
 - k) Training and Other Materials, Samples or Examples
 - l) Within each section of their proposal, Vendors should address the items in the order in which they appear in this RFP. Forms, if any provided in the RFP, shall be completed and included in the appropriate section of the proposal. All discussion of proposed costs, rates, or expenses shall be presented with the cost response.
- 7) Any proposal that does not adhere to these requirements may be deemed non-responsive and rejected on that basis.
- 8) Vendors may attach other materials that they feel may improve the quality of their responses. However, these materials should be included as items in a separate appendix.

Section VII. North Carolina Office of Information Technology General Terms and Conditions

1. Standards - Reserved

2. Site Preparation - Reserved

3. Goods Return - Reserved

4. Specifications - Reserved

5. Warranties - Reserved

6. Personnel

All service management and coordination on behalf of the Agency shall be through a single point of contact designated as the Agency Contract Administrator or Agency Project Manager. Vendor shall designate a Vendor Service Project Manager who will provide a single point of contact for management and coordination of Vendor's Services. All work performed pursuant to this Contract shall be coordinated between the Agency Project Manager and the Vendor Project Manager. The Vendor is required to meet with Agency personnel, or designated representatives, to resolve technical or contractual problems that may occur during the term of this Contract. Meetings will occur as problems arise and will be coordinated by Agency. The Vendor will be given reasonable and sufficient notice of meeting dates, times, and locations. Face to face meetings are desired. However, at the Vendor's option and expense, a conference call meeting may be substituted. Consistent failure to participate in problem resolution meetings, two (2) consecutive missed or rescheduled meetings, or failure to make a good faith effort to resolve problems, may result in termination of this Contract.

7. Subcontracting

The Vendor may subcontract the performance of required services with other Vendors or third Parties, or change subcontractors, only with the prior written consent of this Contracting authority. Vendor shall provide the State with complete copies of any agreements made by and between Vendor and all subcontractors. The selected Vendor remains solely responsible for the performance of its subcontractors. Subcontractors, if any, shall adhere to the same standards required of the selected Vendor. Any contracts made by the Vendor with a subcontractor shall include an affirmative statement that the State is an intended third party beneficiary of this Contract; that the subcontractor has no agreement with the State; and that the State shall be indemnified by the Vendor for any claim presented by the subcontractor. Notwithstanding any other term herein, Vendor shall timely exercise its contractual remedies against any non-performing subcontractor and, when appropriate, substitute another subcontractor.

8. Qualified Personnel

Vendor warrants that qualified personnel will provide services in a professional manner. "Professional manner" means that the personnel performing the services will possess the skill and competence consistent with the prevailing business standards in the information technology industry.

9. Primary Vendor

Vendor agrees that it will not enter any agreement with a third party that might abridge any rights of the State under this Contract. Vendor will serve as the prime Vendor under this Contract. Should the State approve any subcontractor(s), the Vendor shall be legally responsible for the performance and payment of the subcontractor(s). Names of any third party Vendors or subcontractors of Vendor may appear for purposes of convenience in Contract documents; and shall not limit Vendor's obligations hereunder. Third party subcontractors, if approved, may serve as subcontractors to Vendor. Vendor will retain executive representation for functional and technical expertise as needed in order to incorporate any work by third party subcontractor(s).

10. Intellectual Property

Vendor has the right to provide the Services without violating or infringing any law, rule, regulation, copyright, patent, trade secret or other proprietary right of any third party. Vendor represents that its Services are not the subject of any actual or threatened actions arising from, or alleged under, any intellectual property rights of any third party.

11. Inherent Services

If any Services, functions, or responsibilities not specifically described in this Contract are required for Vendor's proper performance, provision and delivery of the Service pursuant to this Contract, or are an inherent part of or necessary sub-task included within the Service, they will be deemed to be implied by and included within the scope of this Contract to the same extent and in the same manner as if specifically described in this Contract. Unless otherwise expressly provided in this Contract, Vendor will furnish all of its own necessary management, supervision, labor, facilities, furniture, computer and telecommunications equipment, software, supplies and materials necessary for the Vendor to provide and deliver the Services.

12. Financial Capacity

Vendor warrants that it has the financial capacity to perform and to continue perform its obligations under this Contract; that Vendor has no constructive or actual knowledge of an actual or potential legal proceeding being brought against Vendor that could materially adversely affect performance of this Contract; and that entering into this Contract is not prohibited by any contract, or order by any court of competent jurisdiction.

13. Warranty as to Equipment: Hardware - Reserved

14. Service License – The Vendor grants to the State and its lawful Users for the term of this Contract a non-exclusive, non-transferable, and non-sublicensable license to use the Services.

15. Maintenance / Support Services – Reserved

16. Travel Expenses

The vendor shall not be reimbursed for travel expenses arising under the performance of this Contract.

17. Governmental Restrictions

In the event any restrictions are imposed by governmental requirements that necessitate alteration of the services offered prior to delivery thereof, the Vendor shall provide written notification of the necessary alteration(s) to the Agency Contract Administrator. The State reserves the right to accept any such alterations, including any price adjustments occasioned thereby, or to cancel this Contract. The State may advise Vendor of any restrictions or changes in specifications required by North Carolina legislation, rule or regulatory authority that require compliance by the State. In such event, Vendor shall use its best efforts to comply with the required restrictions or changes. If compliance cannot be achieved by the date specified by the State, the State may terminate this Contract and compensate Vendor for sums due under this Contract.

18. Prohibition against Contingent Fees & Gratuities

Vendor warrants that it has not paid, and agrees not to pay, any bonus, commission, fee, or gratuity to any employee or official of the State for the purpose of obtaining any contract or award issued by the State. Vendor further warrants that no commission or other payment has been or will be received from or paid to any third party contingent on the award of any contract by the State, except as shall have been expressly communicated to the State Purchasing Agent in writing prior to acceptance of this Contract or award in question. Each individual signing below warrants that he or she is duly authorized by their respective Party to sign this Contract and bind the Party to the terms and conditions of this Contract. Vendor and their authorized signatory further warrant that no officer or employee of the State has any direct or indirect financial or personal beneficial interest, in the subject matter of this Contract; obligation or contract for future award of compensation as an inducement or consideration for making this Contract. Subsequent discovery by the State of non-compliance with these provisions shall constitute sufficient cause for immediate termination of all outstanding contracts. Violations of this provision may result in debarment of the Vendor(s) as permitted by 9 NCAC 06B.1102 (f), 06B.1030, or other provision of law.

19. Availability of Funds

Availability of any and all payments to Vendor is expressly contingent upon and subject to the appropriation, allocation and availability of funds to the Agency for the purposes set forth in this Contract. If this Contract or any Purchase Order issued hereunder is funded in whole or in part by federal funds, the Agency's performance and payment shall be subject to and contingent upon the continuing availability of said federal funds for the purposes of this Contract or Purchase Order. If the term of this Contract extends into fiscal years, subsequent to that in which it is approved, such continuation of this Contract is expressly contingent upon the appropriation, allocation and availability of funds by the North Carolina General Assembly for the purposes set forth in this Contract. If funds to effect payment are not available, the Agency will provide written notification to Vendor. If this Contract is terminated under this paragraph, Vendor agrees to transfer all State data, in a format acceptable to the State, and State-owned or licensed software to the State, if any, or such other entity as may be designated by the State. The State shall remit payment for services accepted prior to the date of the aforesaid notice in conformance with the payment terms.

20. Payment Terms- Reserved

21. Acceptance Criteria –

Acceptance Criteria is the completion of all functionality as described in this RFP which includes but is not limited to the following:

At the end of Year 1, the IAM-MS provider shall have completed:

- a) User data integrated from source systems into unique user records for all LEAs and charter schools
 - i. User records from any LEA or charter school shall be searchable and viewable
- b) User accounts are provisioned for all participating LEAs and charter schools
 - i. Every participating LEA and charter school shall have associated identities
 - ii. User accounts from any participating LEA or charter school shall be searchable and viewable
- c) All user self-service, delegated administration, and access to directory data, functions as described in this RFP
 - i. Users can perform self-service password changes and resets
 - ii. Delegated administrators for each LEA and Charter School can generate and approve requests for appropriate workflows, reset user passwords and disable accounts for their staff and students
 - iii. LEA data can be obtained from the IAM-MS by authorized users (methods dependent upon vendor implementation)
- d) Cloud-ready target applications shall be on-boarded as they become available
 - i. It is expected that five (5) target applications will be available in Year 1.
- e) Pilot onboarding shall be completed for
 - i. LEA and charter school early adopters
 - ii. Target applications
- f) A fully functioning IAM-MS (meets all RFP requirements)**

Years 2 and ongoing: Full Production and Operation

- a) Ongoing IAM-MS maintenance, enhancements, support, operations
- b) Ongoing migrations for new LEAs, Charter Schools, etc.
- c) Ongoing updates to handle changing authoritative source systems
- d) Ongoing On-boarding of new Target Applications and Services

22. Equal Employment Opportunity

Vendor shall comply with all Federal and State requirements relating to fair employment and employment.

23. Inspection at Vendor's Site

The State reserves the right to inspect, prior to and after this Contract becomes effective, during Vendor's regular business hours at a reasonable time, upon notice of not less than five (5) calendar days, and at its own expense, the Vendor's location(s) where the Services will and are being performed.

24. Advertising / Press Release

Vendor absolutely shall not publicly disseminate any information concerning this Contract without prior written approval from the State or its authorized Agent. For the purpose of this provision of this Contract, the Agent is the Purchasing Agency Contract Administrator unless otherwise named in the solicitation documents.

25. Confidentiality

In accordance with North Carolina Office of Information Technology rules 9 NCAC 06B.0103, 06B.0207 and 06B.1001 and to promote maximum competition in the State competitive bidding process, the State may maintain the confidentiality of certain types of information described in NCGS §132-1 et seq. Such information may include trade secrets defined by N.C. Gen. Stat. §66-152 and other information exempted from the Public Records Act pursuant to N.C. Gen. Stat. §132-1.2. Vendor may designate appropriate portions of its response as confidential, consistent with and to the extent permitted under the Statutes and Rules set forth above, by marking the top and bottom of pages containing confidential information with a legend in boldface type "CONFIDENTIAL". By so marking any page, the Vendor warrants that it has formed a good faith opinion, having received such necessary or proper review by counsel and other knowledgeable advisors, and that the portions marked confidential meet the requirements of the Rules and Statutes set forth above. However, under no circumstances shall price information be designated as confidential. The State may serve as custodian of Vendor's confidential information and not as an arbiter of claims against Vendor's assertion of confidentiality. If an action is brought pursuant to N.C. Gen. Stat. §132-9 to compel the State to disclose information marked confidential, the Vendor agrees that it will intervene in the action through its counsel and participate in defending the State, including any public official(s) or public employee(s). The Vendor agrees that it shall hold the State and any official(s) and individual(s) harmless from any and all damages, costs, and attorneys' fees awarded against the State in the action. The State agrees to promptly notify the Vendor in writing of any action seeking to compel the disclosure of Vendor's confidential information. The State shall have the right, at its option and expense, to participate in the defense of the action through its counsel. The State shall have no liability to Vendor with respect to the disclosure of Vendor's confidential information ordered by a court of competent jurisdiction pursuant to NCGS §132-9 or other applicable law.

26. Confidentiality of State Data, Information, and State-licensed or State-owned Software

All State Data and information, including but not limited to financial, statistical, personnel, technical and other data and information relating to the State's operation, which are designated confidential by the State and made available to the Vendor in order to carry out this Contract, or which become available to the Vendor in carrying out this Contract, shall be protected by the Vendor from unauthorized use and disclosure through the observance of the same or more effective procedural requirements as are applicable to the State. The identification of all such confidential State Data and information as well as the State's procedural requirements for protection of such data and information from unauthorized use and disclosure shall be provided by the State in writing to the Vendor. If the methods and procedures employed by the Vendor for the protection of the Vendor's data and information are deemed by the State to be adequate for the protection of the State's confidential Data and information, such methods and procedures may be

used, with the written consent of the State, to carry out the intent of this paragraph. The Vendor shall not be required under the provisions of this section to keep confidential, (1) information generally available to the public, (2) information released by the State generally, or to the Vendor without restriction, (3) information independently developed or acquired by the Vendor or its personnel without reliance in any way on otherwise protected State Data or information. Notwithstanding the foregoing restrictions, the Vendor and its personnel may use and disclose any State Data or information which it is otherwise required by law to disclose, but in each case only after the State has been so notified, and has had the opportunity, if possible, to obtain reasonable protection for such State Data or information in connection with such disclosure.

27a. Care of Information and Data

Vendor agrees to use commercial best efforts to safeguard and protect any data, documents, files, software and other materials received from the State or the Agency during performance of any contractual obligation from loss, destruction or erasure.

27b. Non-Disclosure

Vendor warrants that all its employees and any approved third party Vendors or subcontractors are subject to a non-disclosure and confidentiality agreement enforceable in North Carolina. Vendor will, upon request of the State, verify and produce true copies of any such agreements. Production of such agreements by Vendor may be made subject to applicable confidentiality, non-disclosure or privacy laws; provided that Vendor produces satisfactory evidence supporting exclusion of such agreements from disclosure under the N.C. Public Records laws, N.C. Gen. Stat. §132-1 et seq. The State may, in its sole discretion, provide a non-disclosure and confidentiality agreement satisfactory to the State for Vendor's execution. The State may exercise its rights under this subparagraph as necessary or proper, in its discretion, to comply with applicable security regulations or statutes including, but not limited to 26 USC 6103 and IRS Publication 1075, (Tax Information Security Guidelines for Federal, State, and Local Agencies), Health Information Portability and Accountability Act (HIPPA), 42 USC 1320(d) (Health Insurance Portability and Accountability Act, Federal Education Records Privacy Act, 20 U.S.C. § 1232g (FERPA)), any implementing regulations in the Code of Federal Regulations, and any future regulations imposed upon the Office of Information Technology Services or the N.C. Department of Revenue pursuant to future statutory or regulatory requirements.

Vendor further agrees and specifically warrants that it, its officers, directors, principals and employees, and any subcontractors, shall hold all information received during performance of this Contract in the strictest confidence and shall not disclose the same to any third party without the express written approval of the State.

28. Deliverables – Reserved

29. Late Delivery

Vendor shall advise the Agency contact person or office immediately upon determining that any Service will not, or may not, be delivered at the time or place specified. Together with such notice, Vendor shall state the projected delivery time and date. In the event the delay projected by Vendor is unsatisfactory, the Agency shall so advise Vendor and may proceed to procure substitute services.

30. Patent, Copyright, and Trade Secret Protection

- (A) Vendor, at its own expense, shall defend any action brought against the State to the extent that such action is based upon a claim that the Services or software supplied by the Vendor in providing the Services infringes a patent, or copyright or violates a trade secret in the United States. The Vendor shall pay those costs including attorneys' fees, if any, and damages finally awarded against the State in any such action.
- (B) Should any Services or software used by the Vendor in providing the Services, or the operation thereof become, or in the Vendor's opinion are likely to become, the subject of a claim of infringement of a patent, copyright, or a trade secret in the United States, the State shall permit the Vendor, at its option and expense, either to procure for the State the right to continue using the services or software, or to replace or modify the same to become non-infringing and continue to meet procurement specifications in all material respects. If neither of these options can reasonably be taken, or if the use of such services or software by the State shall be prevented by injunction, the Vendor agrees transfer all State Data and State-owned or licensed software to the State or its designated entity and refund any sums the State has paid Vendor less any reasonable amount for use or damage and make every reasonable effort to assist the State in procuring substitute vendor of identical Services.
- (C) Vendor will not be required to defend or indemnify the State if any claim by a third party against the State for infringement or misappropriation (i) results from the State's alteration of any Vendor-branded service or (ii) results from the continued use of the Services after receiving notice they infringe a trade secret of a third party.
- (D) Nothing stated herein, however, shall affect Vendor's ownership in or rights to its preexisting intellectual property and proprietary rights.

31. Access to Persons and Records

Pursuant to NCGS § 147-64.7, the Agency, the State Auditor, appropriate federal officials, and their respective authorized employees or agents, and the using Agency's internal auditors have access to persons and are authorized to examine all books, records, and accounts of the Vendor insofar as they relate to transactions with any department, board, officer, commission, institution, or other Agency of the State of North Carolina pursuant to the performance of this Contract or to costs charged to this Contract. The Vendor shall retain any such books, records, and accounts for a minimum of five (5) years after the completion of the Contract. Additional audit or reporting requirements may be required by any Agency, if in the Agency's opinion, such requirement is imposed by federal or state law or regulation.

The State Auditor and the using agency's internal auditors shall have access to persons and records as a result of all contracts or grants entered into by State agencies or political subdivisions in accordance with N.C. Gen. Stat. § 147-64.7 and Session Law 2010-194, Section 21 (i.e., the State Auditors and internal auditors may audit the records of this Contractor during the term of this Contract to verify accounts and data affecting fees or performance).

32. Assignment

Vendor shall not assign this Contract or its obligations hereunder except as permitted by 09 NCAC 06B.1003 and this Paragraph. Vendor shall provide reasonable notice of not less than thirty (30) days prior to any consolidation, acquisition, or merger. Any assignee shall affirm this Contract attorning to the terms and conditions agreed, and that Vendor shall affirm that the assignee is fully capable of performing

all obligations of Vendor under this Contract. An assignment may be made, if at all, in writing by the Vendor, assignee and the State setting forth the foregoing obligation of Vendor and Assignee.

33. Insurance Coverage

During the term of this Contract, the Vendor at its sole cost and expense shall provide commercial insurance of such type and with such terms and limits as may be reasonably associated with this Contract. As a minimum, the Vendor shall provide and maintain the following coverage and limits:

Commercial General Liability - General Liability Coverage on a Comprehensive Broad Form on an occurrence basis in the minimum amount of \$20,000,000.00 Combined Single Limit (Defense cost shall be in excess of the limit of liability).

Providing and maintaining adequate insurance coverage described herein is a material obligation of the Vendor and is of the essence of this Contract. All such insurance shall meet all laws of the State of North Carolina. Such insurance coverage shall be obtained from companies that are authorized to provide such coverage and that are authorized by the Commissioner of Insurance to do business in North Carolina. The Vendor shall at all times comply with the terms of such insurance policies, and all requirements of the insurer under any such insurance policies, except as they may conflict with existing North Carolina laws or this Contract. The limits of coverage under each insurance policy maintained by the Vendor shall not be interpreted as limiting the Vendor's liability and obligations under this Contract.

34. Dispute Resolution

The Parties agree that it is in their mutual interest to informally resolve disputes arising under this Contract. A claim by the Vendor shall be submitted in writing to the Agency Contract Administrator for decision. A claim by the State shall be submitted in writing to the Vendor's Contract Administrator for decision. The Parties shall negotiate in good faith and use all reasonable efforts to resolve such dispute(s). During the time the Parties are attempting to resolve any dispute, each shall proceed diligently to perform their respective duties and responsibilities under this Contract. If a dispute cannot be resolved between the Parties within thirty (30) days after delivery of notice, either Party may elect to exercise any other remedies available under this Contract, or at law. This term shall not constitute an agreement by either party to mediate or arbitrate any dispute.

35. Default

In the event any Service provided by the Vendor during performance of any Contract term fails to conform to any material requirement of this Contract, notice of the failure is provided by the State and if the failure is not cured within ten (10) calendar days, or Vendor fails to meet the requirements of Paragraph 21 herein, the State may cancel and procure the services from other sources; holding Vendor liable for any excess costs occasioned thereby, subject only to the limitations provided in these General Terms & Conditions, and the obligation to informally resolve disputes as provided in § 4.134 of these Terms and Conditions. Default may be cause for debarment as provided in 09 NCAC 06B.1030. The State reserves the right to require performance guaranties pursuant to 09 NCAC 06B.1031 from the Vendor without expense to the State. The rights and remedies of the State provided above shall not be exclusive and are in addition to any other rights and remedies provided by law or under this Contract

If Vendor fails to deliver the Services provided herein within the time(s) required by this Contract, the State may provide written notice of said failure to Vendor, and by such notice require payment of a penalty.

Should the State fail to perform any of its obligations upon which Vendor's performance is conditioned, Vendor shall not be in default for any delay, cost increase or other consequences due to the State's failure. Vendor will use reasonable efforts to mitigate delays, costs or expenses arising from assumptions in the Vendor's bid documents that prove erroneous or are otherwise invalid. Any deadline that is affected by any such failure in assumptions or performance by the State shall be extended by an amount of time reasonably necessary to compensate for the effect of such failure.

Vendor shall provide a plan to cure any default if requested by the State. The plan shall state the nature of the default, the time required for cure, any mitigating factors causing or tending to cause the default, and such other information as the Vendor may deem necessary or proper to provide.

36. Waiver of Default

Waiver by either party of any default or breach by the other Party shall not be deemed a waiver of any subsequent default or breach and shall not be construed to be a modification or novation of the terms of this Contract, unless so stated in writing and signed by authorized representatives of the Agency and the Vendor, and made as an amendment to this Contract herein below.

37. Termination

Any notice or termination made under this Contract shall be transmitted via US Mail, Certified Return Receipt Requested. The period of notice for termination shall begin on the day the return receipt is signed and dated:

(A) The Parties may mutually terminate this Contract by written agreement at any time.

(B) The State may terminate this Contract, in whole or in part, pursuant to the following:

(1) Termination for Cause: In the event any goods, software, or service furnished by the Vendor during performance of any Contract term fails to conform to any material requirement of this Contract, and the failure is not cured within the specified time after providing written notice thereof to Vendor, the State may cancel and procure the articles or services from other sources; holding Vendor liable for any excess costs occasioned thereby, subject only to the limitations provided in herein this Agreement. The rights and remedies of the State provided above shall not be exclusive and are in addition to any other rights and remedies provided by law or under this Contract. Vendor shall not be relieved of liability to the State for damages sustained by the State arising from Vendor's breach of this Contract; and the State may, in its discretion, withhold any payment due as a setoff until such time as the damages are finally determined or as agreed by the Parties. Voluntary or involuntary Bankruptcy or receivership by Vendor shall be cause for termination.

(2) Termination for Convenience without Cause: The State may terminate service and indefinite quantity contracts, in whole or in part by giving thirty (30) calendar days prior notice in writing to the Vendor. Vendor shall be entitled to sums due as compensation for Deliverables provided and services performed in conformance with this Contract. In the event this Contract is terminated for the convenience of the State the Agency will pay for all work performed and products delivered in conformance with this Contract up to the date of termination.

(C) Transition Assistance: If this Contract is not renewed at the end of its term, or is canceled prior to its expiration, for any reason, the Vendor must provide for up to six (6) months after the expiration or cancellation of this Contract, all reasonable transition assistance requested by the State, to allow for the

expired or canceled portion of the Services to continue without interruption or adverse effect, and to facilitate the orderly transfer of such services to the State or its designee(s). Such transition assistance will be deemed by the Parties to be governed by the terms and conditions of this Contract, (notwithstanding this expiration or cancellation) except for those Contract terms or conditions that do not reasonably apply to such transition assistance. The State shall pay the Vendor for any resources utilized in performing such transition assistance at the most current rates provided by this Contract for Contract performance. If the State cancels this Contract for cause, then the State will be entitled to offset the cost of paying the Vendor for the additional resources the Vendor may utilize in providing transition assistance with any damages the State may have otherwise accrued as a result of said cancellation.

38. Limitation of Vendor's Liability – Reserved

39. Vendor's Liability for Injury to Persons or Damage to Property

- (A) The Vendor shall be liable for damages arising out of personal injuries and/or damage to real or tangible personal property of the State, employees of the State, persons designated by the State for training, or person(s) other than agents or employees of the Vendor, designated by the State for any purpose, prior to, during, or subsequent to delivery, installation, acceptance, and use of the Services either at the Vendor's site or at the State's place of business, provided that the injury or damage was caused by the fault or negligence of the Vendor.
- (B) The Vendor agrees to indemnify, defend and hold the Agency and the State and its Officers, employees, agents and assigns harmless from any liability relating to personal injury or injury to real or personal property of any kind, accruing or resulting to any other person, firm or corporation furnishing or supplying work, services, materials or supplies in connection with the performance of this contract, whether tangible or intangible, arising out of the ordinary negligence, willful or wanton negligence, or intentional acts of the Vendor, its officers, employees, agents, assigns or subcontractors, in the performance of this Contract.

40. General Indemnity

Vendor shall hold and save the State, its officers, agents and employees, harmless from liability of any kind, including all claims and losses, with the exception of consequential damages, accruing or resulting to any other person, firm or corporation furnishing or supplying work, services, materials or supplies in connection with the performance of this Contract. The foregoing indemnification and defense by the Vendor shall be conditioned upon the following:

- (A) The Agency shall give Vendor written notice within thirty (30) days after it has actual knowledge of any such claim(s) or action(s) filed; and
- (B) Vendor shall have the sole control of the defense of any such claim(s) or action(s) filed and of all negotiations relating to settlement or compromise thereof, provided, however, that the Agency or State shall have the option to participate at their own expense in the defense of such claim(s) or action(s) filed.

41. Changes / Amendments

This Contract [and subsequent purchase order(s)] is awarded subject provision of services to the State Agency and prices indicated by the order or Contract, and all conditions and instructions of this Contract or proposal on which it is based. Any changes made to this Contract or purchase order proposed by the

Vendor are hereby rejected unless accepted in writing by the State Agency or State Award Authority. The State shall not be responsible Services delivered without a purchase order issued by the State Agency or State Award Authority.

42. Stop Work Order - Reserved

43. Price Adjustments for Term Contracts - Reserved.

44. Time is of the Essence

Time is of the essence in the performance of this Contract.

45. Date and Time Warranty

Vendor warrants that any Service which performs any date and/or time data recognition functions, calculation, or sequencing, will provide accurate date/time data and leap year calculations. This warranty shall survive termination or expiration of this Contract.

46. Independent Contractors

Vendor and its employees, officers and executives, and subcontractors, if any, are and shall be independent Vendors and not employees or agents of the State of North Carolina. This Contract shall not operate as a joint venture, partnership, trust, agency or any other business relationship.

47. Transportation - Reserved

48. Notices

Any notices required under this Contract shall be delivered to this Contract Administrator for each Party. Unless otherwise specified herein, any notices shall be delivered in writing by U.S. Mail, Commercial Courier or by hand. The Parties may agree on alternative methods for delivering notices.

49. Titles and Headings

Titles and Headings in this Contract are used for convenience only and do not define, limit or proscribe the language of terms identified by such Titles and Headings.

50. Amendment

This Contract may not be amended orally or by performance. Any amendment must be made in written form and signed by duly authorized representatives of the State and Vendor in conformance with Paragraph 41, Changes / Amendments.

51. Taxes

The State of North Carolina is exempt from Federal excise taxes and no payment will be made for any personal property taxes levied on the Vendor or for any taxes levied on employee wages. Agencies of the State may have additional exemptions or exclusions for federal or state taxes. Evidence of such additional exemptions or exclusions may be provided to Vendor by Agencies, as applicable, during the term of this Contract. Applicable State or local sales taxes shall be invoiced as a separate item.

52. Governing Laws, Jurisdiction, and Venue

This Contract is made under and shall be governed and construed in accordance with the laws of the State of North Carolina. The place of this Contract or purchase order, its situs and forum, shall be in the Superior Court of Wake County, North Carolina, where all matters, whether sounding in contract or in tort,

relating to its validity, construction, interpretation and enforcement shall be determined. Vendor agrees and submits, solely for matters relating to this Contract, to the jurisdiction of the courts of the State of North Carolina, and stipulates that Wake County shall be the proper venue for all matters.

53. Force Majeure

Neither Party shall be deemed to be in default of its obligations hereunder if and so long as it is prevented from performing such obligations as a result of events beyond its reasonable control, including without limitation, fire, power failures, any act of war, hostile foreign action, nuclear explosion, riot, strikes or failures or refusals to perform under subcontracts, civil insurrection, earthquake, hurricane, tornado, or other catastrophic natural event or act of God.

54. Compliance with Laws

Vendor shall comply with all laws, ordinances, codes, rules, regulations, and licensing requirements that are applicable to the conduct of its business, including those of federal, state, and local agencies having jurisdiction and/or authority. In providing Services and Deliverables, and without limiting or modifying in any respect the Vendor's obligations, Vendor shall comply, and shall cause each of its employees and subcontractors to comply at all times, with State policies that are of general application to State contractors or that Vendor has otherwise agreed to, comply with, including, without limitation, the Statewide Information Security Manual and ITS Security Standards and Policies. (The above link leads to both).

55. Severability

In the event that a court of competent jurisdiction holds that a provision or requirement of this Contract violates any applicable law, each such provision or requirement shall be enforced only to the extent it is not in violation of law or is not otherwise unenforceable and all other provisions and requirements of this Contract shall remain in full force and effect. All promises, requirement, terms, conditions, provisions, representations, guarantees and warranties contained herein shall survive the expiration or termination date unless specifically provided otherwise herein, or unless superseded by applicable federal or State statute, including statutes of repose or limitation.

56. Federal Intellectual Property Bankruptcy Protection Act

The Parties agree that the Agency shall be entitled to all rights and benefits of the Federal Intellectual Property Bankruptcy Protection Act, Public Law 100-506, codified at 11 U.S.C. 365(n) and any amendments thereto.

57. Electronic Procurement

Electronic Procurement applies to all contracts that include E-Procurement and are identified as such in the body of the solicitation document: Purchasing shall be conducted through the Statewide E-Procurement Service. The State's third party agent shall serve as the Supplier Manager for this E-Procurement Service. The Vendor shall register for the Statewide E-Procurement Service within two (2) business days of notification of award in order to receive an electronic purchase order resulting from award of this contract.

58. Electronic Procurement (Applies only to Statewide Term Contracts): Reserved.

59. Statewide E-Procurement Administrative Fee

The Statewide E-Procurement Administrative Fee does not apply to contracts for services.

Supplemental Terms and Conditions for Services

1. Supplemental

The additional terms and conditions set forth hereinafter shall supplement the State's Terms and Conditions. In the event of a conflict between these Supplemental Terms and Conditions and the State's Terms and Conditions, above, or any other document, the order of precedence shall be determined by the State's solicitation document(s).

2. License Grant – Reserved

3. Restrictions - Reserved

4. Vendor's Retained Rights

Subject only to the rights granted to State hereunder, Vendor retains all right, title and interest in and to the Services.

5. Support Services – IAM-MS provider shall provide 24/7/365 IAM-MS system monitoring, responses to unexpected outages, system administration/ IAM-MS operation / IAM-MS care and feeding, and IAM-MS technical support (Help Desk) availability as described in SLA. Help desk shall respond to unexpected outages and service inquiries from the IAM-MS Service Manager. The IAM-MS shall have fault-tolerant failover functionality: The master system and LDAP directory have copies that can be automatically failed over to when the master is broken or otherwise unavailable. IAM-MS is monitored 24/7/365 for successful operation, to facilitate appropriate failover when necessary.

While the design of the IAM-MS shall be for 100% uptime, the system shall have a Service Level Agreement (SLA) specifying at least 99.9% uptime on a quarterly basis. Thus no more than 2.19 hours total per quarter of unscheduled downtime would be acceptable according to the SLA. This 99.9% minimum uptime requirement shall apply to the portions of the system that enable users to perform self-service operations (such as password updates), and to authenticate and gain access to cloud-based applications. Scheduled downtime (e.g. software updates, maintenance, etc.) will be kept to a minimum and shall be coordinated in advance.

6. Telephone Assistance

Vendor shall provide the State with telephone access in order to resolve Service problems 24/7/365. Vendor shall respond to the telephone requests for resolution of Service Problems for calls made at any time

7. Termination of Support or Maintenance - Reserved

8. Program Retirement - Reserved

9. Implementation Services Provided by Vendor - Reserved

10. Payment Terms

After the described Services become available to the State, this Contractor shall invoice the Agency on an end of the month basis for the Services provided to the Agency. Upon the Agency's approval of the submitted invoices (s), the Vendor shall be paid the approved amount.

11. Acceptance

Acceptance by the DPI designated Business Owner is required for all Vendor Services, unless provided otherwise in the solicitation documents or a Statement of Work. The State may define such processes and procedures as may be necessary or proper, in its opinion and discretion, to ensure compliance with the State's specifications and Vendor's technical representations. Acceptance of services may be controlled by amendment hereto, or additional terms as agreed by the Parties. In the event acceptance of services is not described in additional contract documents, the State shall have the obligation to notify Vendor, in writing and within a reasonable time following implementation of the Services described in this Contract if it is not acceptable. The notice shall specify in reasonable detail the reason(s) a Service is unacceptable. Acceptance by the State shall not be unreasonably withheld; but may be conditioned or delayed as required for installation and/or testing of the Service(S).

12. Warranty Terms

Notwithstanding anything in this Contract or Exhibit hereto to the contrary, Vendor shall assign warranties for any Services supplied by a third party to the State.

(A) Vendor warrants that any Services provide shall operate substantially in conformity with prevailing specifications set forth in this Contract. If the Services provided by a third party to the State do not perform in accordance with such specifications during the Warranty Period, Vendor shall use all reasonable efforts to correct any deficiencies in the Services so that they will perform in accordance with or substantially in accordance with such contract specifications.

(B) Vendor warrants to the best of its knowledge that:

(1) The Services do not infringe any intellectual property rights of any third party;

(2) There are no actual or threatened actions arising from, or alleged under, any intellectual property rights of any third party;

(3) The Services (software code, etc.) do not contain any surreptitious programming codes, viruses, Trojan Horses, "back doors" or other means to facilitate or allow unauthorized access to the State's information systems.

(4) The Services do not contain any timer, counter, lock or similar device (other than security features specifically approved by Customer in the Specifications) that inhibits or in any way limits the Services' ability to operate.

(C) Unless modified by amendment or the solicitation documents, the warranties in this paragraph are in lieu of all other warranties, express or implied, or whether arising by course of dealing or

performance, custom, usage in the trade or profession or otherwise, including, but not limited to, implied warranties of merchantability and fitness for a particular purpose, and no other representations or warranties have formed the basis of the bargain hereunder.

13. Confidentiality

Vendor shall employ security measures and standards, including encryption technologies, as may be necessary or proper, and as mutually agreed by the State and Vendor during performance of this Contract. Vendor and its agents, if any, shall not have access to any State Data except as required to perform Vendor's obligations under this Contract.

14. State Data and Intangibles Rights

The Parties acknowledge and agree that the State shall own all right, title and interest in the State Data stored by the Vendor during the contract period for Services any State-licensed software.

15. License Rights – Reserved

16. Limitation of Liability for Software Deliverables - Reserved

17. Vendor Obligations - Reserved

18. Qualified Personnel

Each Party shall provide sufficient, qualified, knowledgeable personnel capable of: (i) performing obligations set forth in this Agreement and each SOW; (ii) making timely decisions necessary to move the Services forward; (iii) participating in the project and assisting Vendor in rendering the Services; and (iv) facilitating development, testing and implementation of Vendor Services. Vendor warrants that qualified personnel will perform the services in a professional manner. As used in this Paragraph, "professional manner" means that the personnel performing the services will be of a skill and competence consistent with prevailing norms of company providers in the information technology industry.

19. Transportation - Reserved

Special Terms and Conditions for this Solicitation

20. Disclosure of Litigation

Vendor's failure to fully and timely comply with the terms of this Paragraph, including providing reasonable assurances satisfactory to the State, may constitute a material breach of this Contract:

(A) Vendor shall notify the State in its bid proposal, if it, or any of its subcontractors, or their officers, directors, or key personnel who may provide services under any contract awarded pursuant to this solicitation, have ever been convicted of a felony, or any crime involving moral turpitude, including, but not limited to fraud, misappropriation or deception. Vendor shall promptly notify the State of any criminal litigation, investigations or proceeding involving Vendor or any subcontractor, or

any of the foregoing entities' then current officers or directors during the term of this Contract or any Scope Statement awarded to Vendor.

(B) Vendor shall notify the State in its bid proposal, and promptly thereafter as otherwise applicable, of any civil litigation, arbitration, proceeding, or judgments against it or its subcontractors during the three (3) years preceding its bid proposal, or which may occur during the term of any awarded to Vendor pursuant to this solicitation, that involve (1) services or related goods similar to those provided pursuant to any contract and that involve a claim that may affect the viability or financial stability of the Vendor, or (2) a claim or written allegation of fraud by the Vendor or any subcontractor hereunder, arising out of their business activities, or (3) a claim or written allegation that the Vendor or any subcontractor hereunder violated any federal, state or local statute, regulation or ordinance. Multiple lawsuits and or judgments against the Vendor or subcontractor shall be disclosed to the State to the extent they affect the financial solvency and integrity of the Vendor or subcontractor.

(C) All notices under subsection A and B herein shall be provided in writing to the State within thirty (30) calendar days after the Vendor learns about any such criminal or civil matters; unless such matters are governed by the ITS General Terms and Conditions annexed to the solicitation. Details of settlements which are prevented from disclosure by the terms of the settlement shall be annotated as such. Vendor may rely on good faith certifications of its subcontractors addressing the foregoing, which certifications shall be available for inspection at the option of the State.

21. Criminal Conviction

In the event the Vendor, an officer of the Vendor, or an owner of a 25% or greater share of the Vendor, is convicted of a criminal offense incident to the application for or performance of a state, public or private contract or subcontract; or convicted of a criminal offense including but not limited to any of the following: embezzlement, theft, forgery, bribery, falsification or destruction of records, receiving stolen property, attempting to influence a public employee to breach the ethical conduct standards for State of North Carolina employees; convicted under State or federal antitrust statutes; or convicted of any other criminal offense which in the sole discretion of the State, reflects upon the Vendor's business integrity and such vendor shall be prohibited from entering into a contract for goods or services with any department, institution or agency of the State.

22. Security and Background Checks

The State reserves the right to conduct a security background check or otherwise approve any employee or agent provided by Vendor, and to refuse access to or require replacement of any such personnel for cause, including, but not limited to, technical or training qualifications, quality of work or change in security status or non-compliance with the Agency's security or other requirements.

23. Assurances

In the event that criminal or civil investigation, litigation, arbitration or other proceedings disclosed to the State pursuant to this section, or of which the State otherwise becomes aware, during the term of this Contract, causes the State to be reasonably concerned about:

(A) The ability of the Vendor or its subcontractor to continue to perform this Contract in accordance with its terms and conditions, or

(B) Whether the Vendor or its subcontractor in performing services is engaged in conduct which is similar in nature to conduct alleged in such investigation, litigation, arbitration or other proceedings, which conduct would constitute a breach of this Contract or violation of law, regulation or public policy,

Then the Vendor shall be required to provide the State all reasonable assurances requested by the State to demonstrate that: the Vendor or its subcontractors hereunder will be able to continue to perform this Contract in accordance with its terms and conditions, and the Vendor or its subcontractors will not engage in conduct in performing services under this Contract which is similar in nature to the conduct alleged in any such litigation, arbitration or other proceedings.

24. Confidentiality of State Data, Information, and State-licensed or State-owned Software

All State Data and information, including but not limited to financial, statistical, personnel, technical and other data and information relating to the State's operation, which are designated confidential by the State and made available to the Vendor in order to carry out this Contract, or which become available to the Vendor in carrying out this Contract, shall be protected by the Vendor from unauthorized use and disclosure through the observance of the same or more effective procedural requirements as are applicable to the State. The identification of all such confidential State Data and information as well as the State's procedural requirements for protection of such data and information from unauthorized use and disclosure shall be provided by the State in writing to the Vendor. If the methods and procedures employed by the Vendor for the protection of the Vendor's data and information are deemed by the State to be adequate for the protection of the State's confidential Data and information, such methods and procedures may be used, with the written consent of the State, to carry out the intent of this paragraph. The Vendor shall not be required under the provisions of this section to keep confidential, (1) information generally available to the public, (2) information released by the State generally, or to the Vendor without restriction, (3) information independently developed or acquired by the Vendor or its personnel without reliance in any way on otherwise protected State Data or information. Notwithstanding the foregoing restrictions, the Vendor and its personnel may use and disclose any State Data or information which it is otherwise required by law to disclose, but in each case only after the State has been so notified, and has had the opportunity, if possible, to obtain reasonable protection for such State Data or information in connection with such disclosure.

25. Equivalent Items - Reserved

26. Family Educational Rights & Privacy Act

Student educational records are subject to 20 U.S.C. 1232g, Family Rights and Privacy Act (FERPA) and shall not be disclosed except in very limited circumstances. The Vendor shall ensure that every

employee responsible for carrying out the terms of this contract is aware of the confidentiality requirements of federal law. In addition, every such employee must sign a confidentiality acknowledgement that indicates that he or she understands the legal requirements for confidentiality. The Vendor is responsible for the actions of its employee and must take all precautions necessary to ensure that no violations occur. Finally, access to personally identifiable student education information shall be limited to those employees who must have access to it in order to perform their responsibilities pursuant to this Contract.

27. Debarment

If any of the services rendered under this Contract are to be paid with federal funds, this Contractor by responding to this solicitation certifies that the Vendor organization and its principals are not suspended or debarred from doing business with the federal government.

28. Custody of State Data and State-Licensed Applications

Under this Contract, the State shall be deemed to have custody of and control over the State Data and State-licensed Applications stored by the Vendor and any State-licensed applications used to process such State Data.

29. Reservation of State's Rights

The State expressly reserves its right of ownership to State Data and State-licensed applications subject to this Contractual Services to the exclusion of the Vendor and any third-party.

30. Physical Location of State and State-licensed Applications

At all times during the term of this Contract, all State Data and State-Licensed Applications shall be stored and be processed within the continental United States where the Vendor, or its authorized agents, maintain facilities.

31. Public Records Requests and Litigation e-Discovery

The Service shall, at all times, allow the State to remotely search and download State Data via the internet in response to Public Records request pursuant to NCGS § 132-1 et seq. The Service shall, at all times, allow the State to search and download State Data in response to e-discovery requests during litigation.

32. Deletion of State Data upon Termination or Expiration of this Contract

In the event of termination or expiration of this Contract, and after the State Data and State-licensed applications have been returned to the State or transferred to a service vendor (in a format

dictated by the State), the Vendor shall remove and completely destroy all such State Data and State-licensed Applications in its possession wherever located.

33. Data Breaches

The Vendor shall report in writing to the State any use or disclosure of State Data not authorized by this Contract, or in writing by the State, including any reasonable belief that an unauthorized individual has accessed State Data. Vendor shall make the report to the State immediately upon discovery of the unauthorized disclosure, but in no event more than two (2) business days after the Vendor reasonably believes there has been such unauthorized use or disclosure. Vendor's report shall identify:

The nature of the unauthorized use or disclosure;
The State Data used or disclosed;
Who made the unauthorized use or disclosure; and
What corrective action the Vendor has taken or shall take to prevent future similar unauthorized use or disclosure. The Vendor shall provide such other information, including a written report as reasonably requested by the State.

34. Security Audits

The Vendor shall provide the State with a copy of its most recent SSAE 16 standards, including SOC1, SOC2, and SOC3, and thereafter, each such audit performed during the term of this Contract. Should the Vendor have conducted additional security audit(s), the Vendor shall provide to the State a copy of the most recent audit and, thereafter, copies of any such audits.

35. Data Encryption Requirements – Reserved

36. Confidential Information

The Parties acknowledge that the DPI and the North Carolina State Board of Education are subject to the North Carolina Public Records Act, G.S. § 132-1 et seq. and/or the Family Educational Rights and Privacy Act, 20 U.S.C. 1232g . Parties further acknowledge that in the performance of their duties under this Agreement, they may disclose certain Confidential Information. As used in this Agreement, "Confidential Information" means any information which meets either the definition of Confidential Information in N.C. Gen. Stat. § 132-1.2 or the definition of "Education Records" in 20 U.S.C. § 1232g (a)(4)(A) Each party covenants and agrees that neither it nor its employees shall at any time during or following the term of this Agreement, either directly or indirectly, (a) disclose to any person, organization, or entity in any manner whatsoever any Confidential Information, or (b) use any Confidential Information for any purpose whatsoever, except as strictly necessary to perform the Services. Each party shall restrict disclosure of the Confidential Information to its employees

with a need to know such information in order to perform the services contemplated by the Agreement and shall advise such employees of their obligations with respect to the Confidential Information. Each party shall protect the other party's Confidential Information using the same standard of care it uses to protect its own confidential and proprietary information, but in any event not less than a reasonable standard of care. The receiving party shall immediately notify the disclosing party in writing in the event of any unauthorized use or disclosure of the Confidential Information and assist in remedying such unauthorized use or disclosure, as requested by the disclosing party (which shall not limit other remedies of the disclosing party as provided herein or by applicable law). All Confidential Information shall be and remain the property of the disclosing party notwithstanding the subsequent termination of this Agreement. The receiving party shall, within ten (10) days of the disclosing party's written request, return all Confidential Information (including any copies thereof) or certify in writing that all Confidential Information (including any copies thereof) has been destroyed using a method designed to ensure confidentiality and permanently delete such Confidential Information from any computer hardware or other equipment. In the event that a third party demands that the receiving party disclose any Confidential Information, the receiving party will promptly notify the disclosing party and provide reasonable cooperation to the disclosing party in connection with the disclosing party's efforts to lawfully avoid or limit disclosure and preserve the confidentiality of the Confidential Information in such circumstances.

Section VIII. Attachments, Appendices or Exhibits

Attachment A – Certification of Compliance with Executive Order #24

The undersigned certifies, to the best of his or her knowledge and belief, that:

By Executive Order 24, issued by Governor Perdue, and N.C.G.S. § 133-32, it is unlawful for any vendor or contractor (i.e. architect, bidder, contractor, construction manager, design professional, engineer, landlord, offeror, seller, subcontractor, supplier, or vendor), to make gifts or to give favors to any State employee of the Governor's Cabinet Agencies (i.e., Administration, Commerce, Correction, Crime Control and Public Safety, Cultural Resources, Environment and Natural Resources, Health and Human Services, Juvenile Justice and Delinquency Prevention, Revenue, Transportation, and the Office of the Governor). This prohibition covers those vendors and contractors who:

- (1) have a contract with a governmental agency; or
- (2) have performed under such a contract within the past year; or
- (3) anticipate bidding on such a contract in the future.

For additional information regarding the specific requirements and exemptions, vendors and contractors are encouraged to review Executive Order 24 and G.S. § 133-32.

The undersigned shall require that the language of this certification be included in the award documents for all sub-awards at all tiers (including subcontracts, sub-grants, and contracts under grants, loans, and cooperative agreements) and that all sub-contractors shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction.

N.C.G.S. § 133-32 and Executive Order 24 prohibit the offer to, or acceptance by, any State Employee of any gift from anyone with a contract with the State, or from any person seeking to do business with the State. By execution of this Attachment and submitting a bid in response to the accompanying solicitation, you attest, for your entire organization and its employees or agents, that you are not aware that any such gift has been offered, accepted, or promised by any employees of your organization.

TYPE OR PRINT NAME & TITLE OF PERSON SIGNING:	E-MAIL:
AUTHORIZED SIGNATURE:	DATE:

Attachment B – American Recovery & Reinvestment Act / Race to the Top Contract Provisions

By submission of a proposal, Vendor agrees to comply with the following provisions. Failure to comply with any and all provisions herein may be cause for the contracting agency to issue a cancellation notice to a contractor.

The following is the legislation that created ARRA and the resulting RttT awards by USED: *American Recovery and Reinvestment Act of 2009 (ARRA)*, Section 14005-6, Title XIV, (Public Law 111-5) <http://www2.ed.gov/policy/gen/leg/recovery/statutory/stabilization-fund.pdf>

Reporting Requirements

The Vendor is notified that this project will be financed with *American Recovery and Reinvestment Act of 2009* (hereinafter, "ARRA") Funds. The Contractor shall ensure that all subcontracts and other contracts for goods and services for an ARRA-funded project have the mandated provisions of this directive in their contracts. Pursuant to Title XV, Section 1512 of the ARRA, the State shall require that the Vendor provide reports and other employment information as evidence to document the number of jobs created or jobs retained by this contract from the Vendor's own workforce and any sub-contractors. No direct payment will be made for providing said reports, as the cost for same shall be included in the various items in the contract.

Posting with the Local Employment Security Commission

In addition to any other job postings the Vendor normally utilizes, the Office of Economic Recovery & Investment (hereinafter, "OERI") requires that the Vendor shall post with the local Employment Security Commission Office all positions for which he intends to hire workers as a result of being awarded this contract. Labor and semiskilled positions must be posted for at least 48 hours before the hiring decision. All other positions must be posted a minimum posting of five days before the hiring decision. The Vendor and any Subcontractor shall report the new hires in the manner prescribed by the Employment Security Commission and the OERI.

Required Contract Provision to Implement ARRA Section 902

Section 902 of the ARRA requires that each contract awarded using ARRA funds must include a provision that provides the U.S. Comptroller General and his representatives with the authority to:

- (1) examine any records of the Vendor or any of its subcontractors, or any State or local agency administering such contract, that directly pertain to, and involve transactions relating to, the contract or subcontract; and
- (2) interview any officer or employee of the Vendor or any of its subcontractors, or of any State or local government agency administering the contract, regarding such transactions.

Accordingly, the Comptroller General and his representatives shall have the authority and rights prescribed under Section 902 of the ARRA with respect to contracts funded with recovery funds made available under the ARRA. Section 902 further states that nothing in 902 shall be interpreted to limit or restrict in any way any existing authority of the Comptroller General.

Authority of the Inspector General provision

Section 1515(a) of the ARRA provides authority for any representatives of the United States Inspector General to examine any records or interview any employee or officers working on this contract. The contractor is advised that representatives of the Inspector General have the authority to examine any record and interview any employee or officer of the contractor, its subcontractors or other firms working on this contract. Section 1515(b) further provides that nothing in this section shall be interpreted to limit or restrict in any way any existing authority of an Inspector General.

Buy American provision

Section 1605 of the ARRA requires that iron, steel and manufactured goods used in public buildings or public works projects be manufactured in the United States. Contractor agrees to abide by this provision and shall maintain records of such purchases for inspections by authorized agents of the State of North Carolina and federal agencies. The Contractor must obtain written exception from this provision from the agency issuing the contract.

Wage Rate Provision

Section 1606 of the ARRA requires that all laborers and mechanics employed by contractors and subcontractors with funds from the ARRA shall be paid wages at rates not less than the prevailing wage rate under the Davis-Bacon Act. The contractor agrees that by the submission of a proposal in response to a solicitation funded in whole or in part with recovery funds, continuous compliance will be maintained with the Davis-Bacon Act.

Availability and Use of Funds

Vendors understand and acknowledge that any and all payment of funds or the continuation thereof is contingent upon funds provided solely by ARRA or required state matching funds. Pursuant to Section 1604 of the ARRA, V agree not to undertake or make progress toward any activity using recovery funds that will lead to the development of such activity as casinos or other gambling establishments, aquariums, zoos, golf courses, swimming pools or any other activity specifically prohibited by the Recovery Act.

Whistleblower Provisions

Vendors understand and acknowledge that Article 14 of Chapter 124, NCGS 126-84 through 126-88 (applies to the State and state employees), Article 21 of Chapter 95, NCGS 95-240 through 85-245 (applies to anyone, including state employees), and Section 1553 of the Recovery Act (applies to anyone receiving federal funds), provide protection to State, Federal and contract employees.

Outsourcing outside the USA without Specific Prior Approval Provision

Vendor agrees not to use any recovery funds from a contract or any other performance agreement awarded by the State of North Carolina, its agencies, or political subdivisions for outsourcing outside of the United States, without specific prior written approval from the agency issuing the contract.

Federal, State and Local Tax Obligations

By submission of a proposal, Vendors and subcontractors assert and self-certify that all Federal, State and local tax obligations have been or will be satisfied prior to receiving recovery funds.

Anti-Discrimination and Equal Opportunity

Pursuant to Section 1.7 of the guidance memorandum issued by the United States Office of Management and Budget on April 3, 2009, recovery funds must be distributed in accordance with all anti-discrimination and equal opportunity statutes, regulations, and Executive Orders pertaining to the expenditure of funds.

Office of State Budget and Management Access to Records

OERI requires that the Vendor and subcontractor agree to allow the Office of State Budget and Management internal auditors and state agency internal auditors access to records and employees pertaining to the performance of any contract awarded by a public agency.

Appendix A – Proof-of-Concept Overview

Additional Details on the Proof-of-Concept (PoC) for the Identity and Access Management Managed Service (IAM-MS) for the North Carolina Education Cloud are provided in this appendix.

I) Introduction

If invited, the Bidder shall agree to, at their own expense, meet the evaluation team in Raleigh, NC, to provide a Proof-of-Concept (PoC) demonstration of their IAM-MS functionality and help validate written responses through a face-to-face interview. Only finalist Vendors will be invited to Face-to-Face/Proof-of-Concept interviews. The exact location, date(s) and time(s) shall be determined later. It is likely that a 2-day window will be reserved for each of the finalist interviews. To the extent possible, Bidder's scheduling constraints shall be taken into consideration.

II) PoC Requirements

The intent is for the PoC to demonstrate the following IAM-MS functionality to the extent possible. These are also illustrated in Figures 1 and 2. If invited to a Face-to-Face/Proof-of-Concept interview, finalist candidates shall check the address <http://50.57.226.118/iampoc/> for updates on Proof-of-Concept details, and access to the input datasets. At the PoC, Internet connectivity and multimedia projector capability will be provided. **The finalist candidates shall provide all other components required for the PoC.**

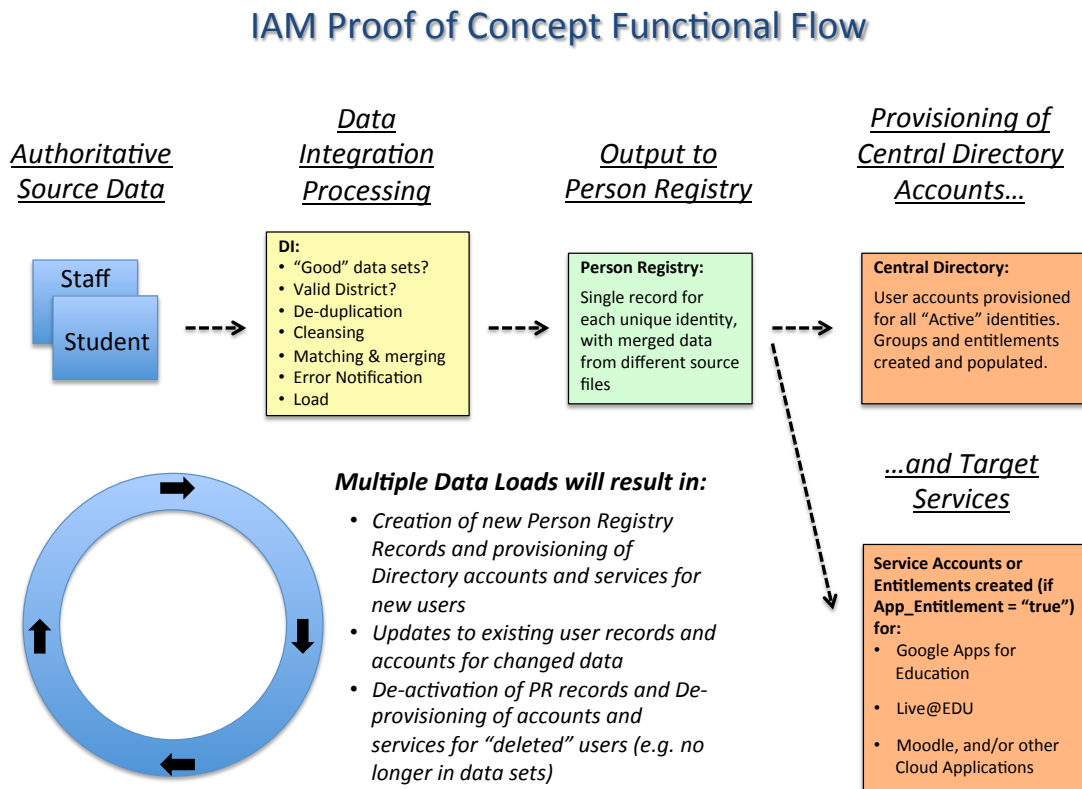


Figure 1

a) *Process Authoritative Source Data*

For the PoC, simulated student and staff datasets will be provided. (Ultimately, other data source(s) will be used to populate the actual IAM-MS). Data source(s) should be used to populate a central identity data repository (person registry), with user identities. Candidates shall demonstrate data de-duplication, cleansing, matching/merging, and updating of the simulated data sets. Input data set updates (new, changed, deleted entries) shall be appropriately handled by the system (e.g. create, modify, de-activate). **At the PoC, a small number of guests will be added through a guest registration system (see Section II, Item i).**

b) *Creation of Roles, Groups and Entitlements*

The PoC shall demonstrate how users (unique individuals) are dynamically assigned roles, added to groups and granted entitlements - based on attributes (data elements) contained in their central registry record. The process for granting privileges associated with specific Roles and Groups shall also be demonstrated (e.g. rule development for RBAC, GBAC). User attributes can be used to provision services (accounts) or may be requested by resources (Service Providers) to be used in making access decisions.

c) *Populate Central Directory*

A central directory shall have user accounts provisioned, updated and de-provisioned with the identity information from the central data repository, including bio/demographic data and authorization attributes such as roles, groups, entitlements, etc. When provisioning directory accounts, create and populate at least these groups: students (all students), high school students (grades 9-12), staff (all active staff/teachers – denoted by Active_Inactive_Indicator set to “A”), delegated administrators, and members of each LEA (one LEA-named Group for each school district, populated with both students and staff). De-provisioning of user accounts will include removing users from groups, as well as de-activating the account. Triggers for these actions will be new, modified, deleted, and de-activated records in the central registry.

d) *Central to Local Directory Updating*

The IAM-MS shall provide a way to update a local directory at each LEA (and charter school) with the corresponding user identity data from the central directory service. This could include newly provisioned, modified, or de-provisioned identities, contact data, or other user attributes. Pulling data for the local LEA shall be possible in real- or near real-time (where feasible), or by using a batch process. Data available to an LEA/charter school shall ONLY consist of identities associated with that LEA/charter school, while all other data shall not be accessible. Data updates shall only be one-way: from the central directory service to a local directory service.

The PoC shall demonstrate this process for a simulated LEA’s local directory. Local directories supported by the eventual IAM-MS shall include Active Directory, eDirectory, and OpenLDAP.

However for the purpose of the PoC demonstration, the vendor may choose any one of the three.

IAM POC - User Functional Testing



- User initial login
 - Password set/change
 - Challenge-Response questions? (Reset)
- Access to Cloud Service (SAML)
 - Google Apps for Education
 - Live@EDU
 - Other?
- Access to service via directory login (other than SAML)
- Guest Self-Registration
- Workflow Request
- Workflow Approval (Sponsor for Guest)
- Delegated Administrator
 - Unlock user account (Only same LEA)
 - Disable User account (Same LEA)
 - Set User's "forgotten" password (Same LEA)
 - Submit Request for Service
 - Approve request for Guest registration
 - Initiate LEA data download from Central Directory
- Audit Reports/Logs
 - Details of above transactions/events

Figure 2

e) Self-Service

The PoC participant shall demonstrate a set of self-service functionalities, including password management (e.g. initial password selection, resets, challenge-response questions, etc.), user profile changes (e.g. bio/demographic update request workflows), and requests for access to target resources/applications (requests would trigger a workflow approval process). These shall use simple, easy-to-understand web interfaces.

f) Authentication Using a Single Username/Password for Every User

The PoC Bidder shall demonstrate authentication using a single username/password that is unique to each user in the system. As per our vision: "Every student, teacher/staff member, parent/guardian, and school community member has a single unique username/password to access learning resources in North Carolina."

Reduced Sign On

The system shall provide a user experience of *reduced sign on* at minimum. The user would have a single username and password, but might have to re-enter them for some services.

Single Sign On (preferred)

The system shall provide a user experience of *single sign on* (e.g. entering username/password only once per browser session), after which the user is able to access all web-based applications without further authentication. Requests for, and delivery of user attributes, entitlements, group memberships, etc. happens in the background.

g) Access to Applications – Service Account Provisioning, SSO, Federation, Attributes

Authentication and authorization functionality shall be demonstrated using at least one (preferably both) of the following two cloud-based services:

1. Google Apps for Education
2. Microsoft Live@EDU

Logins to one or two additional cloud-based services (of the vendor's choosing) shall also be demonstrated.

During the PoC the vendor shall demonstrate that service accounts have been provisioned (e.g. to Google Apps), and at least one part of the demonstration shall utilize federated login to a service provider, using SAML assertions. In the datasets, only a very small number of records have *App_Entitlement* set to "true" – those records should result in accounts being provisioned in Google Apps and/or Live@EDU.

h) Delegation of Administrative Functions

The LEA technology directors and other authorized personnel shall have access to a subset of administrative management tools, limited to data and user records from their own LEA. In order to enable this functionality, the creation of a delegated administrators group within the directory is assumed. Specific user(s) shall then be assigned to that group during the PoC.

At some point during the PoC, the Bidder shall demonstrate the following functions:

- Reset user passwords
- Disable/Enable/Unlock user accounts
- Add/Remove users to roles/groups
- Initiate (Request) and Approve workflow requests
- Sponsor, approve and deny a Guest User account request
- Assign and revoke access to relevant cloud-based services
- The creation of reports showing user and group activity (e.g. changes to user records, workflow requests, approvals, denials, etc.)
- Management tools (and monitoring tools if available)

i) Guest System

The IAM-MS shall have a Guest system with a simple GUI that includes workflows to allow self-registration (pending sponsor approval). The system should also allow sponsors to initiate the request. For example, this might be utilized by newly registering community members at each LEA or Charter School and possibly by parents or a potential guest's sponsor(s). Guest users shall be able to update their passwords the same way as staff and students. Guest users shall also have a mechanism to initiate subsequent data updates, after the initial account has been provisioned. For example, the registrant may return at a later time to update their profile/contact information. Subsequent data updates shall be routed through the existing sponsor for approval, prior to propagation through the system.

The PoC shall demonstrate a guest account request, followed by subsequent sponsor approval, and ideally 2nd level approval. After all necessary approvals have been granted, the guest user account shall be provisioned with access to at least one cloud application. Once the account is provisioned, the PoC shall also demonstrate the guest's ability to update their previously entered profile data and set/change their password.

The Guest system shall ensure that duplicate users are not created within the central directory, and that subsequent users provisioned from the authoritative source systems, are checked against existing guest records to prevent duplication (for example a situation where an existing guest user is later hired as a staff member).

j) Properly Handle Data Changes and Inconsistencies

The PoC shall demonstrate reasonable handling of sample input data changes and inconsistencies. Some examples might include:

- 1) More than one input student record having the same Pupil_Number or the same NorthAmerican_Id_Number, (or one input record and an existing student record in the person registry). A similar match may occur with staff input data. Other identity data may not match (e.g. name fields, Birth_Date, etc.). Does your system successfully identify the student or staff records with duplicate Pupil_Number, Staff_Id, and NorthAmerican_Id_Number field values, and does it flag the duplicates? The system likely would not be able to determine "which" record is valid and could possibly drop the wrong one. Therefore, in such cases it's likely you would need to notify an administrator or designee, who could make that decision.
- 2) Improperly specified field values, for example missing name values, missing or improperly formatted date of birth values. Does your system properly detect them and flag an administrator?
- 3) A staff input record might match a student record, on name fields, Birth_Date, NorthAmerican_ID_Number, but the other identity data do not necessarily match. This could imply a person might have been a student at one point, but has now been hired as a staff member. While contact information (e.g. phone, address, email, last name) is more

current and could be used to update the existing record, the original identifier needs to be maintained. Therefore, the records should be flagged in a report so that an administrator can make appropriate decisions and update the record.

- 4) Improperly formatted (corrupt) input files may be encountered. Does your system properly detect them and flag it to an administrator?
- 5) As subsequent datasets are read in, does your system properly detect records that no longer show up in the system, and deactivate them in the person registry? Similarly, if fields have changed for a given identity, does your system appropriately update the information in the person registry?
- 6) Are new records in subsequent datasets properly detected and entered into the system?

k) Reporting and Audit

The PoC shall demonstrate the ability to generate reports indicating who accessed which records and what changes (if any) were made (add, view, modify, delete) for audit and other purposes. Workflow requests and approvals/denials shall also be captured for reporting. Logs for daily data integration processing shall also be created. At the conclusion of the PoC demonstration, logs and reports shall be generated to show what transpired during the PoC:

- Source data processing
 - New records
 - De-activated records (missing identities)
 - Updates to user records
 - Missing data
 - Duplicate users, identifiers
 - Corrupt data files
- Account Provisioning and De-provisioning
 - Normal account creation
 - Updates to account data
 - Deactivation
 - Service Account (Cloud service) provisioning/de-provisioning
 - Group membership (and removal)
- Workflow Requests
 - Requests
 - Approvals
 - Denials
- Delegated Administration
 - User account changes (Disable, Enable, Unlock)
 - Password resets

- Self-Service
 - Initial Password
 - Password Change
 - Password Reset

- Guest System
 - Self-Registration
 - Sponsor Approval(s)
 - Password Change/Reset
 - Profile data changes

III) Sample Data

"Fake", or "dummy" simulated datasets will be provided to use as inputs to the PoC, at the address provided earlier in this document. While these do not contain valid staff or student data, the fields are loosely reflective of what may be encountered in real student or staff records.

Sample data will come in simulated "big" and "small" sizes. The "small" sizes represent a population of approximately 150K students/40K staff, and the "big" sizes represent approximately 1.5M students/400K staff. At the PoC, demonstrating the IAM-MS solution with a big data set is preferred. However if time/resource constraints are prohibitive, a small dataset may be used as an alternative plan. Also participants might find it useful to prepare for their demos using the small sample datasets, as processing time may be less.

Sample data sets shall be located in subdirectories following a naming convention such as "**data/20120612/big/20120612142304**", where the **20120612** denotes the sample data was created on June 12, 2012, "**big**" (or "**little**") represents the data set size, and **20120612142304** represents a timestamp from when the data was created. Over time, additional subdirectories will be added to the system, to provide more example data for the RFP Bidders.

Example sample data files for each of three sequential simulated datasets are shown below:

Time 1:

```
data/20120612/big/20120612141120/1NCW-20101231063001-00-2602-SUREQ--NCWISE.zip
data/20120612/big/20120612141120/UID1-20101231063051-00-1022-00000-0-ALLSTAFF_V_1_1--.txt
```

Time 2:

```
data/20120612/big/20120612141120/1NCW-20111231063001-00-2602-SUREQ--NCWISE.zip
data/20120612/big/20120612141120/UID1-20111231063051-00-1022-00000-0-ALLSTAFF_V_1_1--.txt
```

Time 3:

```
data/20120612/big/20120612141120/1NCW-20120102063001-00-2602-SUREQ--NCWISE.zip
data/20120612/big/20120612141120/UID1-20120102063051-00-1022-00000-0-ALLSTAFF_V_1_1--.txt
```

The sample data consist of file pairs, one for staff (**UID1** prefix) and the other for students (**1NCW** prefix). You can put them in the proper sequence by checking the date in the filename. For

example, the files shown above are for "20101231", "20111231", and "20120102" respectively, representing three times in sequence. Time 1 contains the initial data, Time 2 and Time 3 contain updated files as might be provided by the (simulated) MFTS system.

Processing the datasets from Time 1, to Time 2, to Time 3, etc., some records may have been added, some records deleted, and some modified. This is shown graphically in **Figure 3**. Furthermore, some of the data files may be corrupted – as is occasionally encountered in the real authoritative source systems. The IAM-MS must be able to properly handle all of these scenarios.

Proof of Concept – Source Data File Sequence

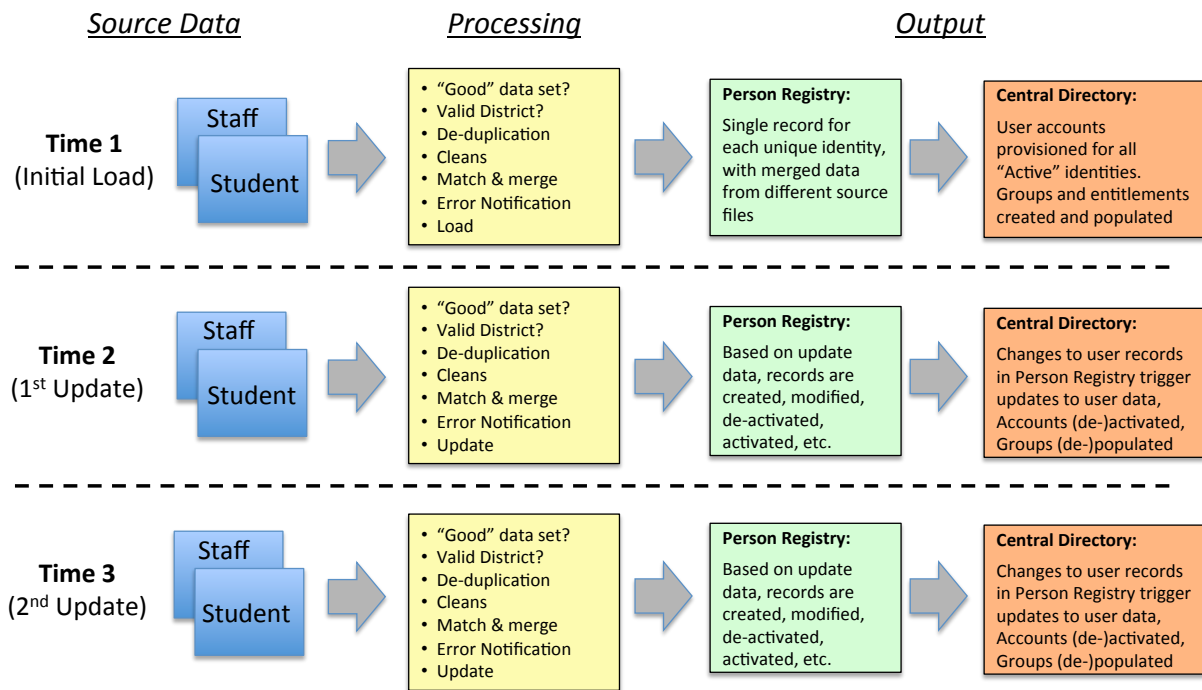


Figure 3

The staff ("UID") files are in .txt format, while the NCWise files are actually in .zip format, to emulate how MFTS is providing those.

If you unzip 1NCW-20101231063001-00-2602-SUREQ--NCWISE.zip you will find the text file 1NCW-20101231063001-00-2602-SUREQ--NCWISE.txt with the simulated staff data for that time period.

The 17 fields in staff files are:

Staff_Id, District_Code, Last_Name, First_Name, Middle_Name, Name_Suffix, Gender_Code, Birth_Date, NorthAmerican_ID_Number, Address_1, City, State, Zip, App_Entitlement, Email_Address, Active_Inactive_Indicator, Last_Update,

The 18 fields in student files are:

Pupil_Number, Last_Name, First_Name, Second_Name, Last_Name_Suffix, Birth_Date, NorthAmerican_ID_Number, Physical_Street_Address, City, State, Zip_Code, Grade, LEA_Code, Gender, Registration_Date, Email_Address, App_Entitlement, Mod_Date,

Data field values in files are tab-delimited.

In this sample data, the fictitious 10-digit "North American ID Number" is used as an imaginary identifier that is unique to every person and must be absolutely protected.

The staff file's "District_Code" and the student file's "LEA_Code" are populated with a three digit code representing the LEA for that record.

The staff file's "Staff_Id" and the student file's "Pupil_Number" are populated with a statewide UID, or unique identifier, for every individual in the system. The Staff_Id and Pupil_Number share the same address space, and the idea is that over time that number stays with an individual for life. So pupils who become teachers would have the same value in "Staff_Id" as they have/had in "Pupil_Number".

The "App_Entitlement" is a boolean value which when set to "true", would indicate that user is eligible to use cloud apps such as GoogleApps, MS Live @ EDU, etc. In these datasets, only a very small number of records have App_Entitlement set to true.

Data for PoC Demonstrations

In advance of each of the PoC visits, the evaluation committee shall identify one “big” and one “little” sample data directory for the Bidder to choose from to do their PoC demonstrations. These directories are being shared in advance, in order to facilitate timely demonstrations at the PoC. This allows the vendor to prepare in advance for the PoC demonstration, with the first time step of data (Time 1 data file as described above). For example, a directory can be pre-populated with the student and active staff populations prior to showing up at the actual demo. We expect this should allow for more effective use of the time allotted to the PoC.

Data for the subsequent time steps (step 2 and step 3) of the corresponding “big” and “little” data directories, will be provided on the first morning of the PoC. Data for steps 2 and 3 can be used during the PoC to demonstrate proper handling of updates as described elsewhere in this document.

a) Suggestions for Possible Data Transformations

When the authoritative source data is consumed for use in the actual IAM-MS, it is likely that various semantic interpretations of field codes, etc., will need to be done by the IAM-MS. For the purposes of this PoC, several possible transformations can be suggested.

i) From LEA_Code / District_Code -> Derive "LEA Name"

This field exists in both student (field is named "LEA_Code") and staff (field is named "District_Code") data. Derive "LEA Name" from this field according to the following table. The 232 valid LEA codes (115 LEAs plus numerous charter schools) and corresponding names in the sample data files are:

Code	Name
35A	A.CHILD'S GARDEN SCH
010	ALAMANCE-BURLINGTON
020	ALEXANDER COUNTY
030	ALLEGHANY COUNTY
26B	ALPHA ACADEMY
49B	AM RENAISSANCE MID
49A	AMERICAN RENAISSANCE
32J	Ann Atwater Community School
040	ANSON COUNTY
69A	ARAPAHOE CHARTER
34G	Arts Based Elementary
050	ASHE COUNTY
761	ASHEBORO CITY
111	ASHEVILLE CITY
060	AVERY COUNTY
92C	BAKER CHARTER HIGH
070	BEAUFORT COUNTY
080	BERTIE COUNTY
79A	BETHANY CMTY MIDDLE
73A	BETHEL HILL CHARTER
090	BLADEN COUNTY
88A	BREVARD ACADEMY
97D	BRIDGES CHARTER SCH
100	BRUNSWICK COUNTY
110	BUNCOMBE COUNTY
120	BURKE COUNTY
130	CABARRUS COUNTY
140	CALDWELL COUNTY
150	CAMDEN COUNTY
679	CAMP LEJEUNE
65A	CAPE FEAR CTR INQUIR
16A	CAPE LOOKOUT HIGH
13A	Carolina International
32C	CARTER COMMUNITY
160	CARTERET COUNTY
92R	Casa Esperanza
170	CASWELL COUNTY
180	CATAWBA COUNTY
32K	Central Park School for Children
681	CHAPEL HILL-CARRBORO
10A	CHARTER DAY SCHOOL
19A	CHATHAM CHARTER
190	CHATHAM COUNTY
209	CHEROKEE CENTRAL SCH

200 CHEROKEE COUNTY
60I CHILDREN'S COMMUNITY SCH
54A CHILDRENS ACADEMY
78A CIS ACADEMY
220 CLAY COUNTY
230 CLEVELAND COUNTY
821 CLINTON CITY
01C CLOVER GARDEN
24N Columbus Charter School
240 COLUMBUS COUNTY
60A COMMUNITY CHARTER SC
92P COMMUNITY PARTNERS
250 CRAVEN COUNTY
06B CROSSNORE ACADEMY
60H CROSSROADS CHARTER HIGH SCHOOL
260 CUMBERLAND COUNTY
270 CURRITUCK COUNTY
280 DARE COUNTY
290 DAVIDSON COUNTY
300 DAVIE COUNTY
998 DEPARTMENT OF JUVENILE JUSTICE AND DELIQUENCY
49C DEVELOPMENTAL DAY SC
96C DILLARD ACADEMY
34C DOWNTOWN MIDDLE
310 DUPLIN COUNTY
320 DURHAM COUNTY
92G EAST WAKE ACADEMY
34E EAST WINSTON PRIMARY
210 EDENTON/CHOWAN
330 EDGECOMBE COUNTY
861 ELKIN CITY
18B ENGELMANN ART/SCI
11A EVERGREEN CMTY CHART
92B EXPLORIS
11K F DELANY NEW SCHOOL
34F FORSYTH ACADEMIES
340 FORSYTH COUNTY
269 FORT BRAGG
92F FRANKLIN ACADEMY
350 FRANKLIN COUNTY
66A GASTON COLLEGE PREP
360 GASTON COUNTY
370 GATES COUNTY
380 GRAHAM COUNTY
06A GRANDFATHER ACADEMY
390 GRANVILLE COUNTY
84B Gray Stone Day School
400 GREENE COUNTY
41B GREENSBORO ACADEMY
410 GUILFORD COUNTY
41C GUILFORD-SABIS
420 HALIFAX COUNTY
93A HALIWA-SAPONI TRIBAL
430 HARNETT COUNTY
43A HARNETT EARLY CHILDH
440 HAYWOOD COUNTY
32B HEALTHY START ACADEM
450 HENDERSON COUNTY
460 HERTFORD COUNTY
181 HICKORY CITY
36A HIGHLAND CHARTER

470 HOKE COUNTY
92Q HOPE ELEMENTARY
480 HYDE COUNTY
41A IMANI INSTITUTE
490 IREDELL-STATESVILLE
500 JACKSON COUNTY
510 JOHNSTON COUNTY
520 JONES COUNTY
132 KANNAPOLIS CITY
60C KENNEDY CHARTER
32D KESTREL HEIGHTS SCH
54B Kinston Charter Academy
60D LAKE NORMAN CHARTER
01A LAKESIDE SCHOOL
83A LAURINBURG CHARTER
83B LAURINBURG HOMEWORK
530 LEE COUNTY
540 LENOIR COUNTY
291 LEXINGTON CITY
34A LIFT ACADEMY
55A LINCOLN CHARTER
550 LINCOLN COUNTY
560 MACON COUNTY
570 MADISON COUNTY
92D MAGELLAN CHARTER
580 MARTIN COUNTY
63A MAST SCHOOL INC
32A MAUREEN JOY CHARTER
590 MCDOWELL COUNTY
600 MECKLENBURG COUNTY
60F METROLINA REG SCH AC
86A MILLENNIUM CHARTER
610 MITCHELL COUNTY
620 MONTGOMERY COUNTY
630 MOORE COUNTY
491 MOORESVILLE CITY
862 MOUNT AIRY CITY
45A MOUNTAIN CMTY SCH
87A Mountain Discovery Charter
640 NASH-ROCKY MOUNT
997 NC Dept of DHHS
92L NE RALEIGH CHART ACA
68B NEW CENTURY CHARTER
01D NEW CENTURY Charter HS
650 NEW HANOVER COUNTY
182 NEWTON-CONOVER
660 NORTHAMPTON COUNTY
26A OMAS INC CHARTER
32G OMUTEKO GWAMAZIIMA
670 ONSLOW COUNTY
68A ORANGE CO CHARTER
680 ORANGE COUNTY
690 PAMLICO COUNTY
700 PASQUOTANK COUNTY
710 PENDER COUNTY
720 PERQUIMANS COUNTY
730 PERSON COUNTY
67A PHASE ACADEMY
41D PHOENIX ACADEMY INC
36B PIEDMONT COMMTY CHAR
740 PITT COUNTY

750 POLK COUNTY
92M PREEMINENT CHARTER
53A PROVISIONS ACADEMY
34B QUALITY EDUC ACADEMY
60G QUEENS GRANT COMMUNITY
92N QUEST ACADEMY
92K RALEIGH CHARTER HIGH
760 RANDOLPH COUNTY
32H RESEARCH TRI CHARTER
770 RICHMOND COUNTY
74A RIGHT STEP ACADEMY
01B RIVER MILL CHARTER
421 ROANOKE RAPIDS CITY
780 ROBESON COUNTY
790 ROCKINGHAM COUNTY
64A ROCKY MOUNT CHARTER
80A ROWAN ACADEMY
800 ROWAN-SALISBURY
810 RUTHERFORD COUNTY
98A SALLIE B HOWARD SCH
820 SAMPSON COUNTY
92H SANKORE SCHOOL
830 SCOTLAND COUNTY
92I SPARC ACADEMY
84A STANLY CMTY OUTREACH
840 STANLY COUNTY
63B STARS CHARTER
92E STERLING MONTESSORI
850 STOKES COUNTY
32I SUCCESS ACADEMY
49D SUCCESS INSTITUTE
60B SUGAR CREEK CHARTER
50A SUMMIT CHARTER
860 SURRY COUNTY
870 SWAIN COUNTY
09A TAR HEEL CHARTER
11B THE ARTSPACE CHARTER
20A THE LEARNING CENTER
12A THE NEW DIMENSIONS
81A THOMAS JEFFERSON ACA
292 THOMASVILLE CITY
16B TILLER SCHOOL
880 TRANSYLVANIA COUNTY
32E TURNING POINT ACAD
890 TYRRELL COUNTY
90A UNION ACADEMY
900 UNION COUNTY
91A VANCE CHARTER SCHOOL
910 VANCE COUNTY
68K VILLAGE CHARTER
32L Voyager Academy
920 WAKE COUNTY
930 WARREN COUNTY
940 WASHINGTON COUNTY
07A WASHINGTON MONTESSOR
950 WATAUGA COUNTY
960 WAYNE COUNTY
96D WAYNE TECH ACADEMY
422 WELDON CITY
241 WHITEVILLE CITY
970 WILKES COUNTY

980 WILSON COUNTY
19B WOODS CHARTER
34D WOODSON SCH OF CHAL
990 YADKIN COUNTY
995 YANCEY COUNTY

XXX For any NOT falling into these numbers, flag as "UNKNOWN"

ii) *From GRADE -> Derive "School Type"*

This field exists only in the student data. Derive "School Type" thusly:

0-5 -> Elementary School (where 0 represents Kindergarten)
6-8 -> Middle School
9-12 -> High School
Less than 0 -> Flag as "UNKNOWN SCHOOL TYPE"
Greater than 12 -> Flag as "UNKNOWN SCHOOL TYPE"

iii) *Other*

- a) Each valid record in the student data set should result in an active record being created in the Person Registry - as long as no *duplicate record* is found (primary key based on the PUPIL_NUMBER field).
- b) Each valid (and active) record in the staff data set should result in an active record being created in the Person Registry (primary key based on the Staff_Id field, along with a Active_Inactive_Indicator set to "A") – as long as no *duplicate record* is found.
- c) Each *active* staff user would ONLY be allowed to see data from their own LEA.
- d) Delegated Administrators for an LEA would be permitted to deactivate a student record, but ONLY from their own LEA.

iv) *Recommended Fields for Guest Records*

The following fields shall be used for Guest Records. Additional fields may be added by the vendor if they feel they are needed for the PoC. Only some of these fields would be entered by the guest during self-registration. The others would be defaults, rule-based or auto-generated.

Last_Name,First_Name,Middle_Name,Name_Suffix,Birth_Date,Address_1,City,State,Zip,NorthAmerican_ID_Number,Email_Address,Active_Inactive_Indicator,Last_Update,App_Entitlement,Sponsor_Staff_Email_Address,Sponsor_Staff_Id,Account_Expiration_Date

References

IAM Plan: "Developing an Identity and Access Management Service for North Carolina Education Cloud", <http://cloud.fi.ncsu.edu/projects/iamdiagrams/20120229.nc.rttt.iam.plan.v5.0.pdf>

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