



Fermilab

MEMORANDUM OF UNDERSTANDING

Between

**The Fermilab Computing Division
and
Research Computing Facility, University of Nebraska-Lincoln
For**

Support of Gratia

April 2009
Version 1.05

INTRODUCTION

This is a memorandum of understanding between the Fermi National Accelerator Laboratory Computing Division (CD) and Nebraska University. The memorandum is intended for the purposes of clarifying the roles and responsibilities of the two parties in the support of Gratia extensions. It reflects an arrangement that currently is satisfactory to the parties; however, it is recognized and anticipated that changing circumstances of the evolving research program may necessitate revisions. The parties agree to negotiate amendments to this memorandum that will reflect such required adjustments.

PERSONNEL

- V. White, Head of the Fermilab Computing Division. The following CD members are involved: R. Pordes, Associate Head Fermilab Computing Division for Grids, P. Spentzouris, Department head Accelerator And Detector Simulations And Support, E. Berman, Department head Grid Facilities, Ph. Canal, Gratia project lead.
- D. Swanson, Director of the Research Computing Facility, University of Nebraska-Lincoln. The following members of UNL are involved: Brian Bockelman, Garhan Attebury.

SIGNATURES

V. White
Head of the Fermilab Computing Division

D. Swanson
Director: Research Computing Facility, University of Nebraska-Lincoln

Scope of Effort:

The Research Computing Facility (RCF) at the University of Nebraska-Lincoln (UNL) agrees to cooperate with Fermi National Accelerator Laboratory (FNAL) to utilize and explore various development options for the gratia accounting software being developed at FNAL. RCF will deploy gratia both to do accounting for our Open Science Grid (OSG) associated US CMS Tier-2 site, as well as for local UNL computing resources that are currently not affiliated with OSG. RCF/UNL will commit an undergraduate student to help with this work, and will expect best effort support for our operations from the FNAL gratia team. Probes, collectors, and the web interfaces will all be used, tested, and developed in our local production environment.

The effort provided by FNAL includes the consulting for requirements, planning, solution design and selection, implementation of the proposed extensions. It also provides for resolution of issues covered by the existing OSG requirements for the Gratia infrastructure or upon new agreement between Nebraska and FNAL, the addition of new infrastructure level features.

The scope of work does not include active participation in the daily operation of the instance of the Gratia at Nebraska.

The time period of the MOU:

This MOU will be valid for 1 year.

Responsibilities:

- I. Operations and support
The operations of the collector installed at Nebraska is the sole responsibility of Nebraska. The Gratia team will provide help to resolve non-routine incident where existing documentation does not provide for a way to recover from the issue.
- II. Change Requests
Extensions and change to this document should be made in writing to the personnel aforementioned.
- III. Joint development
No joint development (beyond consultation) is planned as this time.
- IV. Code ownership and Acknowledgements
Code developed by Nebraska based on Gratia should be made public. If it is found to be of general interest and pass a code review by the Gratia team, the code will be distributed along side the main Gratia software. In such case, Nebraska will be credited for the development of this code/feature. The integration of the new feature with the Gratia code repository and installation will be done jointly by the Gratia core team and Nebraska. Nebraska will be expected to interface with the VDT to insure proper installation of the new features when distributed through Gratia via the VDT. Nebraska will be expected to be available to resolve issues with the new features with additional support from the core Gratia team.

V. Other Miscellaneous Requests

At the time of writing of this document the developments planned by Nebraska are:

- 1) Maintain the graphing interfaces we have on top of gratia (currently at <http://rcf-gratia.unl.edu/gratia/xml/>). This is open source and already available.
- 2) Write a probe for Hadoop MapReduce and HDFS.

Staffing:

1. FNAL CD intends to carry out the responsibilities described above by providing services through collaboration between Physics Software Tools group and the Grid Facilities department.
2. Nebraska intends to carry out the responsibilities described above by providing services through Garhan Attebury, with the help of members of his group, and Brian Bockelman.

Sunset

This document will automatically renew unless, OSG, FNAL or Nebraska either:

- a) Completely freeze new development.
- or
- b) Cease to use Gratia in production.

In either case, each party should be contacted with a least one month notice.