

## Requirements

| #   | Project      | Tracker     | Status      | Priority | Subject   | Assignee      | Updated          | Category       |
|-----|--------------|-------------|-------------|----------|---|---------------|------------------|----------------|
| 317 | Requirements | Requirement | In Progress | Low      | (Requirement) Identifiers for all objects   | Dave Vieglais | 2010-03-15 22:12 |                |
| 318 | Requirements | Requirement | New         | High     | (Requirement) Sponsor required Y1 functionality   | Dave Vieglais | 2010-09-06 03:24 | d1_common_java |
| 337 | Requirements | Requirement | New         | Low      | (Requirement) Deploy three coordinating nodes   |               | 2010-03-17 15:14 |                |
| 339 | Requirements | Requirement | New         | Low      | (Requirement) Web presence to provide publicly accessible information about the project               |               | 2010-03-16 17:36 |                |
| 371 | Requirements | Requirement | New         | Low      | (Requirement) Provide a suite of collaboration tools and instruction on how to use them               |               | 2010-03-16 20:06 |                |
| 374 | Requirements | Requirement | New         | Low      | (Requirement) Periodic Reporting to Sponsor   |               | 2010-03-16 18:11 |                |
| 383 | Requirements | Requirement | New         | Low      | (Requirement) System supports data storage  |               | 2010-03-16 21:35 |                |
| 384 | Requirements | Requirement | New         | High     | (Requirement) Enable efficient mechanisms for users to discover content                               | Dave Vieglais | 2010-09-06 03:58 | d1_common_java |
| 385 | Requirements | Requirement | New         | Low      | (Requirement) Support arbitrary unique identifiers  |               | 2010-03-16 22:09 |                |
| 386 | Requirements | Requirement | New         | Low      | (Requirement) Deploy at least three Member Nodes  |               | 2010-03-17 13:39 |                |
| 387 | Requirements | Requirement | New         | Low      | (Requirement) Implement a Member Node based on Metacat  |               | 2010-10-06 22:00 |                |
| 388 | Requirements | Requirement | New         | Low      | (Requirement) Implement a Member Node based on Dryad  |               | 2010-03-24 13:36 |                |
| 389 | Requirements | Requirement | New         | Low      | (Requirement) Implement a Member Node based on the ORNL DAAC  |               | 2010-03-25 14:46 |                |
| 390 | Requirements | Requirement | New         | High     | (Requirement) Consistent mechanism for identifying users  | Dave Vieglais | 2010-09-06 20:50 | Requirement    |
| 391 | Requirements | Requirement | New         | High     | (Requirement) Enable different classes of users commensurate with their roles.                        | Dave Vieglais | 2010-09-06 20:51 | Requirement    |
| 392 | Requirements | Requirement | New         | High     | (Requirement) Identity and access control should be interoperable across datanets                     | Dave Vieglais | 2010-09-06 20:31 | Requirement    |
| 393 | Requirements | Requirement | New         | High     | (Requirement) Access control rule evaluation must be highly scalable and responsive.                  | Dave Vieglais | 2010-09-06 20:27 | Requirement    |
| 408 | Requirements | Requirement | New         | Low      | (Requirement) Implement a Coordinating Node software stack  |               | 2010-03-25 15:44 |                |
| 409 | Requirements | Requirement | New         | Low      | (Requirement) Develop a reference implementation of the Member Node stack                             |               | 2010-03-25 13:57 |                |
| 410 | Requirements | Requirement | New         | Low      | (Requirement) The infrastructure must support long term preservation of Data                          |               | 2010-03-25 15:41 |                |
| 411 | Requirements | Requirement | New         | High     | (Requirement) The infrastructure must survive destruction of one or more data storage nodes           | Dave Vieglais | 2010-09-06 03:10 | d1_common_java |
| 412 | Requirements | Requirement | New         | Low      | (Requirement) Identifiers always refer to the same object   |               | 2010-03-25 15:41 |                |
| 431 | Requirements | Requirement | New         | Low      | (Requirement) Software developed for infrastructure should be implemented according to specifications |               | 2010-03-25 14:44 |                |
| 433 | Requirements | Requirement | New         | Low      | (Requirement) Data and metadata is replicated to at least one other member node                       |               | 2010-03-25 03:11 |                |
| 439 | Requirements | Requirement | New         | Low      | (Requirement) Maintain original copies of all science metadata  |               | 2010-03-25 03:27 |                |
| 455 | Requirements | Requirement | New         | Low      | (Requirement) Installation of critical software must be well documented and as automated as possible  |               | 2010-03-25 13:52 |                |

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| 468 | Requirements | Requirement | New    | Low      | (Requirement) Design the cyberinfrastructure for the project.  |               | 2010-03-25 16:51 |                |
| 580 | Requirements | Requirement | New    | Low      | (Requirement) All software developed on the project should be open source  | Dave Vieglais | 2010-04-15 22:57 |                |
| 581 | Requirements | Requirement | New    | Low      | (Requirement) System supports multiple types of science metadata   |               | 2010-04-20 20:45 |                |
| 592 | Requirements | Requirement | New    | High     | DataONE needs to synchronize metadata between MNs and CNs  | Robert Waltz  | 2010-09-06 02:28 | d1_cn_service  |
| 632 | Requirements | Requirement | New    | Low      | (Requirement) Monitor the DataONE infrastructure   |               | 2010-05-28 20:10 |                |
| 761 | Requirements | Requirement | New    | High     | (Requirement) Users can specify authorization rules for data objects, science metadata objects, and process artifacts separately                     | Dave Vieglais | 2010-09-06 03:06 | Requirement    |
| 762 | Requirements | Requirement | New    | High     | (Requirement) User identities can be derived from existing institutional directory services  | Dave Vieglais | 2010-09-06 03:01 | Requirement    |
| 763 | Requirements | Requirement | New    | High     | (Requirement) Authentication and authorization services are geographically replicated  | Dave Vieglais | 2010-09-06 20:52 | Requirement    |
| 764 | Requirements | Requirement | New    | High     | (Requirement) Authentication and access control should be consistently available   | Dave Vieglais | 2010-09-06 20:32 | Requirement    |
| 765 | Requirements | Requirement | New    | High     | (Requirement) Tools can access an API for authn and authz  | Dave Vieglais | 2010-09-06 20:30 | Requirement    |
| 766 | Requirements | Requirement | New    | High     | (Requirement) Users should be able to easily assign proxy privileges to other users and to systems acting on their behalf for limited time durations | Dave Vieglais | 2010-08-11 00:11 | Requirement    |
| 767 | Requirements | Requirement | New    | High     | (Requirement) Users need to be able to express embargo rules for data  | Dave Vieglais | 2010-08-11 00:16 | Requirement    |
| 768 | Requirements | Requirement | New    | High     | (Requirement) Need default authz policies that resolve problems associated with inaccessible principals  | Dave Vieglais | 2010-08-11 00:34 | Requirement    |
| 769 | Requirements | Requirement | New    | High     | (Requirement) Authorization should support critical roles, such as curators and system administrators  | Dave Vieglais | 2010-09-06 03:02 | Requirement    |
| 770 | Requirements | Requirement | New    | High     | (Requirement) Authorization system should be able to express the pseudo-principal concepts like 'public'   | Dave Vieglais | 2010-08-11 00:41 | Requirement    |
| 771 | Requirements | Requirement | New    | High     | (Requirement) User identities should have simple string serializations that express both the user identity and namespace from which it is drawn      | Dave Vieglais | 2010-09-06 03:12 | Requirement    |
| 772 | Requirements | Requirement | New    | High     | (Requirement) Authentication services should be compatible with existing infrastructure and applications   | Dave Vieglais | 2010-08-11 07:54 | Requirement    |
| 777 | Requirements | Requirement | New    | High     | (Requirement) Authorization rules should support common permission levels  | Dave Vieglais | 2010-09-06 20:49 | Requirement    |
| 795 | Requirements | Requirement | New    | High     | (Requirement) System must support revocation of user permissions   | Dave Vieglais | 2010-08-29 20:45 | Requirement    |
| 820 | Requirements | Requirement | New    | High     | (Requirement) Common API for authentication and authorization operations   | Dave Vieglais | 2010-09-06 21:23 | Requirement    |
| 821 | Requirements | Requirement | New    | High     | (Requirement) Sponsor required functionality   | Dave Vieglais | 2010-09-06 03:28 | d1_common_java |
| 822 | Requirements | Requirement | New    | High     | (Requirement) Object access and manipulation should be responsive  | Dave Vieglais | 2010-09-06 20:27 | d1_common_java |