Node Manager and Services

Working Team: Progress Update and Future Roadmap

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Overview of Node Manager and User Notification

- **Node Manager:**
  - Component to handle internode communication of configuration info
  - Uses a two-tier design: 1st tier P2P; 2nd tier clients
  - Maintain the node-component registry: registration.xml

- **User Notification:** goal to provide updates to data changes in the federation
Node Manager Accomplishments 2017

• Node Manager 1.0 integrated into esg-node (installer)
  ▪ Deployed to production in v2.5.9
  ▪ Several upgraded sites registered
  ▪ Recapture of upgraded sites in progress
• Credentials share API - requires signed public cert for verification of signed request
  ▪ tested between LLNL and GFDL
• Team reformulation and kickoff discussions
## Node Manager Release Report

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<th>Version</th>
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<td>v2.5.17-master-release</td>
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</table>

All other nodes 2.5 not installed...
• Feedback service prototype
  ▪ collects and collates individual user digests
  ▪ Based on messages from tracking server

• Tracking service is subscription based
  ▪ Periodic project query snapshots to SOLR
  ▪ Takes delta vs previous snapshot
    o Datasets categories for updates: new, retracted, updated (version)
Roadmap for 2018

• Node Manager
  - Streamline config deployment
  - Authenticated communications – used signing protocol like the credentials share API
  - Future: replace with third party communication protocol library

• User notification
  - Complete subscription service
  - Testing phases
  - Deploy to production

• Beyond: consider download tracking
  - will user identity be captured somehow for unrestricted CMIP6 data?
  - Client side: alternatives to email notifications,
    - browser plug-in to “Notification centers”
    - smartphone notifications (SMS or other)?
• Big question – do we need a node manager – what is its useful purpose? Does anyone really use the registry? Its is ”kind of nice to have” but that may not justify the effort
• Node map could be useful, but other services exist for monitoring. These are overarching architectural questions for ESGF
• OTOH – best, most accurate picture of state of federation via registry and node map
• How else could we use the node manager? Other configuration to be distributed?
• Notifications – helpful or distracting? If the latter then worth the effort?