XSEDE Capability Delivery Plan
SPI-02 Guided resource discovery
Last revised 2017-04-07

Background

Use cases describe community needs, requirements, and recommendations for improvements to cyberinfrastructure “CI” resources and services. A Capability Delivery Plan “CDP” is an executive summary of use case support gaps, of plans to fill those gaps with new or enhanced capabilities, and of existing operational components that already support aspects of a use case.

Use Case Summary

XSEDE users and staff need guided resource information exploration in order to identify or select resources appropriate for tasks to be described in allocation requests. This guided resource discovery will likely be useful for other resource selection needs.

Use case document(s): Full description (drafting version)

CDP Summary

The functionality described in this use case is not supported by the operational components listed below.

Gap(s) that we currently plan to address:

- Provide visible RDR overview information needed for allocation requests (suggested priority: high)
- Provide visible RDR information about non-allocated SP Forum resources (suggested priority: high)
- Links between resource information and information in other repositories, such as the XUP System Monitor and CSR. (suggested priority: high)

Gap(s) that will not be addressed at this time:

- Comparison of resources against other resources on user-selectable data fields.
- Other features prioritized for implementation based on feedback from initial deployments.

Time and effort summary:

- <estimate effort for each gap if possible>

Functionality Gaps
1. Visible RDR overview information for allocated resources (suggested priority: high)

The current overview information for resources should be revisited and assessed in light of the need to better present non-technical information needed by users as they begin to prepare allocation requests. Such information includes the description, recommended use, Startup allocation limit, and system production availability dates. Other fields may be identified and prioritized. The information should be presented to minimize the effort required to find these key descriptors, and follow/see information about resources’ allocation dependencies (i.e., information about a storage resource that must be requested along with a computational resource should be clearly presented or linked). Once a presentation model is identified, the Service Providers will be encouraged to update the relevant data fields in RDR.

**Plans:** Define v1 of the fields to be presented (1-ish hour meeting); Make sure these data can be extracted via appropriate APIs, etc.; Define wireframe for portal page and resource display; Populate portal page with resource info.

**Effort:** ? person weeks to implement

2. Visible RDR overview information for non-allocated resources (suggested priority: high)

Not all resources operated by SP Forum members are allocated via XSEDE allocations processes. However, such resources may be available to some users via other mechanisms. Similar non-technical overview information about these resources should also be available to users via appropriate interfaces. Such information includes the description, recommended use, system production availability dates, and user eligibility and access information. Other fields may be identified and prioritized. The information should be presented to minimize the effort required to find these key descriptors. Once a presentation model is identified, the Service Providers will be encouraged to update the relevant data fields in RDR.

**Plans:** Define v1 of the fields to be presented (1-ish hour meeting); Make sure these data can be extracted via appropriate APIs, etc.; Define wireframe for portal page and resource display; Populate portal page with resource info.

**Effort:** ? person weeks to implement

3. Connectivity between overview and information in other repositories, such as the XUP System Monitor and CSR (suggested priority: high)

XSEDE resource information exists in several repositories, and where feasible and practical, links from the resource overviews to information in these other repositories should be provided for users to follow.

**Plans:** Define v1 other repositories to be linked. Identify information and views of value from other repositories. Build links to other repositories.
**Effort**: ? person weeks to implement

**System Components That Support This Use Case**

The following XSEDE operational components currently support this use case:

<table>
<thead>
<tr>
<th>Component</th>
<th>Supported Functionality</th>
</tr>
</thead>
<tbody>
<tr>
<td>XSEDE User Portal (XUP)</td>
<td>User facing interface for resource information</td>
</tr>
<tr>
<td>Resource Description Repository (RDR)</td>
<td>Static resource description and declared operational status</td>
</tr>
<tr>
<td>Information Services</td>
<td>Combines all resource information into a single repository and API suitable for building user interfaces in the XUP and other services</td>
</tr>
<tr>
<td>Community Software Repository (CSR)</td>
<td>Resource software and service descriptions; resource integration status</td>
</tr>
</tbody>
</table>

**References**

(remove this section when not needed)

1.  
2.  
