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# STATS SRS v11.0

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June 22, 2007

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This work was performed under the auspices of the U.S. Department of Energy by University of California, Lawrence Livermore National Laboratory under Contract W-7405-Eng-48.

January 17, 2006



Science and Technology  
Achievements Tracking  
System (STATS)

## **System Requirements Specification**

Mark Piscotty  
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**Technology Information Systems Projects**  
**Lawrence Livermore National Laboratory**

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# STATS

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## System Requirements Specification

**January 17, 2006**  
**Version 1.0**

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## Signatures

The signatures on this page indicate acceptance of the contents of this document as the definition of the functionality of the STATS application. Any modification to this description, other than clarification, will result in a re-negotiation of the STATS deliverables.

### System Owner:

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Rokaya Al-Ayat, LSTO	date
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### Project Manager and Steering Committee Chair:

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Ken Jackson, LSTO	date
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### Steering Committee Members:

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Monya Lane, Engineering Directorate	date
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Jim McGraw, Computation Directorate	date
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Rulon Linford, Physics and Advanced Technologies Directorate	date
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Alan Wootton, Physics and Advanced Technologies Directorate	date
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Charlie Westbrook, Chemistry and Material Science Directorate	date
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# 1 Introduction

## 1.1 Foreword

### 1.1.1 Document Objectives

This document represents the primary deliverable for the Requirements Definition stage of system development. As part of a successful Requirements Definition, this document provides the development staff, the project sponsor, and the user community with a clear understanding of the product's operational, data, and other requirements. With this understanding, the development staff will take the opportunity to refine estimates regarding the cost, schedule, and deliverables reflected in it.

System development deliverables will include:

Stage of Development	Deliverable
Planning	Project Proposal
Requirements Definition	User Interface Prototypes System Requirements Specification (SRS) Software Quality Assurance and Test Plan Updated Schedule of Deliverables
Design (Functional & System)	Design Specification (includes Entity Relationship Diagrams, Interface Design Specification)
Programming	Software User's Guide
Integration & Testing	Acceptance Test Plan Training Plan and Materials
Installation & Acceptance	Operational System Acceptance Test Report User Training

**Table 1. System Development Stages and Deliverables**

All changes to this document will be recorded in its Change History Section.

### 1.1.2 Document Scope

The intent of this document is to describe concisely *what* STATS system will do. This document will:

- Provide a general product description
- Describe the current environment for conducting the business activity that the product will address
- Identify functional, system, data, hardware, software, technical, and other requirements for the product
- Be sufficiently organized and detailed to facilitate tracking of requirements
- Provide a basis to establish plans for software quality assurance and testing

### 1.1.3 References

- [1] LLNL Science and Technology Awards and Recognition System (STARS), <http://stars.llnl.gov/>
- [2] LLNL Information Management System (IM), <http://www-r.llnl.gov/bsd/im/>
- [3] ISI Web of Knowledge, <http://portal.isiknowledge.com/portal.cgi>

### 1.1.4 Outstanding Issues

#### LLNL and External Data Sources

As appropriate, this application will attempt to utilize existing LLNL and external data sources to populate the database. Initial analyses of these data sources indicate varying degrees of data accuracy and integrity, which will directly impact the level of effort required to extract useful data.

#### Security and Intellectual Property Policies

STATS will comply with all applicable LLNL and DOE policies relevant to the protection of classified and sensitive unclassified information. The LLNL OCEC office has been briefed about the PAR system, and has been updated about the current design specifications for the STATS system. The inclusion of unclassified titles for classified reports within the STATS database was specifically approved by the OCEC. Both the OCEC and IPAC will receive updates at their request.

## 1.2 Background

The PAT Achievement Records (PAR) system was developed at the request of the PAT Directorate Chief Scientist, Alan Wootton. He needed a more efficient way of collecting, storing, and analyzing the achievements of PAT researchers so that he would have more accurate and timely information for a variety of purposes. In January of 2004, he asked Rulon Linford to oversee the development of the PAR system. They agreed the biggest challenge would be to convince researchers to keep the data accurate and current. To encourage researcher participation, the system should minimize the work required by them and maximize their incentive to be responsive. These two principles motivated the adoption of the following design guidelines: 1) Do not require information that we do not need, 2) simplify data entry by using automatic downloads from external sources, pull-down menus, etc., 3) provide various report formats including those for CVs, personnel appraisals, etc., 4) improve the system using feedback solicited from the researchers, 5) provide additional reporting capabilities useful to Division Leaders, Group Leaders, etc., and 6) use the collected data for personnel rankings, appraisals, etc.

On January 28, 2004, Linford discussed the intent to develop PAR with Ken Jackson, LSTO. Jackson recommended contacting people in David Gutierrez' group in ENG to develop the database. On February 4, Gutierrez agreed to develop a proposal. Wootton agreed to fund the proposal with the stipulation that PAR data be available for use at the PAT DRC meeting in May. PAR was beta tested in April, and improvements were made. Data entry was solicited from PAT researchers in early May. The data were checked for quality and then successfully used at the DRC meeting on May 27, 2004.

Major improvements were made over the next 6 months based on the many comments from researchers. A new call for data was issued in November, 2004 for the DRC meeting in December. The system has been improved continuously since that time. In addition to DRC reviews, PAR data has been used for LDRD review, workforce review, TRC reviews, annual directorate self assessments, personnel rankings and appraisals, selection of personnel to nominate for awards and for fellowship status in professional societies, progress reports to sponsors, and responses to a variety of *ad hoc* requests for information about collaborations, etc.

Discussions with Rokaya Al-Ayat and others in LSTO were initiated early in 2005 to explore possible interest in developing a PAR-like tool for Lab-wide purposes. These discussions led to interactions with a few other directorates who have shown interest in having a similar tool. A Steering Committee, chaired by Al-Ayat and Ken Jackson, was formed to develop more detailed plans which has led to the development of this Software Requirements Specification Document for a Laboratory-wide system called Science and Technology Achievements Tracking System (STATS).

## 1.3 Project Objectives

The objective of this project is the delivery of an application that will provide a unified, web-based system for collecting, verifying and analyzing the achievements for Laboratory employees. The application will enable individual Directorates to manage and report achievement record data for their employees using an LLNL

standard web browser. In addition, cross directorate data reporting and analysis will be available for such organizations as LSTO and programmatic directorates.

This system is intended to store reference data and metadata for employee achievements. Abstracts and entire publications will not be stored in this system.

Directorates are expected to use this system at all levels of management in preparing for Annual Self-Assessments, peer reviews, LDRD reviews, work force reviews, performance appraisals, and requests from sponsors.

## **1.4 Project Scope**

### **1.4.1 Primary Development Activities**

The requirements and objectives outlined in this document will be achieved by developing a custom software product that may be supported by commercial software tools and servers, and is designed to operate on a commercially available hardware platform. Primary development activities will include

- Development of a Graphical User Interface (GUI) to enable maintenance and retrieval of technical achievement record data
- This and all user interfaces must be accessible from Mac and PC desktop systems
- Development of an interface to the ISI Web of Knowledge web site to enable automated electronic data retrieval for publication records
- Development of interfaces to enable data exchange with internal LLNL applications, such as STARS, PIP, IM, CAFE and AIS institutional applications
- Development of a database that will store and allow authorized access to technical achievement data
- Development of access control mechanisms to protect the integrity and privacy of the data, yet provide easy access for authorized users
- Development of reporting capability necessary to support technical achievement reporting processes
- Development of a user interface to allow retrieval of data into Excel spreadsheets

### **1.4.2 STATS User Base**

STATS will include, pursuant to the project objectives, data and functions necessary to support managing the technical achievement records of LLNL personnel. Categories of these employees include

- Indefinite (full time, part time, and indeterminate)
  - Probationary
  - Non-Probationary
- Fixed Term
  - Post Doctoral
- Flex Term

### **1.4.3 STATS Phase I**

#### **1.4.3.1 Features in Phase I from Current System**

The first Phase of STATS will include most of the functionality that is currently provided by the existing Physics Achievement Records (PAR) system, as well as further functionality to accommodate multi-directorate, Lab-wide integration. Additional functionality will be included when it is clear that the agreed upon schedule will not be adversely affected. At a high level, the primary functions of the current system are

- Store and maintain technical achievement record data necessary to management and respond to requests for achievement data at various organizational levels. This information includes
  - Education and Work History
  - PI Status on Programs, Grants, Contracts, CRADAS
  - Awards / Recognition
    - National Academy Election

- Society Fellowship
- External Awards
- LLNL Awards
- Publications
  - Refereed Journal Articles
  - LLNL Reports
  - Books/Book Chapters
  - Articles in Published Conference Proceedings
  - News Related Articles
  - Contributions to External Reports
  - Abstracts
- Presentations
  - Invited Talks
  - Briefings to External Parties
  - Other Presentations and Posters at Conferences and Workshops
- Professional Leadership and Service
  - Conferences/Workshops organized
  - Editor of a Book
  - Appointment to Editorial Role
  - Professional Society Leadership Positions / Committee Service
  - Participation in Advisory or Peer Review Capacity
  - Other
- Patents / Copyrights Issues
- Highlights
  - Highlights
- Enable output of data in file formats compatible with Excel spreadsheets
- Provide reports as needed, such as
  - Achievement record data filtered by Approved, Unapproved, Deleted and All But Deleted; specific record types or All record types may be selected
  - Achievement record statistics data filtered by date range
  - Submitted achievement records that indicate records entered by users and not through automated processes
  - Individual user CV with all authors displayed
  - Individual user CV with truncated list of authors
  - Individual Appraisal Report that lists achievements to be recognized in the employee's Performance Appraisal

Administrative functionality that currently exists in PAR will also be developed in Phase I of STATS. This functionality will be distributed among the roles described in Appendix A and include:

- Directorate Lead Administrator functionality (limited to achievement records within Administrator user's scope) - Please see Appendix A for a complete list of User roles and privileges
  - View / Edit data of users within scope
  - Approve user achievement records
  - Add new users
  - Modify organization affiliation for users
  - Manage organizational administrator users
  - Manage organization groups
  - Create / View Highlights records
  - View Comments entered by users
  - Add / Edit / Delete Special Authors list, Journal Translation List and Proxy User List
  - Edit pull down list contents for a directorate
  - General configuration of system for directorate
  - Grant designated privileges to lower level Administrators
- Organizational Administrators (Dir, Dept, Div, Group)

- View / Edit data of users within scope
  - Perform tasks based on granted privileges
- Individual users
  - View / Edit own data records
  - Assign Authorized Editors (proxies) to their data records

Access to STATS (authentication) will be granted to employees with active LLNL official OUNs and PACs. By default, only 200 series employees will be granted access. Employees in other job series classifications may be granted access to STATS upon request and subsequent approval of the Directorate Lead Administrator. Authorization to see various data types and perform certain functions will be assigned through user roles and privileges.

The highest level of data classification for STATS is assumed to be Official Use Only (OUO).

### 1.4.3.2 Additional Features in Phase I

Functions and features to be provided in Phase I that are beyond PAR's current capability are

- Additional Functionality
  - Accessibility by multi-directorates
  - Separation of data by directorate and user access scope
  - Retain organizational affiliation for achievement records
  - Assignment of "Authorized Approvers"
  - Roll up reports for the Laboratory as a whole
  - Interfaces with LLNL internal applications, such as STARS (includes changes/additions to data fields to facilitate interfaces)
  - Inclusion of an indicator for a 'community' award
  - Inclusion of an indicator that a user has accepted a record entered by someone else or by an automatic download
  - Improved user interface
  - Ability to create and name lists of base users for a variety of purposes, including report generation, granting read-only access for a program or project, etc."
  - Capability to assign a matrixed user to other organizations in addition to that user's official affiliation
  - New report for specified list of OUNs, with date range and data Type specified, available in Excel or Word formats.
  - Lab-wide Journal Translation List for determining Caltech abbreviations, Impact Factor and Type
  - Editable Proxy User List
- Additional Information
  - Automated download of Conference Proceedings data
  - Project list data to enable records to be associated with programs/projects
  - Funding source affiliation to records of appropriate type
  - List of Base Users who have terminated more than 12 months ago

### 1.4.4 STATS – Future Phases

Functions and features under consideration for other **future** phases of STATS include

- Additional Functionality
  - Interfaces with LLNL internal applications, such as IM, PIP, URP
  - Update Citation data on a monthly basis
  - Generation of LDRD formatted CV
  - Keyword search capability that can query all the records in a user's scope
  - Automated email notification to inform a user when a new record is added to his/her set of records. Possibly provide Directorate admin user with capability to enable/disable this feature.

- Inclusion of fiscal year specification with program/project association
- Functionality to indicate “LDRD Enabled” and “PDRD Enabled”
- Automated deletion of adopted records from the Orphan Organization after 6 months from the adoption date
- Tool for creating, naming, and maintaining lists of base users within their scope. These lists can be used to facilitate the creation of various reports involving the records of users on any list
- Additional Information
  - Expanded Collaboration Data
  - Skills / Competencies / Expertise

### 1.4.5 Out of Scope

- STATS will not attempt to associate historical organizational information to records that were generated prior to the current Laboratory organizational structure

## 1.5 User Groups

STATS users will have role based privileges assigned to them that will be the authorization basis for viewing, editing, deleting data and performing system functions. Only two types of users will be able to log into STATS. A "base user" has an STATS file for recording and maintaining his/her achievements. A "proxy user" is assigned one or more roles for managing or using STATS files but has no file of his/her own. Base users may also be assigned one or more additional roles.

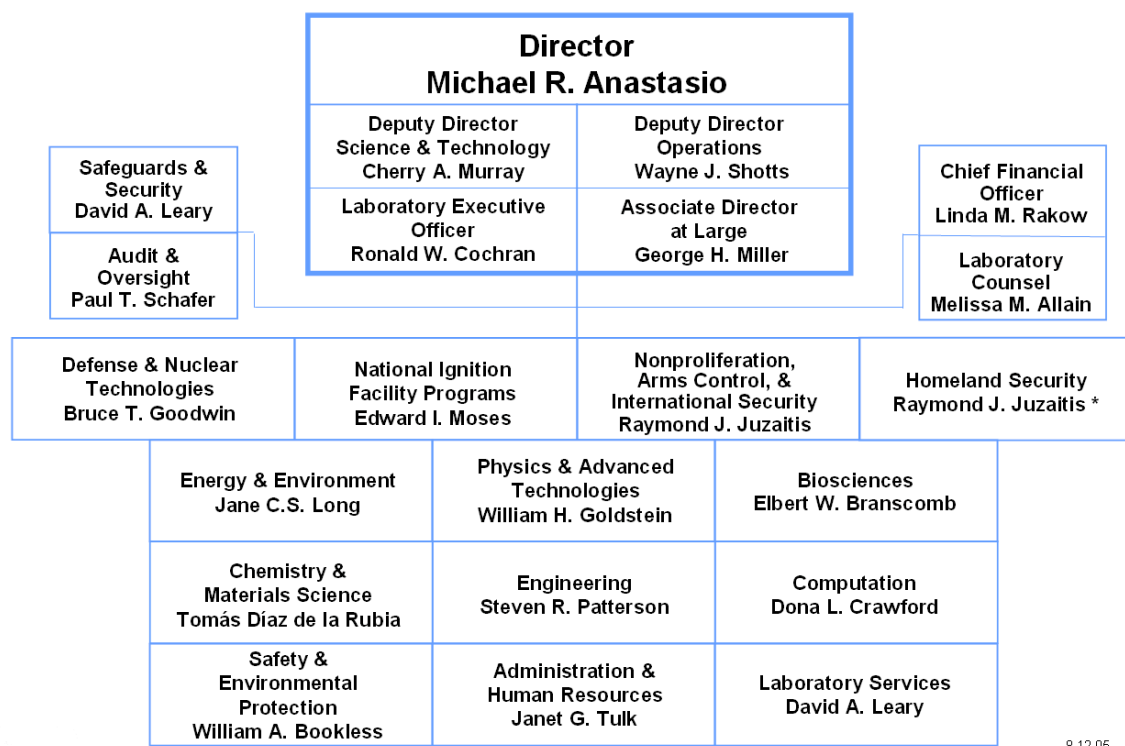
Appendix A provides a matrix of roles and privileges for STATS users. Following the matrix are descriptions of each role and the privileges associated with it.

Table 2 below is the Steering Committee membership that participated in gathering the initial requirements and providing project guidance. Note that in addition to the committee members, input was collected from the Defense and Nuclear Technologies Directorate, the National Ignition Facility Programs Directorate, and the Nonproliferation, Arms Control and International Security Directorate.

Name	Affiliation	Function
Rokaya Al-Ayat	LSTO	Chair
Ken Jackson	LSTO	Chair / Project Manager
Monya Lane	Engineering	Member
Rulon Linfo	PAT	Member
Jim McGraw	Computation	Member
Oscar Nazario	Computation	Technical Lead
Mark Piscotty	Computation	Project Lead
Charlie Westbrook	CMS	Member
Alan Wootton	PAT	Member

**Table 2. STATS Steering Committee**

The current LLNL organizational chart is shown in Figure 1. STATS will be available to all Directorates and one additional “Directorate like” organization for the Director’s office.



8.12.05

**Figure 1. LLNL Organization Chart as of August 12, 2005**

## 1.6 Product Overview

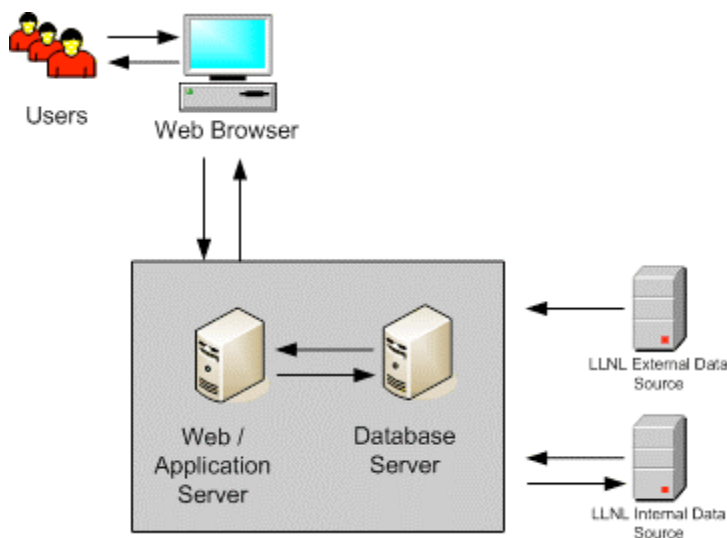
STATS will include functions that enable the management and reporting of technical achievement records for authorized LLNL employees. The immediate object of STATS is to provide a robust database system with an intuitive web-based interface that provides 24x7 access for authorized users. Multiple simultaneous users will be allowed to query and modify STATS achievement data. The particular STATS data that a given user will be allowed to access and/or modify will depend on the user's organization, his or her role in that organization and the underlying business rules that govern data access. The desktop browser will connect via LLNL's yellow unclassified network to the STATS server system. This architecture will facilitate access control, and many modes of data display and interaction, including tables, forms, prose, pull-down list selection, text editing, and others. Figure 2 below depicts a high-level view of STATS's current two tier system architecture (may evolve to three tier, separating the web server and application server).

STATS will include the capability to import data in an automated process from both LLNL internal and external data sources. One initial LLNL internal data source will be the finance reporting tool, Java Café, which will be used to import data related to Principle Investigator status for Programs, Grants, Contracts and CRADAs. Another internal data source is the AIS Data Warehouse for accessing personnel data (name, email address, extension, etc.) and validating the OUN/PAC for authentication purposes. The only external data source currently identified is the ISI Web of Knowledge (<http://portal.isiknowledge.com/portal.cgi/>). This source is used in an automated process to import peer reviewed publication article data from over 6000 world wide journals. STATS will employ association logic defined by the Steering Committee to associate journal articles to the corresponding LLNL authors. The initial state of these articles will be "Unapproved" until an authorized approver verifies the accuracy of the article association with the employee and changes the article state to "Approved" or "Deleted."

User data access and available functionality will be controlled by user roles and privileges and organizational

affiliation defined by the Steering Committee. The system will allow for read only users who, depending on their scope, can read specified, non-sensitive data within and outside their organization. A full set of user roles and privileges is discussed in Section 1.5.

Access to the data in STATS by users shall be accommodated by a number of parameterized fixed reports. The reports will be viewable in the browser (HTML) or downloadable Excel files.



**Figure 2. STATS High-level Architecture**

## **2 Current Environment**

### **2.1 Business Functions**

There is an ongoing and arguably increasing need for an institutional tool that affords an efficient and effective way to track and manage technical achievements, publications, and awards for LLNL's scientific and engineering workforce. Answering this need is a significant challenge due to the large amount of data involved and the institutional interconnections of three types of information. First, each year scientists and engineers at LLNL publish more than 1200 journal articles and author over 400 papers that appear in conference proceedings volumes. Other publications include books or book chapters, posters or presentations at conferences, and the numerous project reports that document the Laboratory's technical achievements and deliverables for our sponsors. Many of these are co-authored by multiple people in other LLNL directorates as well as from outside institutions. At this point, accurately determining an institutional context for these publications and clearly understanding the impact of LLNL's publications in the technical literature is an unmanageable task. Secondly, each new year sees many of LLNL's technical staff receiving awards, prizes or other notable recognition from their peers and our sponsors. The third type of information is related to LLNL's achievements in the realm of intellectual property, including patents and patent applications in the context of the individuals and their home organization. Currently, the STATS is designed to provide an integrated institution-wide tool that allows each directorate and the institution as a whole to track and document scientific accomplishments.



Managing the effective use of this information is perhaps an even more demanding task than tabulating it. For example, STATS will provide a tool that could be used to identify individuals whose accumulated achievements merit nomination for awards and fellowship in professional societies. Information accumulated by the system may also help point out where additional grooming or training might most effectively prepare individuals for opportunities for external recognition.

There are multiple demands for data that will be collected in STATS. In recent years, the calls for information from DOE/NNSA and our other sponsors for the information that will be stored in STATS have become more and more frequent. Currently, preparing the responses for many of these requests requires considerable effort and may even yield results of questionable accuracy. The accountability demands of LLNL's Appendix F reporting to UC and to the NNSA constitute another use of these data. If designed and implemented correctly, the STATS system will be invaluable in preparing input to our Directorate Review Committee (DRC) peer review process, and it is hoped that output from this system will be an automated source of input to the performance review process. Preparations for the upcoming bid for the LLNL management contract will no doubt place an even greater premium on ready access to this information. It is hoped that the creation of the STATS capability will provide a cost-effective solution to these information demands.

## 2.2 Deficiencies

The various directorates employ numerous methods to gather, manage and report publications and awards data for its employees. The majority of these processes involve a "call" to the employees via email or telephone to assemble their publications and awards data and submit the results to an administrative assistant, who then compiles the data in an Excel spreadsheet. The resulting spreadsheet is then compared to and augmented with data from the laboratory's IM system and other internal sources. Occasionally, external publication warehouse sources are consulted in an attempt to further complete the list. Once the list is as complete, it is then distributed via email to the interested parties. This process is often repeated multiple times throughout the year in most directorates and is time consuming for the employees, administrators and individuals reporting the data.

The Physics and Applied Technologies (PAT) Directorate's web-based application, PAR, is used to manage their publication and awards data and can download refereed journal articles from the ISI Web of Knowledge website for its employees via an automated weekly process. PAT reported that this automated process has enabled them to claim approximately 20% more refereed journal articles for its employee. A similar test system was employed for the Computation Directorate, which report upwards of 25% more refereed journal articles were found using this automated process. In addition to providing a more complete portfolio of journal articles, this system enables individual employees to review and manage their own publications and awards data at any time throughout the year and maintains a historical record of this data.

## 3 Requirements

This section presents requirements for system operation of STATS. As a specification of requirements, this section must be complete, that is, it must describe and define every operation the system must perform or support. Each requirement should be clear and precise enough to fulfill two primary functions:

1. Convey to the sponsor, customers, and user community exactly what the system will do
2. Convey to the development team exactly what the system functionality and intent are, in sufficient detail so that development can proceed to completion

The requirements are organized by:

- General Functional Requirements
- System Object Requirements
- System Input and Output Requirements
- Administration Requirements
- Systems and Communication Requirements
- Security Requirements
- Performance Requirements

- Backup and Recovery Requirements
- Hardware Requirements
- Software Requirements
- Usability Requirements
- Future Development Phase Requirements

An attempt is made to show all data items of interest. Many of these data items can be calculated based on the values of other data items, or other functions of the system. While they may be shown in this document listed under data requirements, it in no way indicates a requirement to store those data items that could be calculated. The decision to store or calculate is made during design or implementation.

The following key words are used in the requirements below with the following intended meanings:

- Shall – This is a definite requirement. Failure to meet this requirement means that the system is incomplete.
- Will – This is a strongly desired requirement. Some requirements may be contingent upon external factors, such as cooperation with other organizations, for success. Every effort will be made by the development team to meet these requirements, or provide alternative functionality that enables the user to accomplish the related task.
- May – This is an optional requirement, which can be omitted from the delivered product if time, resources, or other circumstances make its delivery unachievable.

### 3.1 Goals

The goals of this system include the fulfillment of the objectives identified in Section 1.3. Additional goals include:

- Reducing or eliminating the need for Directorates to develop and / or maintain individual system for managing employee achievement data
- A user interface that is intuitive and easy to use
- A flexible, modular implementation that allows for and anticipates future expansion
- Provision for users to perform essential system administration functions

### 3.2 Phase 1 Requirements

The intent of STATS is to mimic most and extend some of the capabilities currently provided by PAT's PAR system and to expand the access to all LLNL Directorates. The following will describe the significant requirements for the STATS application and in some instances, subtle details that are important for adherence to ascribed business rules. Most of the required user functionality is found in the PAR system and Appendix D provides an overview of PAR functionality and includes several screenshots from the PAR system.

#### 3.2.1 General Functional Requirements

- GEN-010     STATS shall avoid, to the extent feasible, storage of more than one copy of the same data element within its database.
- GEN-020     Where multiple users are authorized to access information about the same employee, or other system objects, STATS shall allow all such authorized users access to the identical data elements stored within STATS and will provide for transactional data processing. STATS will not replicate stored information for access by multiple users.
- GEN-030     When a base user's payroll account changes, indicating a transfer within a Directorate or to another Directorate, STATS shall automatically and immediately transfer that base user from the scope of all the Administrators of the past organization to the scope of all the Administrators of the receiving organization. That transfer will apply to all privileges of access and approval held by the affected Administrators.
- GEN-040     Initial system data shall be loaded from appropriate data sources as identified in the sections that follow.

### 3.2.2 System Objects

#### 3.2.2.1 System Data Requirements

- DAT-010 STATS shall be available to store technical achievement data for all Laboratory employees who have been authorized as "base users." By default, automatic authorization of "base users" will be limited to 200 series employees. Additional employees may be added to the "base user" list by a Directorate Lead Administrator. All base users are eligible for automatic population of achievement records.
- DAT-020 Achievement data shall be optional for LLNL employees.
- DAT-030 Base Users may update their own achievement records.
- DAT-040 Updating an achievement record will result in the record having an "Unapproved" state.
- DAT-050 Users with read-only privilege shall have the ability to view specified data for employees in their scope and create reports based on that data.
- DAT-060 Read-only data shall include all categories except:
- Work History
  - Education
- DAT-070 The privilege for Read-only access shall be granted for data in either the "Approved" state or in both the "Approved" or "Unapproved" states. This access may be granted to users within or outside the data owning directorate.
- DAT-080 Each achievement record shall have a date associated with it that is the date the record was published, awarded or occurred. Certain achievements shall have data ranges associated with them (as needed) to indicate an effective time period (such as an editorial appointment). Any portion of this range of dates that falls within the range of dates specified by a report shall qualify the record to be included in the report.
- DAT-090 Beginning and end dates shall be associated with Conferences and Workshops. The beginning date shall be used for query and sorting purposes. The date range shall be displayed in application generated CV's. An additional publication date shall be included for the actual Conference Proceedings Publication, which may be significantly different than the dates for the conference.
- DAT-100 Each achievement record shall have one or more payroll accounts associated with it. The payroll accounts will not automatically change if the authors' payroll accounts change.
- DAT-110 New achievement records added to STATS for a user will have the user's current payroll account associated with it. STATS will not attempt to automatically associate a previous payroll account with a new record.
- DAT-120 The payroll account shall be editable by the record owner or administrator.
- DAT-130 STATS shall allow a user to have multiple instances of an achievement record type.
- DAT-140 STATS shall have data Categories that contain data Types.
- DAT-150 STATS data Categories and data Types are included in Appendix C. Unless specified by the Steering Committee, the included data fields will be the same as those in the PAR system.
- DAT-160 Achievement records may be "Deleted" and will no longer be displayed for a user. The record will

- only be “logically deleted” and can be undeleted in the case of a mistake in deleting a record. Deleted records greater than 1 years old will be purged from the STATS database.
- DAT-170 An achievement record in an “Approved” state shall have the approval date and OUN of the approver associated with it.
- DAT-180 Achievement records shall have an indicator that enables the user to identify the records that he/she has accepted.
- DAT-190 STATS shall include a master project list from which a user may select one or more projects or funding sources to be associated with a record. The list will be a compilation of up to 3 projects or funding sources from each participating directorate and the list will have an “Other” selection. In addition, a keyword field shall be included next to this list that enables the user to enter more specific project identification data. This keyword field will be limited to 256 characters.
- DAT-200 STATS shall support the concept of matrixed employees by enabling base users to be added to additional organizations in addition to their administrative organization. Matrixed employees will be added to the scope of the matrix organization and the employees will be designated as matrixed employees. The Directorate Lead Administrator role of the administrative organization shall have the privilege to perform this association. The Directorate Lead Administrator role user for the matrix organization shall have the privilege to remove any matrixed employee from his/her scope.
- DAT-210 STATS shall provide indicator fields on appropriate record types that indicate that the record is a “community” achievement (community to be defined by the Steering Committee).
- DAT-220 Achievement records shall list the date of the entry or last edit, and list the download system or the OUN of the last person who made that entry or edit.

### 3.2.2.2 User Requirements

STATS shall provide role-base access to achievement record data and functionality. Appendix A includes the user roles to be included in STATS and the privileges associated with them.

- USR-010 A user’s scope is defined as the encompassing data and functionality to which a user has access. Scope is determined by role(s) that are assigned to the user and the span of organizations or people assigned to the user for each role.
- USR-020 STATS will have only two types of users. A "base user" has an STATS file for recording and maintaining his/her achievements. A "proxy user" is assigned one or more roles for managing or using STATS files but has no file of his/her own. Base users may also be assigned one or more additional roles.
- USR-030 A base user shall have the capability to grant any other STATS user Read / Write access to his or her data. The user receiving this grant shall be known as an “Authorized Editor.”
- USR-035 Base users who are matrixed to organizations other than their official Lab affiliation shall be listed in STATS as (matrixed) members of the organizations to which they are matrixed. This will allow all those with roles and spans involving those organizations to have the same functionality for matrixed and regular members of the organization.
- USR-040 Only users with Administrative roles (Group Administrator, Division Administrator, etc) and granted the Approval privilege shall have the privilege to set the status of achievement records within their scope to “Approved”.

- USR-050 Directorate Lead Administrator role users will have the capability to approve all records for a user in the administrator's scope. This approval privilege may be granted to other Administrative role users by the Directorate Lead Administrator.
- USR-070 Any users with edit privileges shall have the capability to "copy" an achievement record to one or more valid STATS users by specifying the user OUN(s). The copied record will indicate which user initiated the copy, so that the recipient may determine from where the copied record originated.
- USR-080 The access to STATS by a terminated employee shall be revoked upon termination, but the employee's records shall remain available for automated downloads and editing by approved users for a period of 12 months. After 12 months, the employees records will no longer be updated automatically or be able to be edited, but will continue to be used for current and historical reporting.
- USR-090 User data, such as OUN, full name, payroll account number, email address, and telephone extension shall be imported into STATS weekly from an institutional data source, such as AIS or PIP. While most users will be able to view some of this personnel data (to be determined by the Steering Committee), the Directorate Lead Administrators and Lab Wide Lead Administrator will be able to access the full list shown in FPH-140.
- USR-100 All users (base and proxy) will have the tools for creating, naming, and maintaining lists of base users within their scope. These lists can be used to facilitate the creation of various reports involving the records of users on any list.

### 3.2.3 Input Requirements

- INP-010 STATS shall provide the capability for users to manually create / edit / delete data for achievement records and copy records to the files of co-authors or co-recipients using their OUNs.
- INP-020 Unless otherwise specified by the Steering Committee, the data fields available for input for each type of achievement record will be consistent with those in the PAR system. See Appendix C for a list data fields associated with each achievement record type in PAR.
- INP-030 The STATS database shall be populated with as much data from LLNL's STARS application that is credible and accurate. This will be a one time data load as part of rolling out the STATS system.
- INP-040 Refereed Journal Article data shall be downloaded from the ISI Web of Knowledge weekly and associated with the corresponding LLNL author(s). This is an automated process.
- INP-050 Articles in Published Conference Proceedings will be downloaded on a weekly basis from an appropriate data source, such as IEEE or INPSEC and associated with the corresponding LLNL author(s). This is an automated process.
- INP-060 Downloaded Refereed Journal Articles and Articles in Published Conference Proceedings will initially be in an "Unapproved" state.
- INP-070 All articles (Journal or Conference Proceeding) that list Lawrence Livermore or LLNL as an address should be included in the automatic downloads. If the article author list does not include ANY base user names in STATS, then the record shall be assigned an "Orphan Status" and associated with an Orphan Record organization. Administrative users may associate orphaned articles to base users in their Directorate using the copy function. When an Orphaned record is adopted by such an association, an indicator on the record in the Orphaned Record organization shall note that it has been adopted. Only a Lab-Wide Lead Administrator may add, edit, or delete a record in the Orphaned Record organization.

- INP-080 All achievement records that have been created, edited or copied from another user's record set will be in an "Unapproved" state.
- INP-090 An "Authorized Editor" may create, update, and delete data for a user.
- INP-100 Administrators in a higher hierarchical level may add, edit, and delete data for a base user within his or her scope.
- INP-110 The source and date of all new achievement record entries, or the last person to edit an achievement record, will be noted on the record. Possible sources include automatic downloads from other databases such as ISI, authorized editors, administrators, approvers, other base users through the copy function, and the base user who owns the records.
- INP-120 All achievement records in a base user's record set will indicate that they are "not yet accepted" unless the record was entered by that base user or was "accepted" by that base user.
- INP-130 PI Status data shall be imported from the LLNL financial reporting tool, Java Café. This shall be a dynamic connection to the Java Café data and this data shall not be stored in STATS.

### 3.2.4 Output Requirements

Unless otherwise specified by the Steering Committee, existing PAR reports will be duplicated in STATS including formats and data fields. Appendix B includes examples of existing PAR reports.

- OUT-010 All STATS canned reports, unless otherwise specified, shall have a capability to specify a date range to be used as parameters in the report query.
- OUT-020 All STATS reports shall 'auto-stamp' the reports with date and search criteria.
- OUT-030 STATS shall provide a report for an individual employee that includes all achievement records for an individual employee (listed below). This report shall be called the Individual Employee report and shall be provided as a downloadable Excel spreadsheet with multiple worksheets, one for each type of record.
- Education
  - Work History
  - PI Status on Programs, Grants, Contracts, CRADAS
  - National Academy Election
  - Society Fellowship
  - External Awards
  - LLNL Awards
  - Refereed Journal Articles
  - LLNL Reports
  - Books/Book Chapters
  - Articles in Published Conference Proceedings
  - News Related Articles
  - Contributions to External Reports
  - Abstracts
  - Invited Talks
  - Briefings to External Parties
  - Other Presentations and Posters at Conferences and Workshops
  - Conferences/Workshops organized
  - Editor of a Book
  - Appointment to Editorial Role
  - Professional Society Leadership Positions / Committee Service
  - Participation in Advisory or Peer Review Capacity

- Other
- Patents

OUT-040 STATS shall provide an Appraisal Report that shall be viewable and printable (not editable) in an HTML format and downloadable in MS Word format. Achievement categories and types to be included are listed below. The Directorate Lead Administrator will have the option of fixing the range of dates of the report for all users in the Directorate.

- PI Status on Programs, Grants, Contracts, CRADAS
- Awards / Recognition
  - National Academy Election
  - Society Fellowship
  - External Awards
  - LLNL Awards
- Publications
  - Refereed Journal Articles
  - LLNL Reports
  - Books/Book Chapters
  - Articles in Published Conference Proceedings
  - News Related Articles
  - Contributions to External Reports
- Presentations
  - Invited Talks
  - Briefings to External Parties
  - Other Presentations and Posters at Conferences and Workshops
- Professional Leadership and Service
  - Conferences/Workshops organized
  - Editor of a Book
  - Appointment to Editorial Role
  - Professional Society Leadership Positions / Committee Service
  - Participation in Advisory or Peer Review Capacity
  - Other
- Patents / Copyrights Issued
- Highlights

OUT-050 STATS shall provide a CV Report for an individual employee that is downloadable in MS Word format. Two format options shall be available: one listing all authors, and one providing a truncated list of authors (3 authors followed by et al). Data included in the CV shall be as follows:

- Name
- Education
- Work History
- PI Status on Programs, Grants, Contracts, CRADAS
- National Academy Election
- Society Fellowship
- External Awards
- LLNL Awards
- Refereed Journal Articles
- LLNL Reports
- Books/Book Chapters
- Articles in Published Conference Proceedings
- News Related Articles
- Contributions to External Reports
- Abstracts
- Invited Talks

- Briefings to External Parties
  - Other Presentations and Posters at Conferences and Workshops
  - Conferences/Workshops organized
  - Editor of a Book
  - Appointment to Editorial Role
  - Professional Society Leadership Positions / Committee Service
  - Participation in Advisory or Peer Review Capacity
  - Other
  - Patents
- OUT-055 STATS shall provide a CV Report for an individual employee that complies to an LDRD specified format for use in LDRD proposals. The format is shown in Appendix E.
- OUT-060 STATS shall provide a general report that displays all selected achievement type records included within the user's scope. Specific organizations (Departments, Divisions, Groups) within the user's scope may be selected to limit the returned data. The user may choose one of the four following parameters for filtering the data: 1) Only Approved, 2) Submitted but Unapproved, 3) All but Deleted, 4) Only Deleted. Achievement record types will be selectable parameters for this report. The report will be downloadable in MS Excel format.
- OUT-080 STATS shall NOT provide a Submission Statistics report similar to the one in the PAR system.
- OUT-090 STATS shall provide an All Statistics report that will enumerate total counts of all records that are not marked as 'deleted' for each employee within the user's scope. If development time exists, an optional filter of this data will enable the display of only 'approved' records. This report will include the following information:
- Name
  - PI Status on Programs, Grants, Contracts, CRADAS
  - National Academy Election
  - Society Fellowship
  - External Awards
  - LLNL Awards
  - Refereed Journal Articles
  - LLNL Reports
  - Books/Book Chapters
  - Articles in Published Conference Proceedings
  - News Related Articles
  - Contributions to External Reports
  - Abstracts
  - Invited Talks
  - Briefings to External Parties
  - Other Presentations and Posters at Conferences and Workshops
  - Conferences/Workshops organized
  - Editor of a Book
  - Appointment to Editorial Role
  - Professional Society Leadership Positions / Committee Service
  - Participation in Advisory or Peer Review Capacity
  - Other
  - Patents
- In addition, this report will include a Total column for each employee on the report. The report will be downloadable in MS Excel format.
- OUT-100 Summary reports for each Directorate shall be generated after each weekly automated download that identifies the Directorate-relevant articles (Journal and Conference Proceedings) along with associated base users in that Directorate. An automated email containing this Directorate summary



- and a list of any articles "orphaned" during the last download shall be sent weekly to users designated by the Directorate Lead Administrator role users.
- OUT-110 STATS shall provide an Orphan report that lists ISI downloaded Refereed Journal Articles and Articles in Published Conference Proceedings that have not been associated with an employee and have not been deleted. This report shall be accessible to all STATS users.
- OUT-120 STATS shall provide a report (available to anyone with appropriate scope) with the following specifications:
- Date range selection
  - Categories and Types selection
  - Short or full list of authors selection
  - All record set data of OUNs specified, consistent with the other specifications
  - Selected Format
    - MS Excel
    - MS Word in CV style by category and type, with appropriate citation formatting where appropriate. Data will not be separated based on author name.

### **3.2.5 Administration**

The goals of the Administration object are to provide maintenance functions and flexibility. To the extent possible, STATS shall provide functionality that enables flexible configuration for each directorate.

#### **3.2.5.1 Administration Functional Requirements**

- ADM-010 Users with Directorate Lead Administrative roles and those Administrative user that have been granted the Approval privilege shall be granted the privilege to modify the status of achievement records within their scope to "Approved", "Unapproved", or "Deleted".
- ADM-020 Users with Directorate Lead Administrative roles in STATS shall be granted the privilege to implement system configuration modifications for their Directorate.
- ADM-030 STATS shall provide a Journal Translation administration tool that will enable Directorate Lead Administrators to view / edit / delete entries in the Journal Translation Table. The table shall have four columns: 1) Full Journal Name used by ISI, 2) Caltech Journal Name Abbreviation, 3) ISI Impact Factor, and 4) Shunt Type (Refereed Journal Articles, Articles in Published Conference Proceedings, Abstracts, News Related Articles). Note that the Shunt Type is used to distinguish between Peer Reviewed and non-Peer Reviewed publications downloaded from ISI. This functionality is currently in the PAR Production system for PAT. This list shall be a Laboratory wide list and shall be editable by all Directorate Lead Administrators.
- ADM-040 STATS shall provide a report available to the Directorate Lead Administrators that displays an editable list of Proxy Users for a Directorate. The fields to be included are 1) Name, 2) OUN, and 3) Classification. This report shall be part of the Administration portion of STATS.
- ADM-050 STATS shall provide a report viewable by the Directorate Lead Administrators that displays a list of STATS users who have terminated from LLNL more than 12 months ago. Note that users will automatically be added to this list once the difference between the current date and their termination date exceeds 12 months. This functionality currently exists in the production PAR system for PAT.

### **3.2.6 Systems and Communication Requirements**

- COM-010 STATS shall provide user access via LLNL standard web browsers operating on systems that reside on LLNL's restricted unclassified Yellow network. Currently IE 6 for PCs and Mozilla 1.6 for Macintosh computers. Problems with other browsers reported by users will be recorded and addressed by the Steering Committee.

### **3.2.7 Security Requirements**

- SEC-010 STATS shall contain no classified information. All data in STATS will be at the SUI (Sensitive Unclassified Information) level or below.
- SEC-020 Access to STATS shall be restricted to users enrolled with a unique user name and password (LLNL OUN/PAC). Each user account enrolled in STATS shall be assigned to a person who is responsible for the use of the account.
- SEC-030 STATS shall enforce a 1 hour idle timeout, which will require the user to re-issue his or her username and password after being idle for 1 hour or more, to regain access to the system.
- SEC-040 Access to STATS data shall be controlled based on the user's privilege level (e.g. no access, read-only, update), organization and role.

### **3.2.8 System Performance Requirements**

- PERF-010 STATS shall be capable of supporting up to 50 users simultaneously. Additional user load may result in slower response of the application. This is dependent on the availability of the system architecture hardware.
- PERF-020 STATS shall be available for access on a 24 X 7 basis except when the system experiences a problem or must undergo necessary system maintenance.

### **3.2.9 Backup and Recovery Requirements**

- BKUP-010 STATS shall provide the capability to backup and restore the system data and software so as to minimize data loss in the event of a hardware or software failure.
- BKUP-020 Differential system backups shall occur nightly, with full system backups occurring at least monthly.
- BKUP-030 Full data backups shall occur nightly.
- BKUP-040 Redundant server hardware will be available to minimize downtime impact in case of catastrophic failure of the primary production servers.
- BKUP-050 Backup and recovery processes will be in place and tested at least once.

### **3.2.10 Hardware Requirements**

- HWFN-010 Hardware which houses the STATS system server shall support and reside on LLNL's Yellow 10-base-T Ethernet network.
- HWFN-020 STATS Server hardware shall be accessible from LLNL's Yellow backup servers, or support stand-alone backup capability.
- HWFN-030 STATS Server hardware shall support software functionality requirements for operating system, relational database management system, web server, and other server software.

### **3.2.11 Software Requirements**

- SWFN-010 STATS server operating system shall support multi-user (100) remote login access.
- SWFN-020 STATS server operating system shall support the selected relational database management system.
- SWFN-030 STATS server operating system shall support the selected web server software.
- SWFN-040 STATS server relational database management system shall allow multiple (100) simultaneous users to concurrently read a specific data element in the database.
- SWFN-045 STATS server relational database management system shall have the capability to lock specific data elements while they are being updated by a given user, so that other users will not see partially updated data sets.
- SWFN-050 STATS server relational database management system shall support Java DataBase Connectivity (JDBC) and Open DataBase Connectivity (ODBC).
- SWFN-060 STATS server relational database management system shall include an Application Programming Interface and support interaction with the selected web server software.
- SWFN-070 STATS server web server shall support interaction with the selected relational database management system software.
- SWFN-080 STATS will support of any modifications to LLNL's standard desktop configurations for client web browsers and will be prioritized with other maintenance requests by the Steering Committee.

### **3.2.12 Usability Requirements**

- USA-010 For any operation, if an error condition occurs, STATS shall, to the extent possible, issue an error message that accurately describes the condition and advises the user on how to proceed.
- USA-020 STATS shall provide a user guide.
- USA-040 STATS shall support a graphical user interface, with input accepted from the keyboard and/or mouse.
- USA-060 STATS graphical user interface shall be optimized for display on a 19" monitor capable of displaying 16 million colors at 1024x768 resolution.

## **3.3 Future Phase Requirements**

### **3.3.1 Future STATS Requirements**

- FPH-010 Achievement records may have optional LDRD number fields included
- FPH-020 Achievement records may have optional fields to include "LDRD Enabled", "PDRD Enabled", etc.
- FPH-030 STATS may provide a Missing Data report that indicates achievement records missing integrity critical data, such as payroll account data, OUN, etc.
- FPH-040 STATS may use data from the IM system as appropriate, based on defined data integrity standards.
- FPH-050 STATS may interface with PIP system for data exchange to maintain current, shareable data in both systems.

- FPH-060 STATS may interface with the IM and URP systems to update and share data
- FPH-060 STATS may include a Collaborations achievement record type.
- FPH-070 STATS may include pertinent reports that will enable searching for records with specified funding source criteria.
- FPH-080 STATS may update Citation data on a monthly basis.
- FPH-090 STATS may include Skills / Competency / Expertise information for users
- FPH-110 STATS shall include a keyword search capability to enable a query capability of achievement records
- FPH-120 STATS may provide an automated email notification to users when records have been added to their set of records
- FPH-130 STATS may include a fiscal year specification to accompany the program/project association
- FPH-140 STATS may provide an Administrative Scope report that lists all the users in their scope with the following data:
- Employee number
  - Last Name
  - First Name
  - Middle Initial
  - Payroll Account
  - OUN
  - Telephone extension
  - Building / Room
  - L-Stop
  - Job Classification
  - Appointment code (IN, FX, FP, etc)
  - Directorate affiliation
  - LLNL hire date?
  - Last transfer date?
  - Termination date?
  - Re-hire date?
  - PhD school?
  - PhD date?
  - Gender?
  - Ethnicity?
  - Citizenship?
- ? – possibly personnel sensitive data
- FPH-150 STATS may include the monetary amount associated with an LLNL award to enable directorates to track and report on the award amounts distributed during a given time period.
- FPH-160 STATS may include a report that provides an updated list of employees in a given Directorate, who have terminated within the last 12 months. The report name will be List of Recent Terminations and will be viewable by the Directorate Lead Administrator.

## 4 Technical Requirements

### 4.1 Development Requirements

Each system developer will require access to an Apple Macintosh system and a Windows XP system configured to pertinent aspects of LLNL's desktop standards in order to sufficiently test system operation and usability. At least one system developer will require database administrator privileges on the STATS server platform.

### 4.2 Technical Specifications

STATS will be implemented to work with Internet Explorer 6 browsers on Windows 2000 or higher and Mozilla 1.6 on Macintosh OS 10 or higher platforms, unless otherwise specified by the Steering Committee. Compatibility with other system configurations is not an STATS requirement and therefore will not be tested or supported.

### 4.3 Design Constraints

System Design must incorporate sufficient flexibility to accommodate capabilities anticipated in future phases of development. In addition, it is assumed that this application will have a lifetime of 10 years or more.

## 5 Glossary

Term	Definition
AIS	Administrative Information Systems
Java CAFÉ	Java CAFE (Costs, Accounts, Funding, and Effort) is a tool that allows resource managers and principle investigators to track and analyze costs, accounts, funding, and effort
DOD	United States Department of Defense
DOE	United States Department of Energy
IM	Information Management system
ISI	Institute of Scientific Information. A Thomson business, now part of Thomson Scientific
JDBC	A Java implementation of ODBC
LDRD	Laboratory Directed Research and Development
ODBC	Open Data Base Connectivity. A connectivity standard specification which defines how computer programs can access databases
PAR	PAT Achievement Records system
PDRD	Plant Directed Research and Development
PIMS	Personnel Information Management System
PIP	LLNL's People Information Project

## 6 Change History

Revision	Date	Author	Comments
0.1	Oct 17, 2005	Mark Piscotty	Initial draft
0.2	Nov 18, 2005	Mark Piscotty	Updated requirements based on facilitated requirements sessions.
0.3	Nov 30, 2005	Mark Piscotty	Updated requirements based on SRS review meeting, Nov 29, 2005. Comments incorporated from Rulon Linford.
0.4	Dec 14, 2005	Mark Piscotty	Updated requirements based on Steering Committee Meeting Dec 13, 2005.
0.5	Dec 22, 2005	Mark Piscotty	Updated Security and Intellectual Property Policies section (from Ken Jackson). Added Appendix E. Included updated requirements from Steering Committee meeting Dec 20, 2005. Updated user Roles/Privilege table in Appendix A. Removed "Historical" and "Authorized Users" sections from Outstanding Issues.
1.0	Jan 10, 2006	Mark Piscotty	Removed several items from the deliverables table, Table 1 - System Development Stages and Deliverables. Added Business Need section (written by Ken Jackson) Included edits from Rulon Lindford in email dated Jan 12, 2006.

## **7 Appendices**

**Appendix A – User Roles and Privileges**

**Appendix B – PAR Data Reporting Capability**

**Appendix C – PAR Data Categories, Types, and Data Fields**

**Appendix D – PAR Functionality Overview**

**Appendix E – Standardized LDRD Curriculum Vitae (FY06)**

**7.1 Appendix A – User Roles and Privileges**

Privileges		User Types		Admin Roles							
		Base User (author)	Proxy User (not author)	Group Admin	Division Admin	Department Admin	Directorate Admin	Directorate Lead Admin	Lab Wide Admin	Lab Wide Lead Admin	Master App Admin
1	View Approved data and generate reports for his/her scope	✓	O	✓	✓	✓	✓	✓	✓	✓	✓
2	View Unapproved data and generate reports for his/her scope	✓	O	✓	✓	✓	✓	✓		✓	✓
3	Enter / Edit data within his/her scope	✓	O	✓	✓	✓	✓	✓			✓
4	Authorized Editor (privileges 1,2, and 3) for Base Users assigned to him/her	O	O								✓
5	Assign any User to be an Authorized Editor for his/her data	✓									✓
6	Assign Group membership to a Base User within his/her scope				O	O	O	✓			✓
7	Approve Data for his/her scope			O	O	O	O	✓			✓
8	Matrix a Base User in his/her scope to other organizations							✓			✓
9	Assign a member of his/her scope to be an Admin for the same or a lower level scope							✓			✓
10	Assign privileges 6 and/or 7 to lower level Administrators in his/her scope							✓			✓
12	Assign any User privileges 1 and/or 2 for one or more Base Users in the Lead Admin scope							✓			✓
13	Add/Edit Special Authors Criteria, Pull-down Lists, Journal Translation Lists, Proxy List and Configuration Data for his/her scope							✓			✓
14	Add New Users within his/her Directorate to the system							✓			✓
15	Assign any User as a Lab Wide Admin or Lab Wide Lead Admin									✓	✓
16	Add/Edit/Delete records from the Orphan Organization									✓	✓

**O = optional privilege that may be granted to the user**



**Base User (author)**

- ✓ A user for which STATS data is maintained.
- ✓ Can view own data and generate reports from that data
- ✓ Can enter and edit own data
- ✓ Can associate applicable data entries by type, to other Base Users by specifying their OUN's.
- ✓ Is associated to his/her home Directorate, Department, Division and optionally Group.
- ✓ Can assign, one or more users of the system (regardless of the assignee's Directorate) to be an Authorized Editor\* for his/her data.
- ✓ Optional privileges that may be granted to a Base user
  - Can be assigned as an Authorized Editor\* for other Base Users in the system.
  - Can be given, READ ONLY access to all Approved and Unapproved data in one or more specified Directorates.
  - Can be given, READ ONLY access to all Approved data ONLY in one or more specified Directorates.

**\*An Authorized Editor for a Base User can perform the following for that User's data.**

- ✓ Can view approved and unapproved data and generate reports based on that data.
- ✓ Can enter and edit data.
- ✓ Can associate applicable data entries by type to other Base Users by specifying their OUN's.

**Proxy User (not author)**

- ✓ A user of the system for which data is NOT maintained
- ✓ Optional privileges that may be granted to a Proxy User
  - Can be assigned as an Authorized Editor\* for other Base Users in the system.
  - Can be given, READ ONLY access to all Approved and Unapproved data of specified Base Users in one or more specified Directorates.
  - Can be given, READ ONLY access to all Approved data ONLY of specified Base Users in one or more specified Directorates.

**Group Administrator**

- ✓ Authorized Editor\* for all members of his/her group.
- ✓ Generate Group Reports within scope
- ✓ Other privileges that may be granted by his/her Directorate Lead Admin
  - Approve Data for Base Users in his/her group.

**Division Administrator**

- ✓ Authorized Editor\* for all members of his/her division.
- ✓ Generate Division and Group Reports within scope
- ✓ Other privileges that may be granted by his/her Directorate Lead Admin
  - Approve Data for Base Users in his/her division.
  - Assign Group membership for Base Users in his/her division.

**Department Administrator**

- ✓ Authorized Editor\* for all members of his/her department.
- ✓ Generate Department, Division, and Group Reports within scope
- ✓ Other privileges that may be granted by his/her Directorate Lead Admin
  - Approve Data for Base Users in his/her department.
  - Assign Group membership for Base Users in his/her department.

**Directorate Administrator**

- ✓ Authorized Editor\* for all members of his/her directorate.
- ✓ Generate Directorate, Department, Division, and Group Reports within scope
- ✓ Other privileges that may be granted by his/her Directorate Lead Admin
  - Approve Data for Base Users in his/her directorate.
  - Assign Group membership for Base Users in his/her directorate.

**Directorate Lead Administrator**

- ✓ Authorized Editor\* for all members of his/her directorate.
- ✓ Assign Group membership for Base Users in his/her directorate.
- ✓ Can Approve Data for any Base User in his/her directorate.
- ✓ Generate Directorate, Department, Division, and Group Reports within scope
- ✓ Can assign any user to have READ ONLY access to all Approved and Unapproved data of any Base User in his/her directorate.
- ✓ Can assign any user to have READ ONLY access to all Approved data of any Base User in his/her directorate.
- ✓ Can assign any user in his/her directorate to be a Directorate, Department, Division, Group, or Directorate Lead Administrator.
- ✓ Can Add/Edit Pull-Down Lists, Journal Translation Lists, Proxy List and Configuration Data for his/her directorate.
- ✓ Can Add/Edit Special Authors Criteria for members of his/her directorate.
- ✓ Can add new Users within his/her Directorate to the system
- ✓ Other privileges that he/she may grant to Directorate, Department, Division or Group Administrators in his/her Directorate.
  - The ability to Approve Data for Base Users in the Administrator's scope.
  - The ability to Assign Group membership for Base Users in the Administrator's scope.

**Lab Wide Admin**

- ✓ Can view Approved data and Generate Reports using that data for all Base Users of the system.

**Lab Wide Lead Admin**

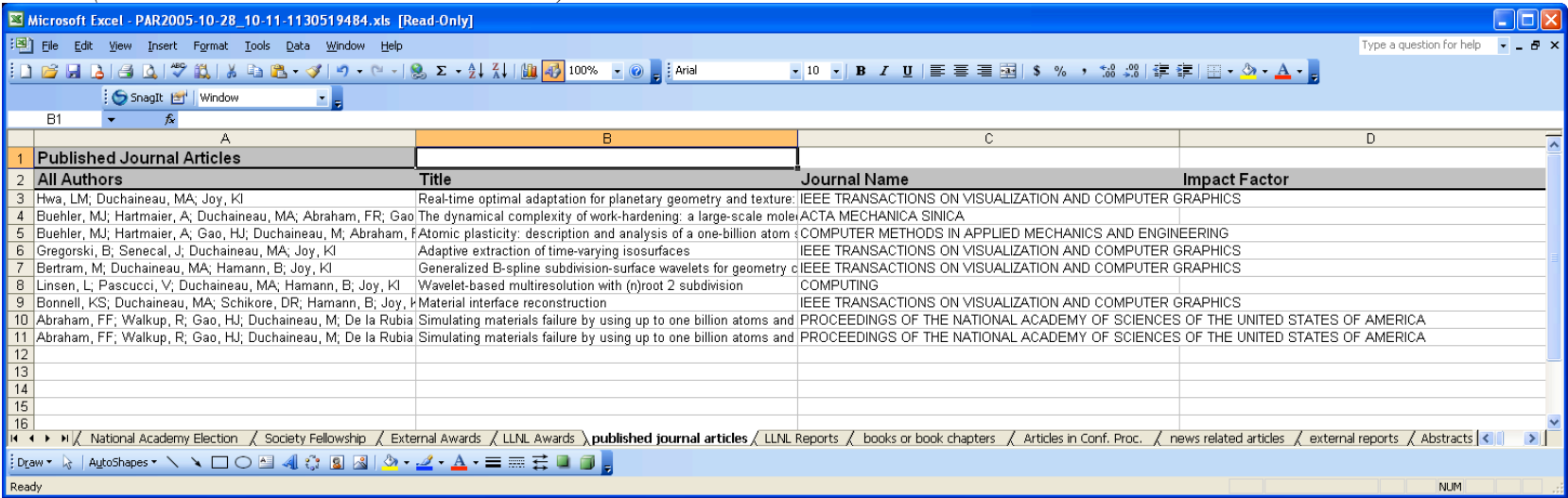
- ✓ Can view Approved and Unapproved data and Generate Reports using approved data for all users of the system
- ✓ Can Add/Edit/Delete records that are assigned to the Orphan Organization
- ✓ Shall be responsible for maintenance of the Orphan Organization

**Master App Administrator**

- ✓ Has complete access to all data and functionality in the system

7.2 Appendix B – PAR Data Reporting Capability

1. Individual Employee Report – Download in MS Excel format  
(View & Edit Data -> Create in Excel Format)



The screenshot shows a Microsoft Excel window titled "Microsoft Excel - PAR2005-10-28\_10-11-1130519484.xls [Read Only]". The spreadsheet contains a table with the following data:

Published Journal Articles	Title	Journal Name	Impact Factor
Hwa, LM; Duchaineau, MA; Joy, KI	Real-time optimal adaptation for planetary geometry and texture	IEEE TRANSACTIONS ON VISUALIZATION AND COMPUTER GRAPHICS	
Buehler, MJ; Hartmaier, A; Duchaineau, MA; Abraham, FR; Gao, HJ	The dynamical complexity of work-hardening: a large-scale molecular dynamics simulation	ACTA MECHANICA SINICA	
Buehler, MJ; Hartmaier, A; Gao, HJ; Duchaineau, M; Abraham, FR	Atomic plasticity: description and analysis of a one-billion atom molecular dynamics simulation	COMPUTER METHODS IN APPLIED MECHANICS AND ENGINEERING	
Gregorski, B; Senecal, J; Duchaineau, MA; Joy, KI	Adaptive extraction of time-varying isosurfaces	IEEE TRANSACTIONS ON VISUALIZATION AND COMPUTER GRAPHICS	
Bertram, M; Duchaineau, MA; Hamann, B; Joy, KI	Generalized B-spline subdivision-surface wavelets for geometry compression	IEEE TRANSACTIONS ON VISUALIZATION AND COMPUTER GRAPHICS	
Linsen, L; Pascucci, V; Duchaineau, MA; Hamann, B; Joy, KI	Wavelet-based multiresolution with (n)root 2 subdivision	COMPUTING	
Bonnell, KS; Duchaineau, MA; Schikore, DR; Hamann, B; Joy, KI	Material interface reconstruction	IEEE TRANSACTIONS ON VISUALIZATION AND COMPUTER GRAPHICS	
Abraham, FF; Walkup, R; Gao, HJ; Duchaineau, M; De la Rubia, J	Simulating materials failure by using up to one billion atoms and	PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA	
Abraham, FF; Walkup, R; Gao, HJ; Duchaineau, M; De la Rubia, J	Simulating materials failure by using up to one billion atoms and	PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA	

2. Sample Appraisal Report – Printable Web Page (no download capability)  
(View & Edit Data -> Create Appraisal Report)

PAR Appraisal Report - Mark Duchaineau

from 06/2004 to 05/2005

• Refereed Journal Articles (indicate status: submitted, accepted, published. Also whether in print journal)										
All Authors	Article Title	Journal Name	Volume	Page Number	Month	Year	Status	Funds	From ISI	Entry Approved?
Buehler, MJ; Hartmaier, A; Duchaineau, MA; Abraham, FR; Gao, HJ	<a href="#">The dynamical complexity of work-hardening: a large-scale molecular dynamics simulation</a>	ACTA MECHANICA SINICA	21	103-111	04	2005	P		Yes	<a href="#">Approve</a>
Buehler, MJ; Hartmaier, A; Gao, HJ; Duchaineau, M; Abraham, FR	<a href="#">Atomic plasticity: description and analysis of a one-billion atom molecular dynamics simulation</a>	COMPUTER METHODS IN APPLIED MECHANICS AND ENGINEERING	193	5257-5282		2004	P		Yes	<a href="#">Approve</a>
Gregorski, B; Senecal, J; Duchaineau, MA; Joy, KI	<a href="#">Adaptive extraction of time-varying isosurfaces</a>	IEEE TRANSACTIONS ON VISUALIZATION AND COMPUTER GRAPHICS	10	683-694	11	2004	P		Yes	<a href="#">Approve</a>

**3. Sample CV Report – Download in MS Word format****[ NOTE: 2 options – 1) All Authors and 2) Truncated list with et al ]***(View & Edit Data -> Create CV)***Mark Duchaineau**

Center for Applied Scientific Computing (CASC)  
Physics and Applied Technology Directorate  
Lawrence Livermore National Laboratory

Phone:

Email: [duchaineau1@llnl.gov](mailto:duchaineau1@llnl.gov)**Publications:**Refereed Journal Articles:

Hwa, LM; Duchaineau, MA; Joy, KI, "Real-time optimal adaptation for planetary geometry and texture: 4-8 tile hierarchies", *IEEE TRANSACTIONS ON VISUALIZATION AND COMPUTER GRAPHICS*, **11**, 355-368, (2005).

Buehler, MJ; Hartmaier, A; Duchaineau, MA, *et al.* "The dynamical complexity of work-hardening: a large-scale molecular dynamics simulation", *ACTA MECHANICA SINICA*, **21**, 103-111, (2005).

Buehler, MJ; Hartmaier, A; Gao, HJ, *et al.* "Atomic plasticity: description and analysis of a one-billion atom simulation of ductile materials failure", *COMPUTER METHODS IN APPLIED MECHANICS AND ENGINEERING*, **193**, 5257-5282, (2004).

Gregorski, B; Senecal, J; Duchaineau, MA, *et al.* "Adaptive extraction of time-varying isosurfaces", *IEEE TRANSACTIONS ON VISUALIZATION AND COMPUTER GRAPHICS*, **10**, 683-694, (2004).

#### 4. General Report by Organization (Division Level) for selected categories/type of data – Download in MS Excel format

*Administration – Download Options [only approved, submitted but unapproved, all but deleted, only deleted]*

##### 4.1 Category: PI Status, Type: PI Status

1	PI Status on Programs, Grants, Contracts, and CRADAs											
2	Title	Status	Total Funds	Cat1 Name	Cat2 Name	Cat3 Name	Cat4 Name	Cat5 Name	Year	PAT PERSON	Actt No	Re
3	PAT PMC DISTRIBUTION FY01	O	-2885 blank	blank	blank	PMC Collect	PMC	Burden	2006		3775-01	Davi
4	V DIV - PROGRAM MANAGEMENT	O	162 blank	blank	blank	V Division	PMC	Burden	2006	OSTERHELD, ALBERT L	3725-61	Torr
5	V DIV - PROGRAM DEVELOPMENT / DIVISION OFFICE	O	0 blank	blank	blank	V Division	PMC	Burden	2006		3725-62	Torr
6	PAT PMC STAFF	O	645 blank	blank	blank	AD Office	PMC	Burden	2006		3725-01	Davi
7	CAFE FOR PAT	C	0 blank	blank	blank	AD Office	PMC	Burden	2006		3725-05	Davi
8	FE - ADMINISTRATION & CLERICAL SALARY	O	0 blank	blank	blank	FEP	PMC	Burden	2006		3725-22	Chu
9	FE - PM TRAVEL	O	0 blank	blank	blank	FEP	PMC	Burden	2006		3725-26	Chu
10	FE - CONFERENCES/WORKSHOPS	C	0 blank	blank	blank	FEP	PMC	Burden	2006		3725-30	Chu
11	FE - SUPPORT PERSONNEL SALARY	O	0 blank	blank	blank	FEP	PMC	Burden	2006		3725-23	Chu
12	V DIV - CLERICAL	O	0 blank	blank	blank	V Division	OPC	Burden	2006	OSTERHELD, ALBERT L	4268-63	Torr
13	V DIV - PERSONNEL MANAGEMENT	O	523 blank	blank	blank	V Division	OPC	Burden	2006	OSTERHELD, ALBERT L	4268-61	Torr
14	PAT OPC DISTRIBUTION FY01	O	-8103 blank	blank	blank	OPC Collect	OPC	Burden	2006		4293-01	Davi
15	IGPP - TRR SUPPORT	O	0 blank	blank	blank	Institutes	PMC	Burden	2006	BRADLEY, JOHN P	3725-58	Torr
16	IGPP - PROGRAM MANAGEMENT	O	47 blank	blank	blank	Institutes	PMC	Burden	2006	BRADLEY, JOHN P	3725-56	Torr

##### 4.2 Category: Publications, Type: Refereed Journal Articles

1	Published Journal Articles											
2	All Authors	Title	Journal Name	Status	Eprint	Volume Number	Page/Article Number	Month	Year	FirstAuthor?	Funding Source	Author Name
3	Yi, Q; Quinlan, D	Applying loop optimizations to obje	LECTURE NOTES IN COMPUTER P			3602	253-267		2005	N		quinlan1
4	Ngu, AHH; Buttler, D; Critchlow, T	Automatic generation of data types	LECTURE NOTES IN COMPUTER P			3615	266-274		2005	N		buttlr1
5	Schulz, M; May, J; Gyllenhaal, J	DynTG: A tool for interactive, dynar	LECTURE NOTES IN COMPUTER P			3515	140-148		2005	N		may10
6	Pon, RK; Critchlow, T	Performance-oriented privacy-pres	LECTURE NOTES IN COMPUTER P			3615	240-256		2005	N		critchlow1
7	Mirin, AA; Sawyer, WB	A scalable implementation of a finit	INTERNATIONAL JOURNAL OF HIP			19	203-212		2005	Y		mirin1
8	Henshaw, WD	On multigrid for overlapping grids	SIAM JOURNAL ON SCIENTIFIC CP			26	1547-1572		2005	Y		henshaw1
9	Schulz, M; May, J; Gyllenhaal, J	DynTG: A tool for interactive, dynar	LECTURE NOTES IN COMPUTER P			3515	140-148		2005	Y		schulz6
10	Baker, AH; Jessup, ER; Manteuffel	A technique for accelerating the co	SIAM JOURNAL ON MATRIX ANAL			26	962-984		2005	Y		baker59
11	Ngu, AHH; Buttler, D; Critchlow, T	Automatic generation of data types	LECTURE NOTES IN COMPUTER P			3615	266-274		2005	N		critchlow1

5. Report up to one type of data for each category by employee and year – Download in MS Excel format  
**[ Should be modified to include any type of record, for a set of authors, and for a date range ]**  
 (Administration -> Search option)

1	Published Journal Articles																
2	All Authors	Title	Journal Name	Status	Eprint	Volume	Page/Ar	Month	Year	FirstAut	Funding	Author I	Co-auth	UCRL	Cited	Referen	
3	Buehler, MJ; Hartmaier, A;	Atomic plasticity: description and ana	COMPUTER METHODS IN APPLIED MECH	P		193	5257-5282		2004	N		duchainea		Max Planck Inst Met	1	89	10
4	Gregorski, B; Senecal, J;	[Adaptive extraction of time-varying iso	IEEE TRANSACTIONS ON VISUALIZATION	P		10	683-694	11	2004	N		duchainea		Lawrence Livermore N	0	24	10
5	Bertram, M; Duchaineau, N	Generalized B-spline subdivision-surfa	IEEE TRANSACTIONS ON VISUALIZATION	P		10	326-338	5	2004	N		duchainea		Univ Kaiserslautern, F	0	44	10
6	Linsen, L; Pascucci, V; Du	Wavelet-based multiresolution with (n)	COMPUTING	P		72	129-142	4	2004	N		duchainea		Univ Calif Davis, Dept	0	12	10
7	Linsen, L; Pascucci, V; Du	Wavelet-based multiresolution with (n)	COMPUTING	P		72	129-142	4	2004	N		pascucci		Univ Calif Davis, Dept	0	12	10
8																	
9																	
10																	
11																	

6. Submission Statistics – Web Page output (no download capability)  
**[ This report will not be included in STATS ]**  
 (Administration – View Submission Statistic)

#### Submission Statistic

Name	Journal Article	Book/Book chapters	Articles in Conf. Proc	Talks	Briefing	National Academy election	Society Fellowship	External Awards	LLNL Awards	Conf./Workshop organized	Editorial Role	Society Leadership...	Advisory and Peer Review	Other	Patent	Total
mcgraw1	1		1							29	2		7			40
Total	1	0	1	0	0	0	0	0	0	29	2	0	7	0	0	40

## 7. View All Statistics for a specified time frame – Download in MS Excel format

(Administration -> View All Statistic -> View in Excel)

Microsoft Excel - PAR2005-10-28\_11-30-1130524257.xls [Read-Only]

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y
	Name	Education	Work History	National Academy Election	Society Fellowship	External Awards	LLNL Awards	Refereed Journal Articles	LLNL Reports	Books	Articles in Published Conference Proceedings	News Related Articles	Contributions to External Reports	Abstracts	Invited Talks	Briefings to External Parties	Other Presentations and Posters at Conferences and Workshops	Conferences/Workshops Organized	Editor of a Book	Appointment to Editorial Role	Professional Society Leadership Positions/Committee Service	Participation in Advisory or Peer Review Capacity	Other	Patents/Copyrights Issued	Total
1	abdulla1							1																	1
2	abed1																								0
3	ahn1							1																	1
4	aimonetti1																								0
5	alano1																								0
6	aldrich4																								0
7	allen17							1																	1
8	allen24																								0
9	alumbaugh2																								0
10	anderson110							1																	1
11	anderson128																								0
12	anderson208							3																	3
13	anderson28																								0
14	apodaca4																								0
15	aquilino1																								0
16	arnold2																								0

Ready NUM

### 7.3 Appendix C – PAR Achievement Record Categories, Types and Data Fields

Publications			
Type	Attributes	Field Type	Field Size
Referred Journal Articles			
	First Author?	Y/N Pull Down	1
	Status (Published, Accepted, Submitted)	Radio Button Selection	10
	ePrint	Y/N Checkbox	1
	Was part of the work reported in this publication funded by any of the following? (LDRD, PDRP)	Multiple Checkboxes	10
	Article Title	Free Form Text	1500
	Journal	Pull Down List	number (id)
	Volume Number	Free Form Text	30
	Page Number or Article Number	Free Form Text	15
	Year	Pull Down List	4
	Month	Pull Down List	10
	All Authors	Free Form Text	4000 x 2
	Co-Author Organizations	Free Form Text	4000 x 2
	UCRL#	Free Form Text	100
LLNL Reports			
	First Author?	Y/N Pull Down	1
	Was part of the work reported in this publication funded by any of the following? (LDRD, PDRP)	Multiple Checkboxes	10
	Report Title	Free Form Text	1500
	Report Classification	Pull Down List	number (id)
	Sponsor of Report	Pull Down List	number (id)
	Volume Number	Free Form Text	30
	Page Number or Article Number	Free Form Text	15
	Year	Pull Down List	4
	Month	Pull Down List	10
	All Authors	Free Form Text	4000 x 2
	Co-Author Organizations	Free Form Text	4000 x 2
	UCRL# or UCID#	Free Form Text	100
Books			
	First Author?	Y/N Pull Down	1
	Type of Document Authored	Pull Down List	number



			(id)
	Was part of the work reported in this publication funded by any of the following? (LDRD, PDRP)	Multiple Checkboxes	10
	Title of Book	Free Form Text	2500
	Editors	Free Form Text	100
	Published or Copyright Year	Pull Down List	4
	Published or Copyright Month	Pull Down List	15
	Publisher	Free Form Text	100
	Publisher's Location (City and State)	Free Form Text	100
	Name of Chapter or Description	Free Form Text	4000
	Pages Contributed	Free Form Text	100
	All Authors	Free Form Text	4000
	Co-Author Organizations	Free Form Text	4000
	UCRL#	Free Form Text	100
<b>Article in Published Conference Proceeding</b>			
	First Author?	Y/N Pull Down	1
	Articles Peer Reviewed?	Y/N Checkbox	1
	Article Title	Free Form Text	1500
	Was part of the work reported in this publication funded by any of the following? (LDRD, PDRP)	Multiple Checkboxes	10
	Name of Conference	Free Form Text	250
	Location (City and State or Country)	Free Form Text	100
	Start Date of Conference (Month/Year)	Pull Down List	15/4
	Journal Name, or Conference Series, or Title of Conference Proceedings	Pull Down List	number (id)
	Volume Number	Free Form Text	100
	Page Number	Free Form Text	100
	Published Year	Pull Down List	4
	Published Month	Pull Down List	15
	All Authors	Free Form Text	4000
	Co-Author Organizations	Free Form Text	4000
	UCRL#	Free Form Text	100
	Publisher	Free Form Text	100
	Web Site URL	Free Form Text	500
<b>News Related Articles</b>			
	Article Title	Free Form Text	1500
	Was part of the work reported in this publication funded by any of the following? (LDRD, PDRP)	Multiple Checkboxes	10

	Type of Publication	Pull Down List	number (id)
	Name of Publication	Free Form Text	200
	Page Number	Free Form Text	15
	All Authors	Free Form Text	4000
	Year	Pull Down List	4
	Month	Pull Down List	10
	Day	Pull Down List	10
	UCRL#	Free Form Text	100
<b>Contributions to External Reports</b>			
	Report Title	Free Form Text	1500
	Title or Description of Contribution	Free Form Text	500
	Sponsor of the Report	Pull Down List	
	Publisher of Report	Free Form Text	number (id)
	Report Number	Free Form Text	50
	All Authors	Free Form Text	4000
	Year	Pull Down List	4
	Month	Pull Down List	10
	Admin Comments	Free Form Text	not stored
<b>Abstracts</b>			
	Title of Talk or Poster	Free Form Text	1500
	Journal Name, Conference Series, or Title of Conference Proceedigs	Pull Down List	number (id)
	Volume Number	Free Form Text	50
	Page Number or Abstract Number	Free Form Text	50
	Year	Pull Down List	4
	Month	Pull Down List	10
	All Authors	Free Form Text	4000
	UCRL#	Free Form Text	100

Educational and Work History			
Type	Attributes	Field Type	Field Size
<b>Education Data</b>			
	Name of University	Free Form Text	300
	Location (City and State or Country)	Free Form Text	100
	Dates Attended (From and To)	Pull Down List	
	Degree Earned	Free Form Text	40
	Date Degree Earned	Pull Down List	
	Thesis Title (if applicable)	Free Form Text	1000

	Is Data Released	T/F Checkbox	1
<b>Work History</b>			
	Employer Name	Free Form Text	300
	Location (City and State or Country)	Free Form Text	150
	Job Title	Free Form Text	100
	Date (From)	Pull Down List	
	Date (To)	Pull Down List	

Awards/Recognition			
Type	Attributes	Field Type	Field Size
<b>National Academy Election</b>			
	Name of Academy	Pull Down List	12
	When Awarded (Year)	Pull Down List	4
	Citation	Free Form Text	1500
	Is Data Released	T/F Checkbox	1
<b>Society Fellowship</b>			
	Society	Pull Down List	12
	When Awarded (Year)	Pull Down List	4
	Citation	Free Form Text	1500
	Is Data Released	T/F Checkbox	1
<b>External Awards</b>	Name of Award	Pull Down List	1500
	Granting Organization	Pull Down List	12
	When Awarded	Pull Down List	4
	Co-Recipients	Free Form Text	4000
	Co-Recipient Organizations	Free Form Text	4000
	Citation or Purpose of the Award	Free Form Text	1500
	Is Data Released	T/F Checkbox	1
<b>LLNL Awards</b>	Name of Award	Pull Down List	1500
	Granting Organization (within LLNL)	Pull Down List	
	When Awarded	Pull Down List	4
	Co-Recipients	Free Form Text	4000
	Co-Recipient Organizations	Free Form Text	4000
	Citation or Purpose of the Award	Free Form Text	1500
	Is Data Released	T/F Checkbox	1

Presentations			
Type	Attributes	Field Type	Field Size
<b>Invited Talks</b>			

	Was part of the work reported in this publication funded by any of the following? (LDRD, PDRP)	Multiple Checkboxes	10
	Talk Title	Free Form Text	1500
	Where Presented (category)	Pull Down List	number (id)
	Where Presented (location)	Free Form Text	1500
	Year	Pull Down List	
	Month	Pull Down List	
	UCRL#	Free Form Text	100
<b>Briefings to External Parties</b>			
	Briefing Title	Free Form Text	1500
	To Whom (Type of Org)	Pull Down List	number (id)
	Organization Name	Free Form Text	1500
	Where Presented (category)	Pull Down List	number (id)
	Where Presented (location)	Free Form Text	1500
	Year	Pull Down List	
	Month	Pull Down List	
	UCRL#	Free Form Text	100
<b>Other Presentations and Posters at Conferences and Workshops</b>			
	Presentation/Poster Title	Free Form Text	1500
	Type of Presentation	Pull Down List	number (id)
	Name of Conference or Workshop	Free Form Text	200
	Location (City and State or Country)	Free Form Text	200
	Year	Pull Down List	4
	Month	Pull Down List	10
	Is Data Released	T/F Checkbox	1

Professional Leadership and Service			
Type	Attributes	Field Type	Field Size
<b>Conferences/Workshops Organized</b>			
	Type (conference, workshop)	Pull Down List	15
	Title of Conference/Workshop	Free Form Text	1500
	City and State or Country	Free Form Text	1500
	Start Date Month	Pull Down List	
	Start Date Year	Pull Down List	
	Role of Organizer	Pull Down List	number (id)
	Conference/Workshop URL	Free Form Text	100

	Is Data Released	T/F Checkbox	1
<b>Editor of a Book</b>			
	Type of Book	Pull Down List	number (id)
	Title of Book	Free Form Text	300
	Published or Copyright Year	Pull Down List	number (id)
	Published or Copyright Month	Pull Down List	10
	Publisher	Free Form Text	150
	Names of all Editors	Free Form Text	300
	Institution of Co-Editors	Free Form Text	300
<b>Appointment to Editorial Role</b>			
	Journal Title	Free Form Text	1500
	Journal	Pull Down List	number (id)
	Role	Pull Down List	number (id)
	Years Active (From, To)	Pull Down List	4, 4
	Is Data Released	T/F Checkbox	1
<b>Professional Society Leadership Positions/Committee Service</b>			
	Society	Pull Down List	number (id)
	Society Division	Pull Down List	number (id)
	Role	Pull Down List	number (id)
	Years Active (From, To)	Pull Down List	4, 4
	Is Data Released	T/F Checkbox	1
<b>Participation in Advisory or Peer Review Capacity</b>			
	Organization being Advised		number (id)
	Committee Name or Type of Proposal		1500
	Role		number (id)
	Years of Service (From, To)	Pull Down List	4, 4
	Is Data Released	T/F Checkbox	1
<b>Other</b>			
	What		1500
	Years of Service (From, To)	Pull Down List	4, 4
	Is Data Released	T/F Checkbox	1

Patents/Copyrights			
Type	Attributes	Field Type	Field Size
<b>Patents/Copyrights Issued</b>			
	Type	Pull Down List	20
	Status	Radio Button Selection	50
	Title	Free Form Text	1500

	Name of Inventors	Free Form Text	1500
	Organization of Co-Inventors	Free Form Text	1500
	Year	Pull Down List	4
	Month	Pull Down List	15
	Patent or Copyright Number	Free Form Text	100
	LLNL Record of Invention Number (ILNO)	Free Form Text	50

## 7.4 Appendix D – PAR Functionality Overview

### View and Edit Data



View & Edit Data for

[Create CV](#) | [Create CV \(w/ all authors\)](#) | [Create in Excel Format](#) | [Create Appraisal Report](#) | [Organization Change](#)

### Submission for Oscar Nazario

1. An employee can view and edit (update and delete) their own data.
  - a. In some cases they can move entries within a category to another type of entry.
  - b. If the entry is modified and was previously approved, it becomes unmarked requiring new approval.
2. An employee can create a CV or a CV w/all authors in MS Word format.
3. An employee can create a report in MS Excel format of their data.
4. An employee can create an Appraisal Report (printable web page)



5. An employee can change his organization information.

If this information is correct, please don't forget to fill in the rest of the form at the bottom of the page and **Save** your changes. If this is incorrect, please check the Official ID or Employee Number you entered and search again.

**First Name:**   
**Last Name:**   
**Official ID:** (if not llnl employee, please assign the user a official id), so, he can get in   
**Phone:**   
**Email:**   
**Division (Please assign one):**   
**Group (Please assign one):**

## Submit New Data

View & Edit Data
 Submit New Data
 PAR Home
 External Links
 Account Maintenance
 End Session

Editing Data for Oscar Nazario

Create Data for Oscar Nazario Switch Users

### Submit New Data to PAR

Data categories preceded by a "+" are included in your annual personnel appraisal. Categories preceded by a "\*" are discretionary, but may be included in your appraisal, and to PAT - Click links below to start submission.

#### Educational and Work History

- \* **Education** (include degrees earned and thesis titles)
- \* **Work History** (include present external appointments and LLNL position)

#### PI Status

- + **PI Status on Programs, Grants, Contracts, and CRADAs** (No entry required - please comment on data in View & Edit screen of

#### Awards/Recognition

- + **National Academy Election**
- + **Society Fellowship**
- + **External Awards**
- + **LLNL Awards**

#### Publications

- + **Refereed Journal Articles** (indicate status: submitted, accepted, published. Also whether in eprint journal)
- + **LLNL Reports** (reports and papers that cannot or will not appear in journals or conference proceedings -- abstracts are not to be included)
- + **Books** (include entries in handbooks, encyclopedias, etc. -- conference proceedings that are in book form are not to be included here, but in the Articles in Press)
- + **Articles in Published Conference Proceedings** (include only refereable papers -- vignette presentations and abstracts (1 page or less)
- + **News Related Articles** (professional society magazines, newspapers, popular press, project newsletters)
- + **Contributions to External Reports** (reports and papers published external to LLNL that will not appear in journals or conference proceedings)
- \* **Abstracts** (for talks and poster papers that will not be published as papers in journals or conference proceedings)

- The employee selects each type of data via hyperlink (i.e. Refereed Journals, LLNL Awards, etc.), and a data entry form with the specific attributes for that type of data is displayed.
- The employee can add one or more entries of the same type.
- All entries are marked as employee submissions. (this info is used to generate statistics).
- Entries that require approval are set to not yet approved (unmarked).



**Account Maintenance****PAR Personnel Account Maintenance Page**

**Note:** If you notice any missing or extra information in the lists below, please contact Pauline Gu

**Authorized Proposal Editors**

You will be able to declare certain people as authorized editors for the information of which you are the Principal Investigator. This allows you to have other people help you with editing the texts online. Below the Authorized Editors for PAR submittal in which you are the PI are listed so that you may add and remove them.

**Your Authorized Editors**

Remove	Name	Email	Phone
<input type="checkbox"/>	Joseph Pascual	<a href="mailto:pascual2@llnl.gov">pascual2@llnl.gov</a>	42534
<input type="checkbox"/>	James McGraw	<a href="mailto:mcgraw1@llnl.gov">mcgraw1@llnl.gov</a>	
<input type="checkbox"/>	Erika Tarte	<a href="mailto:tarte2@llnl.gov">tarte2@llnl.gov</a>	44311
<input type="checkbox"/>	Mark Piscotty	<a href="mailto:piscotty3@llnl.gov">piscotty3@llnl.gov</a>	
<input type="checkbox"/>	Oscar Nazario	<a href="mailto:nazario1@llnl.gov">nazario1@llnl.gov</a>	30918
<input type="checkbox"/>	David Gutierrez	<a href="mailto:gutierrez3@llnl.gov">gutierrez3@llnl.gov</a>	
<input type="checkbox"/>	Harry Briley	<a href="mailto:briley1@llnl.gov">briley1@llnl.gov</a>	29238

**Add Authorized Editor**

Enter the Official ID's of the people you wish to add as Authorized Editors to your proposals below. Separate multiple people with commas.

(example: gu4, linford1)

**You are an Authorized Editor For:**

Note that you may not remove yourself as an Authorized Editor, you must ask the person in the list below to remove you.

Name	Email	Phone
Joseph Pascual	<a href="mailto:pascual2@llnl.gov">pascual2@llnl.gov</a>	42534
Linda Fischer	<a href="mailto:fischer4@llnl.gov">fischer4@llnl.gov</a>	
Thomas Coward	<a href="mailto:coward1@llnl.gov">coward1@llnl.gov</a>	
Steven Ashby	<a href="mailto:ashby1@llnl.gov">ashby1@llnl.gov</a>	

- An employee can add/delete entries from his authorized editors list (proxy's)
- An employee can view the list of employee's for which he/she is an authorized editor.

## Functions available to an Administrator

### Administrative Page

#### 1. General Report

This page allows the administrator to view PAR submitted data, and allows the administrator to control the pull down lists.

Please check the category boxes in which you would like to view or download the PAR data

[Search](#) | [Admin Maintenance](#) | [Special Personnel Admin](#) | [Highlights](#) | [View Comments](#) | [View Submission Statistic](#) | [View All Statistic](#) | [Special Author AKA](#)

**For a PAT-Wide report, leave the Group and Division pull downs in their default position.**

**For a Group Report:**  **For a Division-Wide Report:**

#### Categories

- All ☐
- Educational and Work History 

Education  
Work History
- PI Status 

PI Status
- Awards/Recognition 

National Academy Election  
Society Fellowship  
External Awards  
LLNL Awards
- Publications: 

Refereed Journal Articles  
LLNL Reports  
Books/Book Chapters  
Articles in Published Conference Proceedings
- Presentations: 

Invited Talks  
Briefings to External Parties  
Other Presentations and Posters at Conferences and Workshops

- The administrator can generate directorate, division or group level reports for ALL categories or a subset of categories/types of data in MS Excel format. This report is for all the data in the system (i.e. no time frame is specified)
- The administrator can download this data by status;
  - Download only APPROVED data
  - Download only SUBMITTED (not yet approved) data
  - Download only DELETED (records marked deleted are not assigned to any author, but the data is maintained.)
  - Download APPROVED and SUBMITTED data.

## 2. Search

### PAR Data Search and Report Generation

NOTE: The result of the search is only for those information matching the searching criteria, AND they are APPROVED and they are not DELETED.

Please enter your search criteria below and click "Generate Report" to view information from the PAR database.

**Select Search Category:**

Education and Work History	Please select one . ▾
PI Status	Please select one . ▾
Awards/Recognition	Please select one . ▾
Publications:	Please select one . ▾
Presentations:	Please select one . ▾
Professional Leadership and Service	Please select one . ▾
Patents/Copyrights	Please select one . ▾

Last Name:

Year:

- Administrator can select ONLY one type of entry from each category, specify author and year and generate downloadable report in MS Excel format.

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## 3. Administrator Account Maintenance and Special Personnel Page

- The master administrator(s) can add/delete one or more employees that serve as directorate administrators, division administrators or group administrators.
  - i. These administrators automatically become authorized editors (proxy's) for their respective organization scope.
  - ii. These administrators have access to reports that include all employees within their organization scope.
- The master administrator can add/delete divisions and groups. Divisions are associated with their respective payroll account.
- The master administrator can add employees to the system and assign them to a division and group. He/she can also modify existing user's division and group information.

#### 4. View Submission Statistics

##### Submission Statistic

Name	Journal Article	Book/Book chapters	Articles in Conf. Proc	Talks	Briefing	National Academy election	Society Fellowship	External Awards	LLNL Awards	Conf./Workshop organized	Editorial Role	Society Leadership...	Advisory and Peer Review	Other	Patent	Total
mcgraw1	1		1							29	2		7			40
<b>Total</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>29</b>	<b>2</b>	<b>0</b>	<b>7</b>	<b>0</b>	<b>0</b>	<b>40</b>

- The administrator can view submission statistics for the employees in their respective domain.
- Once again, submissions are employee manual entries that have been APPROVED.
- No download capability of these statistics is available.

#### 5. View All Statistics

From Jan 2004 To Dec 2005 View View in Excel

##### All Statistic

			Awards/Recognition				Publications						Presentations			Professional Leadership and Service								
Name	Educ	Work Hist	Natl Acad Elec	Society FltwsHp	Ext Award	LLNL Award	Jrnl Artcl	LLNL Report	Books	Artcl Publ Conf Proc	News Rel Artcl	Ext Report	Abstract	Invite Talks	Brief Ext Party	Other Unpub	Conf Wrkshp Org	Book Editor	Appt Editor Role	Prof Society Lead Comm	Advsry Peer Review Comm	Other	Patent Cpyrght Issued	Total
abdulla1							1																	1
abed1																								0
ahn1							1																	1
aimonetti1																								0
alano1																								0
aldrich4																								0
allen17							1																	1
allen24																								0

- The administrator can view or download in MS Excel format all statistics for a specified time frame (month/year to month/year). These represent the total count of APPROVED entries by employee broken down by type.

#### 6. Other Administrative Functions

- The master administrator, can add/edit/delete entries in the Special Authors AKA list. This list is used in the processing of the ISI Publications data for better filtering of entries. ISI data is downloaded and processed weekly via a automated process.
- The master administrator is responsible for maintaining (add/edit/delete) the application pull-down lists used in the data entry process.
- The master administrator can add/edit Highlights (general items of interest for the application users).

Journal
Where Presented for Invited Talks
Society in Society Fellowship
Name of Award in External Awards
Granting Organization in LLNL Awards
Role of Organizer in Conferences/Workshops Organized
Publication Type in Editorial Role
Role in Editorial Role
Society Division in Professional Society Leadership Positions/Committee Service
Role in Professional Society Leadership Positions/Committee Service
Role in Participation on Advisory and Peer Review Committees

## **7.5 Appendix E – Standardized LDRD Curriculum Vitae (FY06)**

### Curriculum Vitae for **John H. Doe**

**PRESENT POSITION:**

Institute of Geophysics and Planetary Physics  
Lawrence Livermore National Laboratory  
L-413  
Livermore, CA 94550  
(925) 423-8124

**PERSONAL:**

Citizenship: U.S.

**PROFESSIONAL MEMBERSHIPS:**

American Physical Society  
American Astronomical Society

**EDUCATION:**

12/84-10/87, University of Chicago, Chicago, IL, Ph.D. (Astrophysics)  
09/83-12/84, University of Chicago, IL, M.S. (Astrophysics)  
08/79-05/83, Rice University, Houston, TX, B.A. (Physics)

**PREVIOUS RESEARCH EXPERIENCE:**

Participating Student Guest, Lawrence Livermore National Laboratory, Livermore, CA,  
06/86-10/86

**HONORS:**

Graduated Summa Cum Laude (Rice University 5/83)  
Member:     Phi Beta Kappa  
              Sigma Pi Sigma (National Physics Honors Society)  
              Pi Delta Phi (National French Honors Society)

**GENERAL RESEARCH INTERESTS:**

Nuclear Astrophysics, Stellar Structure, High Temperature Plasmas

**PUBLICATIONS AND OTHER PAPERS:**

(Please list no more than ten that are relevant to this proposal.)