

Network Noise

Volume 3, Issue 1

Terry Christie, Editor

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CAIS Hotline

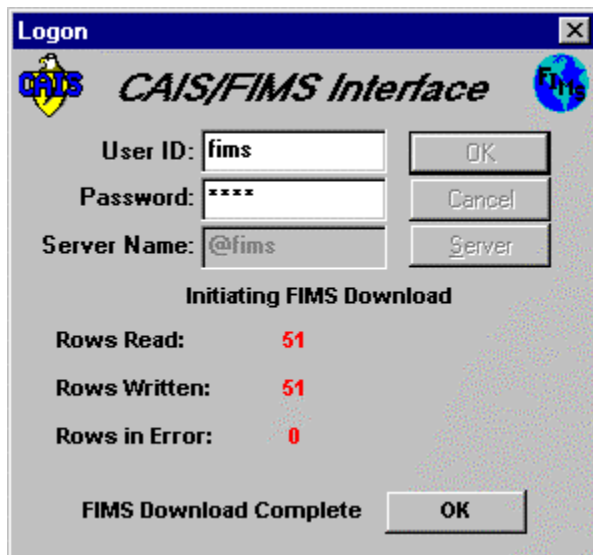
Charlie Lu
DynCorp

We have relocated to Gaithersburg, MD. Our hotline services will continue to be maintained by Kevin Kiah. Kevin's new number is 301-903-0944, fax # 301-903-0999.

Charlie Lu can now be reached at 301-903-0923.

Some features to be looking forward to – the NEW CAIS/FIMS Interface. Below is a preview of the development:

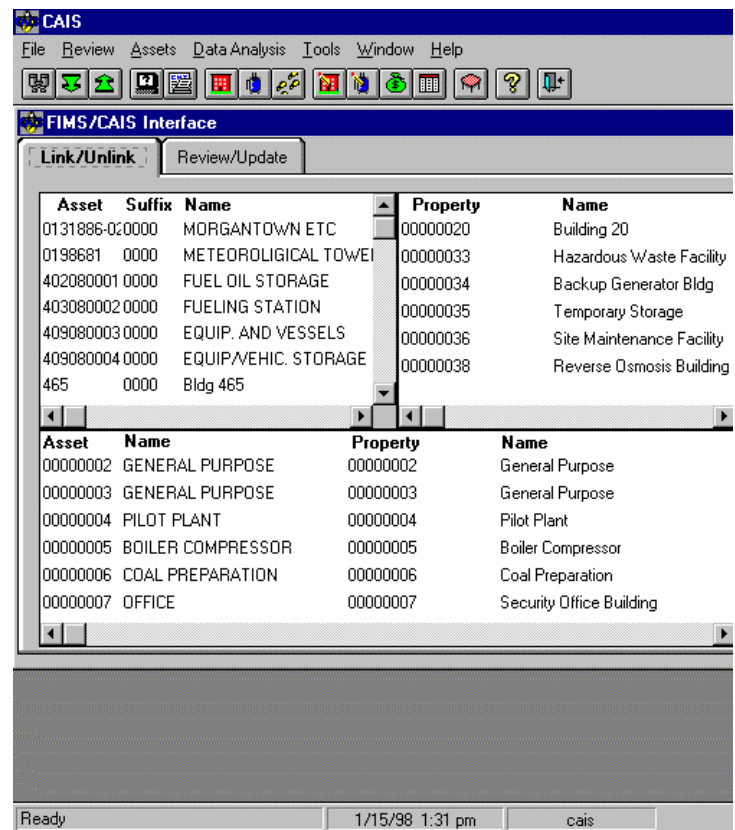
1. The FIMS login screen from within CAIS allows you to log directly into FIMS and download all FIMS assets that are associated with your site into CAIS.



2. After downloading your FIMS assets, you are then able to link and unlink your FIMS assets with your CAIS assets. This screen has a built in auto linker that will automatically link all FIMS and CAIS assets with the same asset ID. All linked assets are displayed in the lower pane of the window. The remaining assets in the upper left pane are your unlinked CAIS assets and the

remaining assets in the upper right pane are your unlinked FIMS assets. This is your exception reporting. You will now be able to easily tell when new assets have been added to FIMS or any discrepancies between the two systems.

3. All remaining assets can then be manually linked together for those Asset Ids that do not match.



4. The review and update screen is currently under development and will allow you to review all of the differences between the CAIS data and the FIMS data. You can also select which FIMS records you want to update your CAIS data with.

The feature to upload CAIS data into FIMS has not changed and will remain the same with the exception

of a few additional fields that may be uploaded to FIMS.

We would also like to start distributing Site-CAIS upgrades on CD-ROM. All sites that do not have CD-ROM capabilities on their CAIS machine should give Kevin or Charlie a call. The next upgrade will be distributed at the LCAM/CAS Users' Meeting at LLNL.

We look forward to see all of you there. We have some exciting plans for Site-CAIS and would love to share them with you at the next LCAM/CAS meeting so please try to attend.

HAPPY NEW YEAR

Charlie Lamb, Program Coordinator

Oak Ridge National Laboratory

This is a time to remember where we have come from and where we are going. Times are changing and so has the importance of CAS. We as members of the CAS team need to focus on new horizons, and new goals. ORNL CAS, as of December, has a WEB Page. We are excited and working hard to fill every void that may exist with information. Photos of every facility, along with a link back to the CAIS database to retrieve a summary report, identified by an IU number. . We are taking photos of those IU's, that number over 3000; those will soon be linked to our summary report on the WEB. Our inspectors have really worked hard to accomplish this large task, do their scheduled inspections, and when needed or ask for special inspections. As you can see, I am very proud of our inspectors here at ORNL.

The horizon is before us, and every step brings us closer, yet moves the horizon a step further away. So let us keep our eyes on the horizon, and we will never run out of steps.

Notes from the Chairman

Bob Von Eschen

Pantex

Preparations are proceeding as scheduled for the spring CAS Network meeting, to be held at LLNL on March 30 through April 2, 1998. Some of the features beyond those of past meetings are:

- LLNL site tour by Paul Reynolds and other LLNL personnel.
- CAIS Program development future (plus) by DynCorp's Charlie Lu and Kevin Kiah, with hopefully some assistance from Jesse Oak of Parsons Brinkerhoff.

- Paver Program presentation and implementation information by INEEL's Robert Olson and Ken Taylor.
- Roofer Program presentation and implementation information by Savannah River Site's Neil Cushman and Ken Ziegler.
- Crystal Report Writer software presentation by LLNL's Paul Reynolds.
- Hardware and software presentation by a team from Comp USA courtesy of Frank King. There will be a demonstration of laptop computers (Fajitsu, etc.), digital cameras (Sony, etc.), and software (yet to be determined). NOTE: If you have any suggestions as to what the vendor should bring, please send me an e-mail (rvonesch@pantex.com)

Please notify Terry as soon as practical of your planned attendance at this meeting so both LLNL security and the hotel can be notified. The meeting is scheduled for four days, with Friday to travel as the time zones eat up hours on the way east and may put you back home real late if you don't get an early morning flight.

Keep in mind the monthly Network conference calls, held the second Wednesday of each month at 11:00 EST. Terry gets the notices with a telephone number out at least one-week in advance. Please join us with any questions and input or just to let us know you still exist. The next two dates, before the spring meeting are February 11 and March 11.

Pantex CAS Program Status

Bob Von Eschen

Pantex

The program continues in its 2nd three-year cycle of facility assessments with Jerry Williams and I as CAS inspectors. We have been able to maintain the schedule set for the three-inspector crew and a CAIS administrator, with a cut of program development and some special data presentations previously offered. However, and to further complicate matters, the requests for special topic assessments, data development, unique reports, and management report input have been increasing. The CAIS system's memory is nearly full with no funding for either hardware or a CAIS administrator. An announced reorganization has put the CAS program under the Construction Engineering Department at the end of January, and we have no indication how this will effect program operations, if at all. Hope to see all at the spring Network meeting.

LCAM/CAS Network Meeting

Nelda Fondse

Lawrence Livermore National Laboratory

The next meeting of the LCAM/CAS Network will be held at Lawrence Livermore National Laboratory, 700 East Avenue, Livermore, California. The dates for this meeting are March 31 through April 3, 1998. The meeting coordinator is Nelda Fondse at 510-423-0729. There is no fee required, however, all visitors to the laboratory will need a badge. A standard DOE badge can be used to enter the laboratory. If you do not have a DOE badge, when registering with the meeting coordinator (no later than March 20) the following information is required to insure that your badge will be waiting for pick up at the West Gate Badge Office.

1. Full name
2. Identification
3. You must be a US citizen
4. Social Security Number
5. Affiliation

There is a block of rooms reserved until March 16 at:

Sheraton Four Points Hotel
5115 Hopyard Road
Pleasanton, California 94588
510-460-8800

Ask for reservations under LLNL CAS.

- \$99 per night (single) king size bed
- \$109 per night (double) two queen size beds
- Restaurant located at hotel and many others within a block radius

If you need any further information please call the meeting coordinator or Paul Reynolds, 510-422-6965 or Bill Denton, 510- 423-7912.

Roofing Maintenance Software Review: "The Art of Roofing Condition Inspections"

Dana Vanier

National Research Council, Canada

This is an excerpt from an article sent to me by Dana Vanier.

This report on 'commercially available' roofing inspection, maintenance and evaluation software is a report in progress. When more information is acquired, this data and information will be finalized and presented at a formal setting, either a roofing conference or roofing publication. This report

focuses on four roofing inspection packages available in North America and identifies their features and capabilities for approximately 50 preselected categories and criteria. The report does not rate or compare the four packages, but provides building owners, roofing contractors and roofing consultants with an objective review of systems available currently. This report is presented to assist users to locate software tools for decisions about roofing maintenance, provide data about the general nature of the available software, and help building owners, contractors and consultants make decisions about automating data collection, monitoring and retrieval.

The selection of the software reviewed was made by the authors based on their extensive experience in the roofing industry, from information obtained from knowledgeable contacts in industry and from data acquired from extensive searching of the Internet and other electronic databases. It was discovered that there is precious little information available about roofing inspection software, and the most reliable sources were from knowledgeable individuals.

Only commercially available software was evaluated in this interim report owing to time and personnel and administrative constraints. It is hoped that some proprietary systems mentioned in this report can be evaluated for the final report.

Four products were selected for a complete evaluation in this report:

- CAMP – Roofer Management Program from CAMP, Inc.
- REVS – Roofing Evaluation System from Bruco Enterprises, Inc.
- ROOFER – from US Army Corps of Engineers, Civil Engineering Research Laboratories
- ROOFWORKS – from Jim D. Koontz & Associates, Inc.

All the software products evaluated in this report were obtained directly from the developer and represent the most up-to-date version of the software. The installations were carried out following the developers' instructions, and the features and capabilities were reviewed based the software provided, the instructions from the developers and the user manuals provided by the developer.

It is encouraging to the author to see such a fine selection of software products for roofing inspection. In general, the products are professionally designed, marketed, supplied and supported. All of the products were easy to install and stable in operation. Although most of the products have some very minor flaws (bugs), none of these prevented the reviewers (or users in general) from using the products, as

designed and represented. In addition, on a personal note, all of the product developers were friendly, helpful, informative and knowledgeable (of both their product and the roofing industry).

As stated earlier, it is not the intention of this report to rank or rate the products. However, the authors can state that none of the developers are misrepresenting their products in their literature.

CAS Inspections at Los Alamos National Laboratories

Noah E. "Gene" Buck

CAS Lead Inspector, LANL

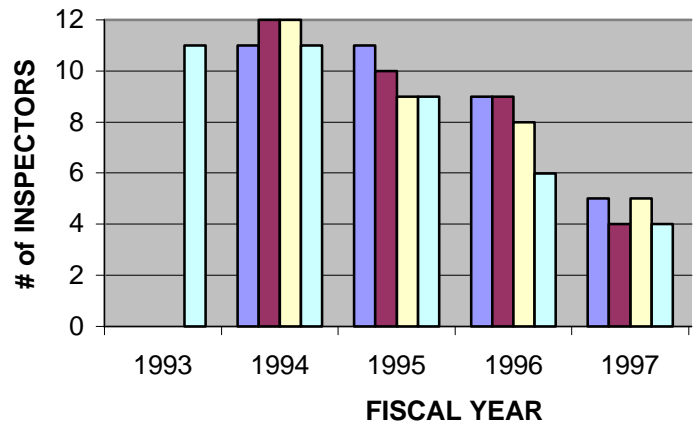
The first days of the CAS Program at LANL were subcontracted to Merrick & Co. in August 1992 and included a lead inspector and five- two person architectural teams. A two week Merrick training and certification class was conducted with classroom instruction and actual field inspections which enabled each team to compare their findings against the other teams in different components, actual deficiencies found and grading of the condition, purpose and urgency. An average consistency of deficiencies and scoring of system components was the result of this training. Deficiencies were recorded in one-column and corresponding corrective maintenance requirements in another. The recorded information included location, component, type, deficiency, quantity and recommendations on how to correct the deficiencies. Systems were graded in the CAS format of condition, urgency and purpose. In April 1992 the program was transferred to Johnson Controls Inc. The organizational structure was changed to a lead inspector with four- three person teams with expertise in architectural, structural, site, electrical, and mechanical disciplines. Inspector training and certification was provided in a LANL site developed course in April 1994, which included field-testing and class room testing. The systems, components and deficiencies with causes were recorded in an alphanumeric code to insure consistency and to minimize ad-hoc reporting. Other coded information such as a deficiency, action, condition and code category was added as well. A DOE certification training class was also given in January 1994. In October 1996 the program was transferred to Westinghouse Electric Corporation. The LANL Facilities Safeguards and Security Division (FSS-9) CAS Team Leader, David McIntosh has directly managed all of the subcontractor personnel.

The CAS team formerly inspected nearly eight million square feet of laboratory space using twelve inspectors in a three-year cycle. Inspection efforts were focused in three areas. The first is the system

scores for the DOE. The second was detailed deficiencies that are used to generate the BMAR and documentation of maintenance items for each asset. The third was code compliance issues, which cover UBC, NEC, UMC, UPC, NFP, CFR, OSHA, ADA compliance and the General Design Criteria (DOE 6430.1a). ICBO or IAPMO certification in an inspector's primary discipline is a job requirement.

In the spring of last year, budget restrictions reduced personnel to one team and a lead inspector (see personnel history graph). We still have to inspect and score systems, record detailed deficiencies and document code violations. We are now inspecting buildings under life cycle planning guidelines in three and five year cycles. Some other projects we have worked on are: the CAS Pilot Version 2, space utilization and occupancy, condition scoring for the CAMP reports, the CFC audit program, and the DOE 5480.20 quarterly inspections.

CAS MANPOWER



The remaining team is comprised of one architectural, one mechanical, one electrical inspector and a lead inspector. We inspect the larger or more critical buildings with each inspector in their own discipline. One inspector in all three disciplines inspects the smaller less important buildings. Cross training in multi-disciplines has now become necessary. Cross training in code certification in the past was an optional effort encouraged by our CAS Team Leader to give the inspector more skills and credibility. Cross training is now a necessity! The LANL training center is offering code review classes for the DOE complex inspectors as well as LANL coordinators, inspectors, and facility management personnel with a nominal cost. These classes are to be conducted two to three times a year. If anyone is interested in these classes, they should contact us and we'll give them the registrar's number. ICBO and IAPMO certification tests should be taken as soon

after the classes as possible. A dedicated study period prior to the tests is recommended.

Another area where we are beginning to direct our program effort is in the percentage profiles of the different building systems and components with respect to total construction cost. This was discussed at the Albuquerque network meeting in October. The RPV costs are used to generate the system scores based on costs for correction and deficiencies identified by the inspector. RPV effects CAS scores, so we began to develop and are continuing to develop percentage profile costs of the various types of buildings at LANL. The profiles are taken from Means Square Foot Costs. The need for detailed deficiency reporting is becoming less of an issue for us and more of a task for facility management units. Detailed deficiency items concerning code compliance will be recorded and placed in the BMAR. The focus of CAS inspections is moving toward stewardship of real property assets at LANL.

Very early in the CAS Pilot Program in 1992, the inspectors found numerous code violations that were legacy issues. Last year we began reporting to the LANL ESH-5 division each code violation we found with a Risk Assessment Code (RAC) score attached to each finding. This score is used to determine the probability of failures related to the violation and the severity of the failure, should it occur. There is also a timeline for corrections from the RAC numerical matrix generated. The one thing that is continually asked us by facility folks is "Isn't that code violation grandfathered?" Our reply to this question is, "How can you grandfather a safety item?" We have to make some difficult determinations and defend them, which is based on knowing and interpreting the codes. If we feel that a grandfathered code issue is of a safety nature, they are sent to ESH-5. We have found that there are two types of code violations, safety and minimum design and installation standards. The majority of all violations, maybe 90%, are direct safety or potential safety hazards, and they are less frequently design or installation standards.

These efforts have pointed to the need for a strong centralized authority having jurisdiction here at LANL. There is a diverse group of facility management personnel responsible for their own areas addressing code compliance. Their interpretations sometimes vary from one area to another on the same violations. The safety of the people performing work here is the number one focus at LANL. The CAS program at LANL is striving to document and interpret all code issues under one roof. This takes up a small amount of our regular inspection time but it is well worth it if it helps keep people safe.

With budgets and personnel numbers dwindling, we still provide the condition of the asset, report on code compliance and document deficiencies. The need for skillfully trained and credible inspectors requires a considerable investment, but it is crucial for maintaining minimum standards in the CAS Program.

Baker Crumbs

Ken Baker
DOE/HQ

Deferred Maintenance...Field Management has received survey reports from 90.9% of the sites. The majority of the CAS users reported estimates of deferred maintenance. The winner of the highest estimate was LLNL. Some of the non-CAS users had some surprisingly interesting answers. A meeting with the CFO representative team is scheduled for January 29. It will be a strategy session on what to do next regarding survey results and planning for validation visits and how and what to report to headquarters. For CAS users, I feel confident you have nothing to worry about regarding "meeting the scrutiny of an IG audit". I should have more information at the March Livermore picnic.

CAS Crystal Ball...The ball is clear not covered with the usual haze. We have money to do some interesting things this year. The CAS contractors and yours truly plan on getting your input on enhancements and removal of CAS trash. So come prepared with recommendations on what direction you want our program headed! No, it is not headed for the nearest landfill. We have Tuesday afternoon, March 31 to talk trash.

Model morsels...Model building and CAIS summary condition code calculations are on hold right now because of CAIS training at ORNL next week. We have gotten information from the Corps of Engineers on models they have developed and we are going to explore development of unit costs for the sixteen seismic model-building types found in FIMS. We will, Kevin and Jesse that is, may have another iteration to show you at the picnic. Besides enhancement ideas and trash bags, please bring your models (RPV studies) if you have developed some lately to the meeting.

Sorry no Baker's dozen this time!

Final Notes

Terry Christie
Oak Ridge National Laboratory

Thanks for all the input. Remember to keep in touch through the conference calls and the next Network Meeting.