

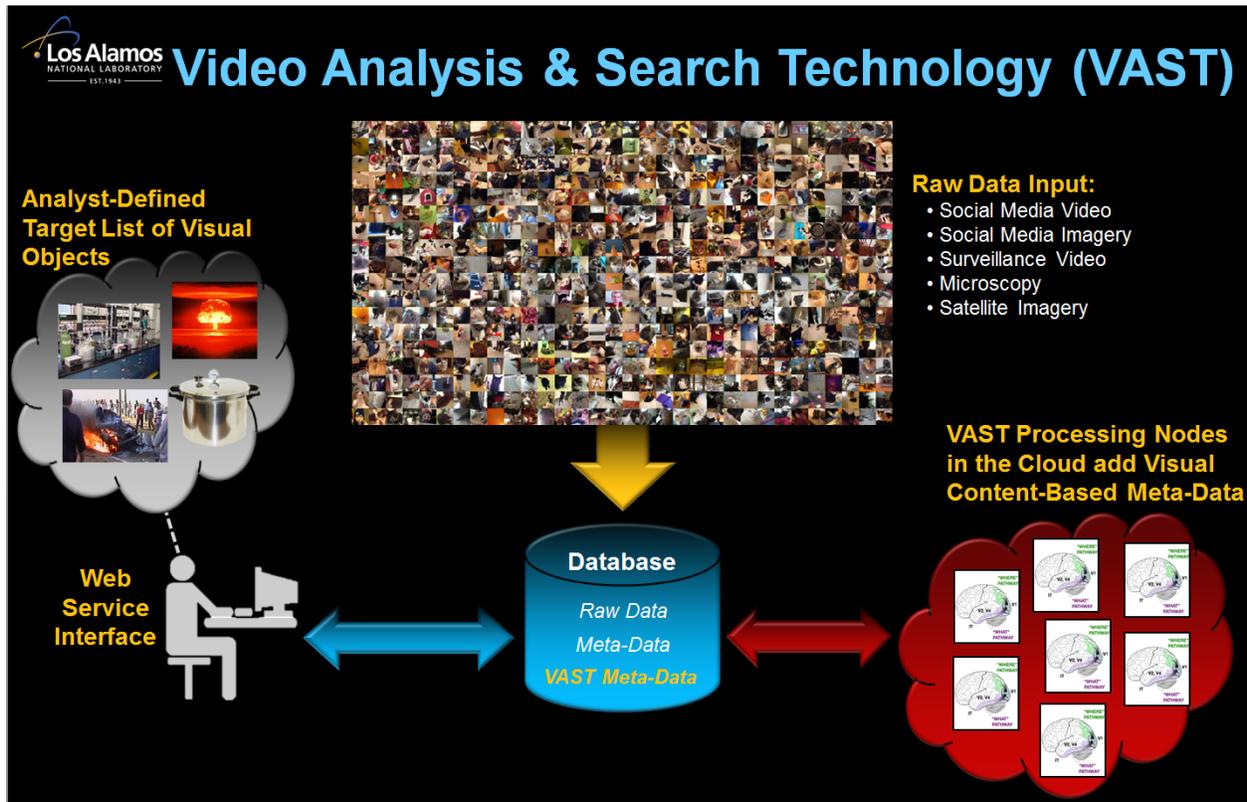


Los Alamos National Security, LLC Request for Proposals for commercialization and/or CRADA partners for Laboratory developed Video Analytics Search Technology (VAST)

Los Alamos National Security, LLC (LANS) is the manager and operator of the Los Alamos National Laboratory for the U.S. Department of Energy National Nuclear Security Administration under contract DE-AC52-06NA25396. LANS is a mission-centric Federally Funded Research and Development Center focused on solving the most critical national security challenges through science and engineering for both government and private customers.

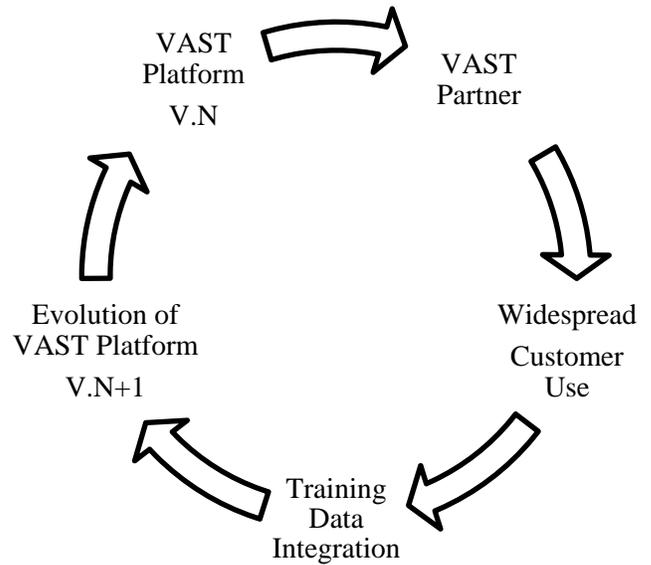
As part of its national security mission, LANS has developed and implemented ground breaking Video Analysis and Search Technology (VAST) that has innumerable applications ranging from manufacturing surety and healthcare diagnostics to big data analytics and artificial intelligence. LANS is committed to partnering with the private sector in an effort to bring our Video Analytics and Search Technology (VAST) to bear on the most challenging government and commercial problems.

VAST is a deep learning machine vision platform that employs sparsely coded hierarchical and lateral linkages within a neural network modeled on the human neuro-visual system. As a learning platform, the more training data that VAST consumes, the better it becomes at identifying patterns, detecting objects, mitigating risk, and solving problems for its end users.

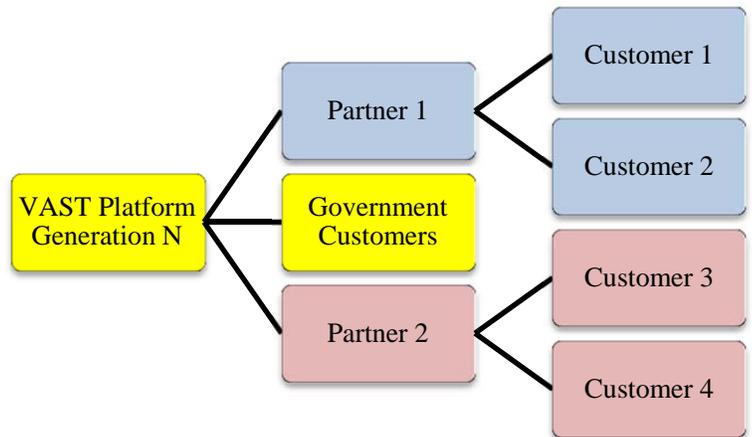


LANS has achieved success in introducing and deploying the VAST platform to its government customers and expects that there are numerous opportunities to further enhance VAST in the commercial marketplace. In order to better fulfill its national security mission, LANS is seeking one or more private entities (Partner/s) to enhance the efficacy of the VAST platform by ensuring the proper delivery of the software to existing and future government users while simultaneously growing the nascent market of commercial end users.

In order to create the most value from the VAST platform for our customers, LANS is seeking to engage with at least one Partner that will: (1) ensure widespread dissemination of the current generation (gen N) of the VAST platform to multiple government and/or commercial users; (2) help LANS integrate commercial and/or government training data sets into a next generation (gen N+1) VAST platform that is newer and more evolved; and (3) assist LANS in the development and deployment of the gen N+1 VAST platform to at least the government customer set. The iterative and evolutionary growth of the VAST platform will require a broad-based licensing, deployment, and service model for the software and well as top-notch data handling and integration capabilities.



In order to accomplish the foregoing goals, LANS is exploring the possibility of a long-term collaboration with one or more Partners with the expectation that the Partners will in turn disseminate the VAST platform into a multiplicity of channels to a large number of end users. The Partner may engage its customers through any suitable vehicle, including but not limited to engaging in and/or assisting LANS in distributing non-exclusive licensing arrangements for one or more components of the VAST platform Intellectual Property portfolio.



To that end, LANS is opening this formal Request for Proposals to private industry to gauge the level of interest and potential for a Partner in advancing and evolving the VAST platform. This offering is made without prejudice to any form of agreement, collaborative arrangement, alliance, or partnership mechanism; and LANS will entertain any and all proposals that meet the following requirements.

Proposers should note that certain types of agreements such as cooperative research and development agreements (CRADA) typically offer more intellectual property protection as well as an option to obtain limited exclusive rights at least within the field of use contemplated by the CRADA. As a non-limiting example, a CRADA involving the application of the VAST platform in the field of social media video data (blue) may be able to secure an exclusive license to any copyright (software) and/or patent rights

arising out of any platform improvements and/or inventions arising out of the collaboration. Similarly, a second Partner can earn exclusivity within a separate and distinct field of use (red) as shown in the diagram above. Please note that both LANS and the U.S. Government retain certain limited use rights in any and all intellectual property, both existing and to-be-developed, relating to the VAST platform. Those companies interested in pursuing this opportunity should direct a Formal Proposal to the undersigned on or before 11:59 MDT on August 31, 2014.

Attached you will find:

- A listing of LANS Intellectual Property,
- Formal Proposal Criteria,
- Certain partner attributes that LANS prefers, and
- Submission Process.

Please properly mark any information that is considered proprietary or business-sensitive. LANS will provide a standard Non-Disclosure Agreement to any interested party that requests it (VAST@lanl.gov), providing your entity is a U.S. Company.

We look forward to working with you in introducing the VAST platform to the private sector in collaboration with our partners in national security.

LANS INTELLECTUAL PROPERTY

Patent Applications:

- S-129,622 entitled “Image Fusion Using Sparse Overcomplete Feature Dictionaries,” U.S. nonprovisional patent application number 14/026,295 filed September 13, 2013, priority date September 13, 2012.
- S-129,623 entitled “Object Detection Approach Using Generative Sparse, Hierarchical Networks with Top-down and Lateral Connections for Combining Texture/Color Detection and Shape/Contour Detection,” U.S. nonprovisional patent application number 14/026,812 filed September 13, 2013, priority date September 13, 2012.
- S-129,185 entitled “System and Method for Automated Object Detection in an Image,” U.S. nonprovisional patent application number 14/026,730 filed September 13, 2013, priority date September 13, 2012.
- S-133,188 entitled “Efficient Convolutional Sparse Coding,” U.S. provisional patent application number 61/927,779 filed March 31, 2014.

Copyrights:

- International Copyright on all VAST software

FORMAL PROPOSAL CRITERIA

Proposal Format: Proposals must follow the format described below:

- Cover Page: Include a cover page with:

- company name;
 - contact information;
 - a clear statement referencing the VAST technology; and
 - appropriate distribution restriction markings (“Proprietary,” “Official Use Only,” “Export Controlled,” etc.)
- Executive Summary: Include a one page executive summary after your cover page.
 - Markings: Please ensure all pages in your proposal are marked appropriately with any distribution restrictions.
 - If portions of your proposal are proprietary to your company, ensure those sections are marked appropriately.
 - Ensure to use “Proprietary” and do not use “Confidential.” “Confidential” is a DOE classification marking and LANS cannot accept proposals marked “Confidential.”
 - Proposals that are properly marked as “Proprietary” will be held as company proprietary information and no information from one applicant will be shared with any other applicant.
 - All Applicants are encouraged to execute a Non-Disclosure Agreement with LANS early in the proposal process. Please contact Dave Seigel with any questions.

Proposal Content: At a minimum, proposals must address the following Partner Selection Elements: Attributes, Technology Deployment Strategy, Proposed Working Relationship with LANS. If there is additional information that you believe will add credibility to your proposal, you may add additional information.

- Attributes
 - Key technical staff and/or cleared staff
 - Experience dealing with the US Government customer set (DoD, IC, Law Enforcement)
 - Other consultants, partners, channels, or existing relationships with existing or potential VAST platform users
- Technology Deployment Strategy
 - Identified channels for distribution, service, and upgrade of VAST platform onto US Government and/or commercial end users.
 - Access to classified facilities and/or classified computing networks.
 - Technology development funding including the ability to engage directly with LANS researchers in developing advanced and next generation capabilities for the VAST platform.
 - Ability to collect, integrate, manage, protect, and handle at least commercial customer data sets. Ability to manage customer relationships for existing and potential customers in direct competition.
- Proposed Working Relationship with LANS
 - Ability and/or desire to enter into a Cooperative Research and Development Agreement (CRADA) to ensure creation and adoption of the next generation VAST

platform, generate new jointly-held intellectual property, and participate in the joint growth of the government and commercial markets.

- U.S. Citizen technical and/or business development team.

- Local/Regional facilities at which LANS researchers may collaborate with the Partner staff in some or all aspects of the VAST platform research, development, deployment, integration, and evolution.

PREFERRED PARTNER ATTRIBUTES

- Ability to deliver customer-centric training data sets to LANS-operated and/or LANS-accessible systems so that the VAST capability can continue to grow its knowledge base in service of the national security mission
- One or more U.S. persons cleared at the TS(Q)/SCI level to interact with LANS and/or U.S. government customers
- Ability and/or desire to at least partially locate and/or operate within the Northern New Mexico in close proximity to Los Alamos, Santa Fe, and/or Albuquerque

The foregoing are merely preferences, and LANS welcomes all Formal Proposals from any potential Partners.

SUBMISSION PROCESS

Proposals must be submitted via email to VAST@lanl.gov, and made attention to David Seigel in the Richard P. Feynman Center for Innovation at LANL. Proposals must be received on or before 11:59 MDT on August 31, 2014. If you do not get an email receipt within 24 hours of submitting your Letter of Interest, please call David Seigel to confirm receipt.

David Seigel
Business Development Executive
Richard P. Feynman Center For Innovation
Los Alamos National Laboratory
VAST@lanl.gov
Office: 505-665-2743
Cell: 505-412-2931

For all questions regarding this RFP or the VAST technology please send email to VAST@lanl.gov.