

# Collaborative Information Management Systems Development for the National Children's Study, Polk County, Iowa

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## Introduction

The University of Iowa, University of Utah, and Brown University have pooled resources in order to develop a fully functional, integrated NCS data management and data collection platform.

## Platforms

It has been determined that the Westat open source solution was the solution that contained the greatest portion of existing functionality initially as an aid to bringing up a new, open source, NCS compliant solution.

## Development Tools

Jira is used for issue tracking and project planning. As a web based tool, Jira is well suited for distributed collaboration on projects.

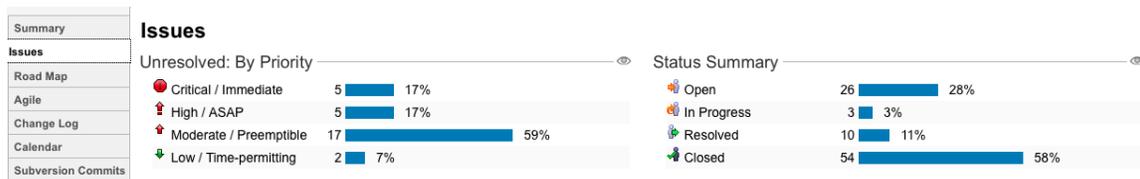


Figure 1 - Issue priority

Jira also has a plugin, Greenhopper, which allows for more effective project management.

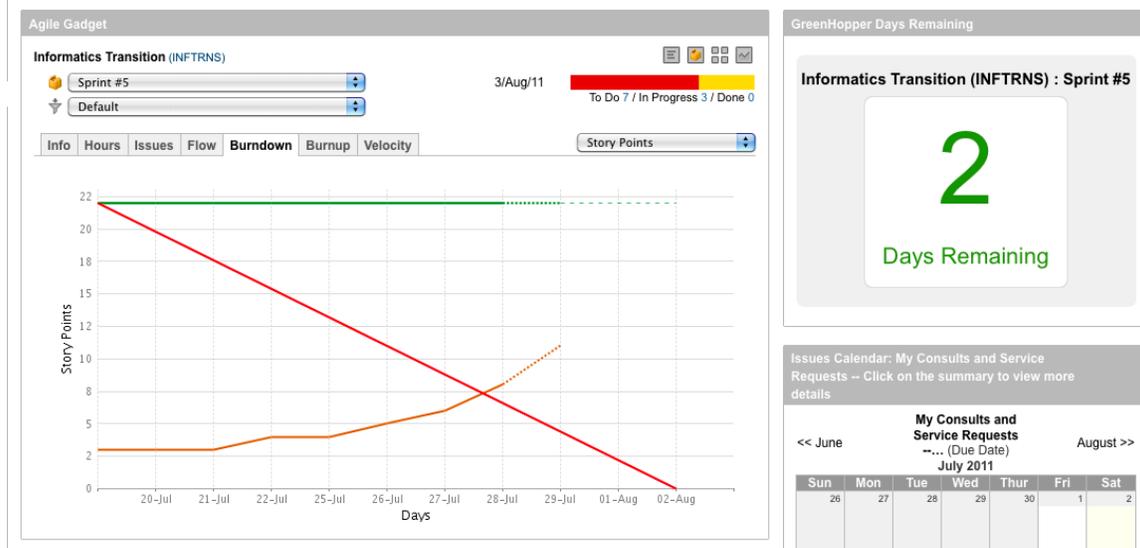


Figure 2 - Greenhopper

Documentation of change is critical in a distributed development environment. The team is using Confluence to keep team members up to date on documentation.

Version control is essential in a distributed development environment. Mercurial is a distributed version control system that is well suited to this sort of development.

### Cost of Development

The cost of development in order to bring up an NCS compliant informatics solution can be considerable. By collaborating with other study centers utilizing the same solution, the costs can be distributed among centers.

### Distributed Locations

While the collaborative effort is proceeding well and the effort is seeing returns on investment at this early stage, the project is not without hurdles.

### Conclusion

Developing a solution for the NCS is a challenge. This is due to the scope of the study, timelines for IMS implementations, and the constant change as requirements are determined.