



Core System v3.2.0

Release Description Document (RDD)

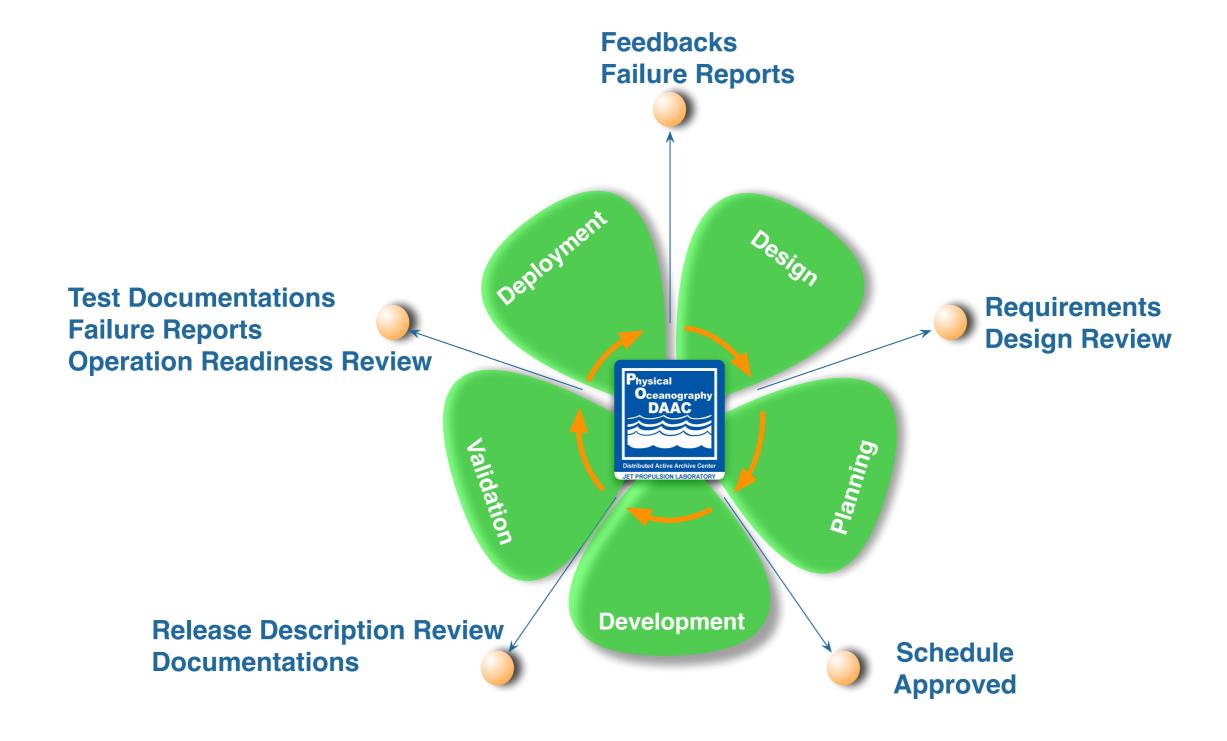
Review

Thomas Huang September 1, 2011

Jet Propulsion Laboratory California Institute of Technology Pasadena. California

Our Process

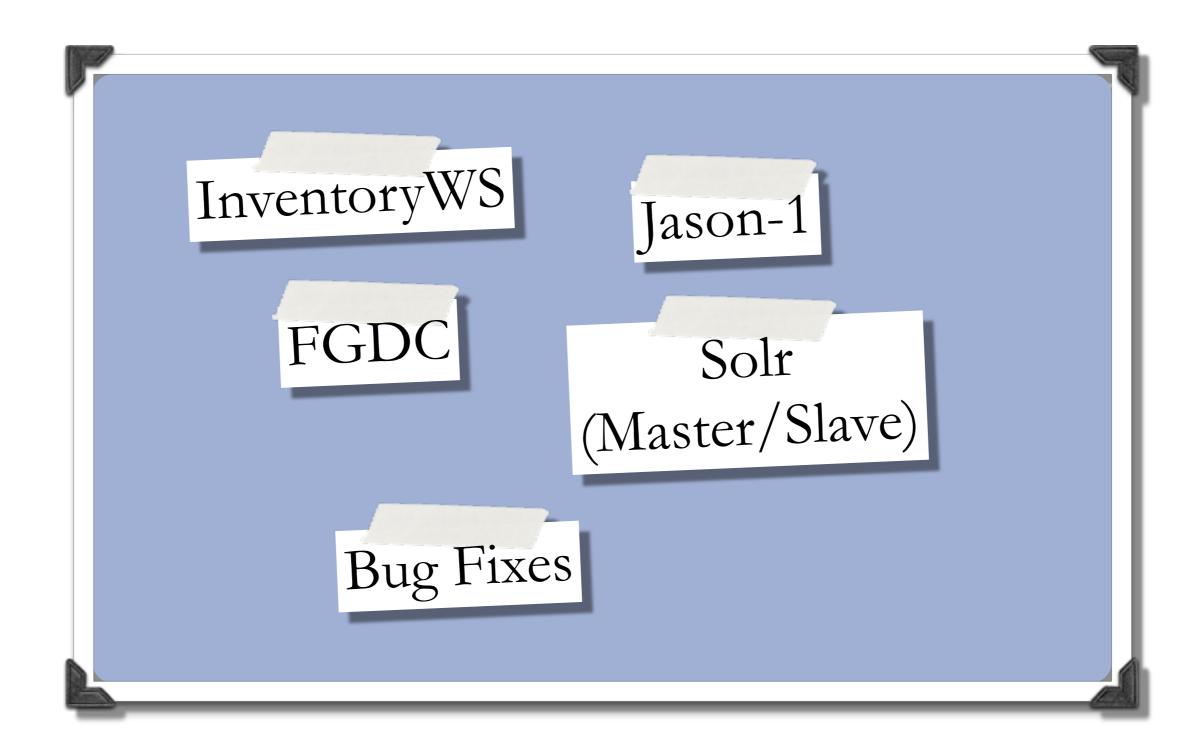








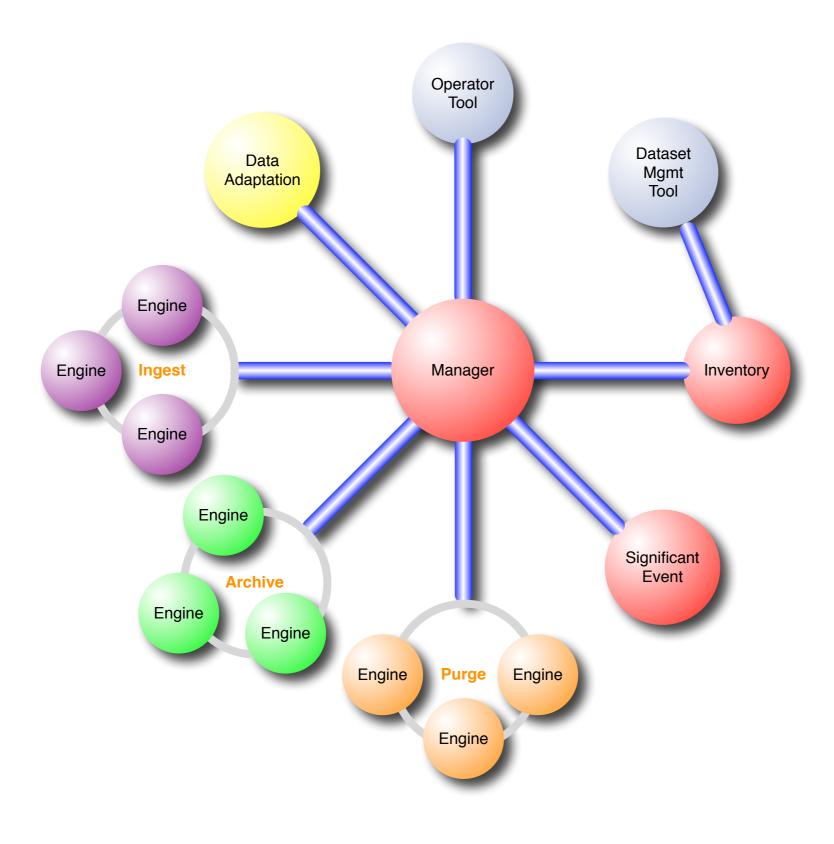




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Architecture





System Level Changes













- Trac <u>1078</u> Need uniform maven repository for DEV vs CM build for non-PO.DAAC jar files
- Trac 1097 Upgrade to Groovy 1.7.8 and Grails 1.3.7
- Trac <u>1111</u> Upgrade to dojo 1.6
- Trac <u>1120</u> Upgrade to use Java 1.6.0 update 27



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Administer



- New Capabilities
 - none
- Modified Capabilities
- none
- Corrected Capabilities
- none



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Archive



New Capabilities

 Trac <u>970</u> - new OPS tool to re-associate existing granule from one dataset to another

Modified Capabilities

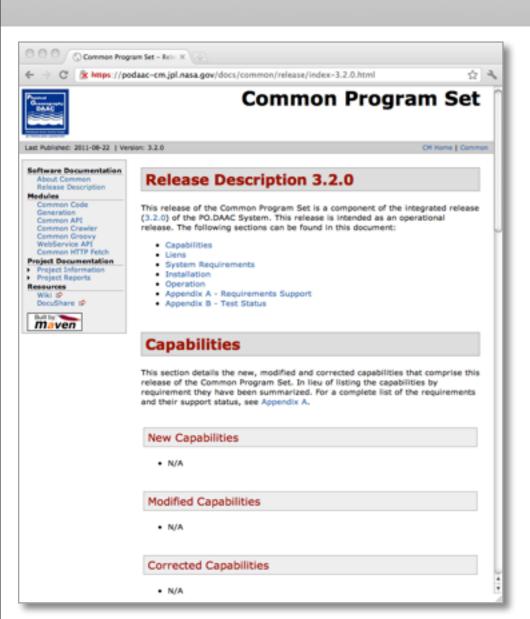
Trac <u>1096</u> - Extract unique host metric for archive popularity

Corrected Capabilities

- Trac <u>1033</u> fix archive_tool.sh -delete option to handle access type simulated and location policy type archive-simulated
- Trac <u>1074</u> archive_tool verify should not change state from deleted to missing if verify is run on rolled off data



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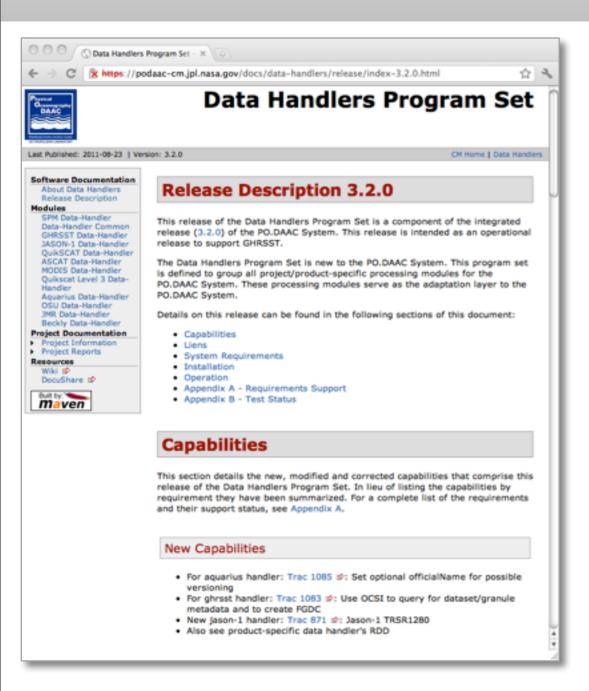
Common



- New Capabilities
 - none
- Modified Capabilities
 - none
- Corrected Capabilities
- none



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Data Handlers

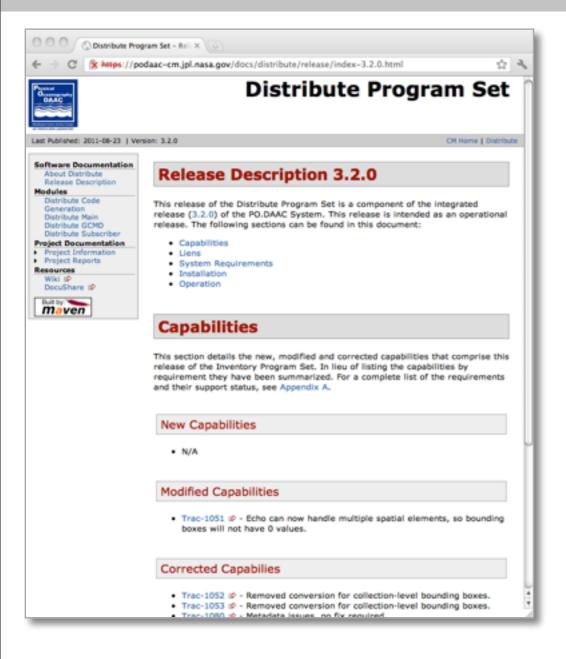


New Capabilities

- Trac <u>871</u> Jason-1 TRSR1280
- Trac <u>1083</u> Use OCSI to query for dataset/granule metadata and to create FGDC
- Trac <u>1085</u> Set optional officalName for possible versioning
- Modified Capabilities
 - none
- Corrected Capabilities
 - Trac <u>1051</u> Zero-valued ECHO bounding boxes for ASCAT data
 - Trac <u>1069</u> GHRSST Website's MMR search function has multiple 'High' risk vulnerabilities
 - Trac 1080 Aquarius Data Sets ECHO Problems
 - Trac 1081 Determining MODIS daily data dates



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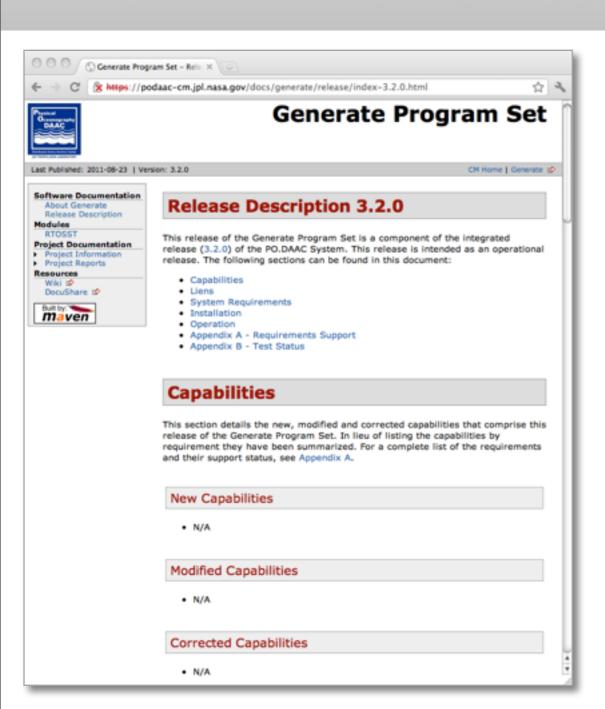
Distribute



- New Capabilities
 - none
- Modified Capabilities
 - Trac <u>1051</u> Zero-valued ECHO bounding boxes for ASCAT data
- Corrected Capabilities
 - Trac <u>1052</u> Zero-valued ECHO bounding boxes for Merged Altimeter Data
 - Trac <u>1053</u> Bad ECHO collection bounding box for ASCAT-L2-Costal
 - Trac 1080 Aquarius Datasets ECHO Problems



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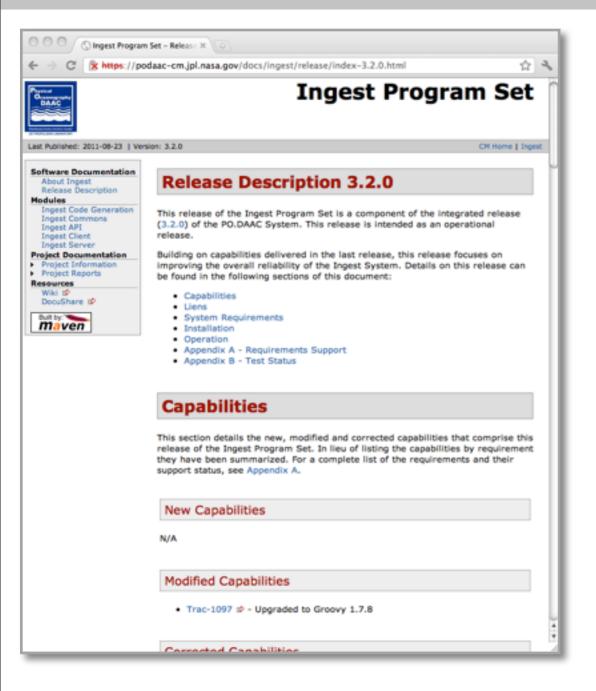
Generate



- New Capabilities
 - none
- Modified Capabilities
 - none
- Corrected Capabilities
 - none



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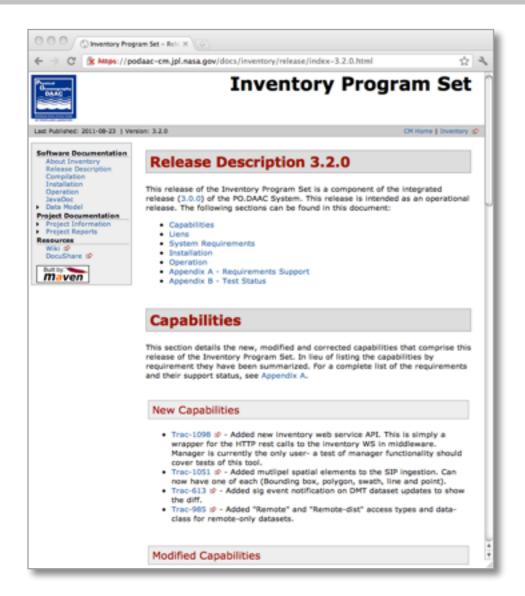
Ingest



- New Capabilities
 - none
- Modified Capabilities
 - Trac <u>1097</u> Upgrade to Groovy 1.7.8 and Grails 1.3.7
- Corrected Capabilities
 - none



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Inventory



New Capabilities

- Trac 613 Need visibility on what DE modified via the DMT
- Trac <u>985</u> new data_class and access_type
- Trac <u>1051</u> Zero-valued ECHO bounding boxes for ASCAT data
- Trac 1098 Make inventory a RESTful web service

Modified Capabilities

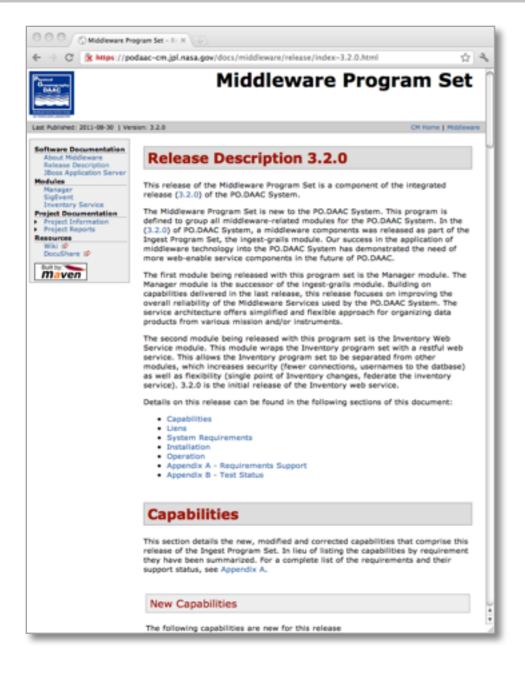
- Trac <u>1099</u> Metadata manifest XML schema update to include 'diff' field
- Trac <u>1100</u> Need database trigger to update GRANULE_META_HISTORY and LAST_REVISION_DATE fields.

Corrected Capabilities

none



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Middleware



New Capabilities

- Trac <u>917</u> SIG EVENT: add capability to save customized view
- Trac 1098 Make inventory a RESTful web service
- Trac <u>1101</u> Manager and Sigevent support new Jason-1 datasets
- Trac <u>1102</u> New web service API to Manager to support product type creation
- Trac <u>1103</u> New web service API to SigEvent to support event group creation and retrieval
- Trac <u>1117</u> Manager to monitor InventoryWS

Modified Capabilities

- Trac <u>1004</u> SigEvent enhancement Need reminder notification
- Trac <u>1104</u> Manager to communicate with Inventory web service
- Trac <u>1109</u> Remove JMS dependency from SigEvent

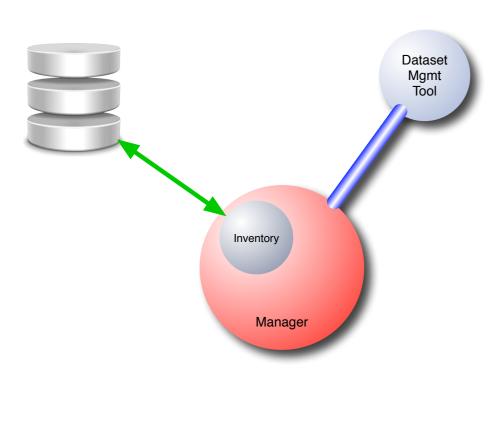
• Corrected Capabilities

- Trac <u>860</u> DMAS manager OutOfMemoryError
- Trac <u>1003</u> SigEvent enhancement Resolved issue should clear notification to allow notification resent
- Trac <u>1093</u> Product tuck in ARCHIVED/RESERVED during dev regression testing

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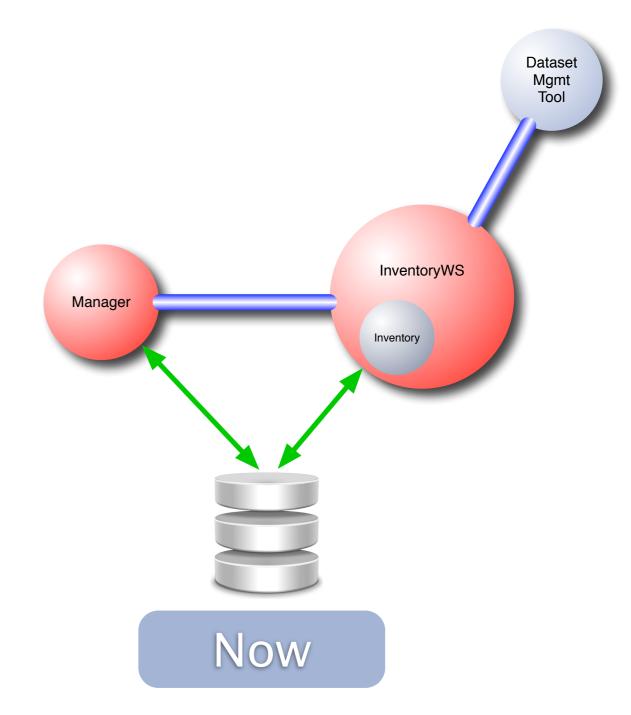
Inventory Web Service





Before

Heavy Manager load = Slow DMT request handling



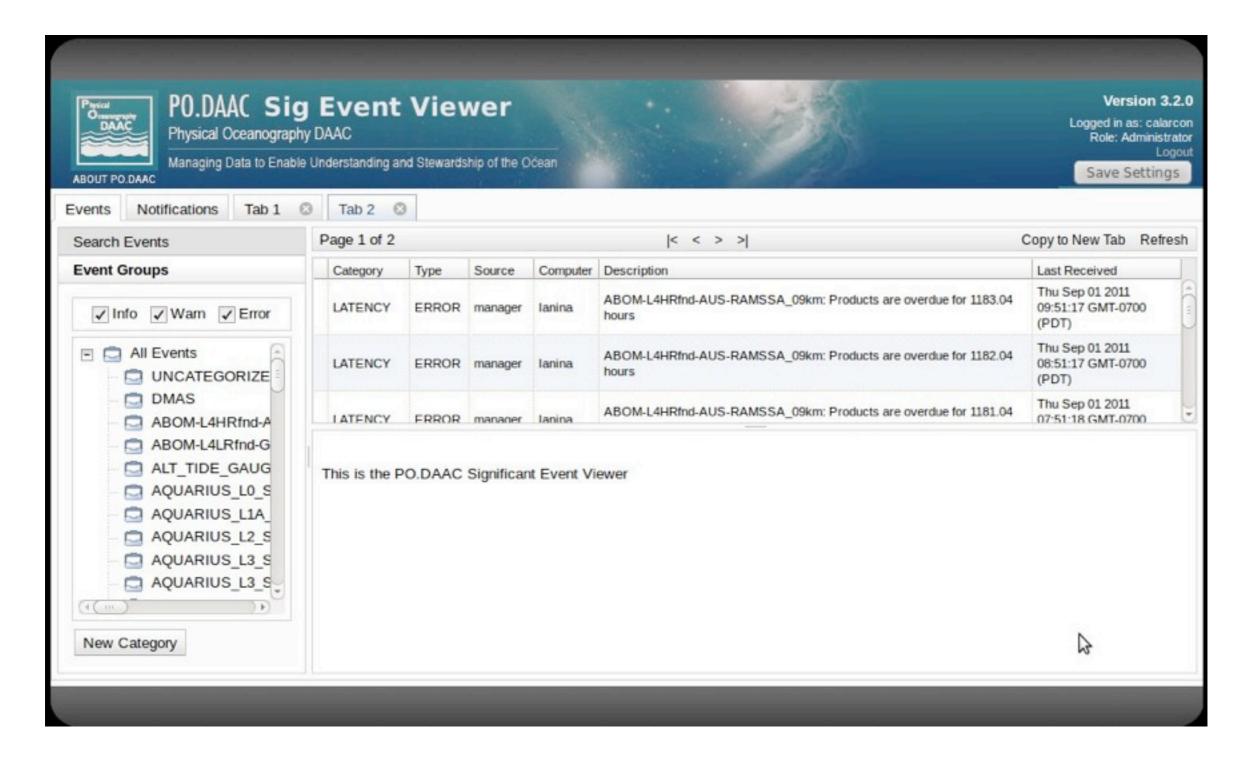
- Post-Ingestion metadata update
- Create metadata without ingestion



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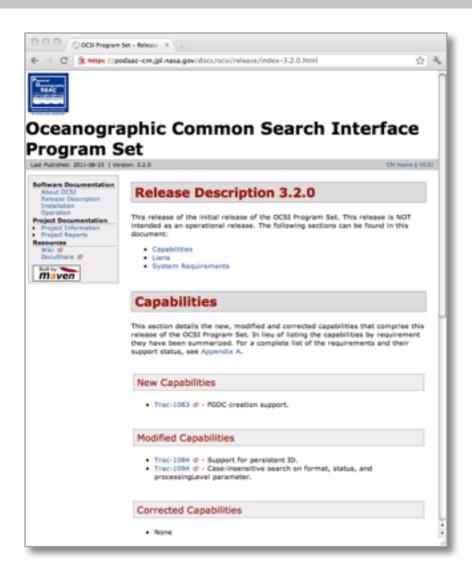
Middleware: SigEvent







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OCSI



New Capabilities

 Trac <u>1083</u> - Use OCSI to query for dataset/granule metadata and to create FGDC

Modified Capabilities

- Trac 1084 OCSI: support for persistent/permanent ID
- Trac <u>1094</u> OCSI search on format, status and processingLevel parameter should be case-insensitive

Corrected Capabilities

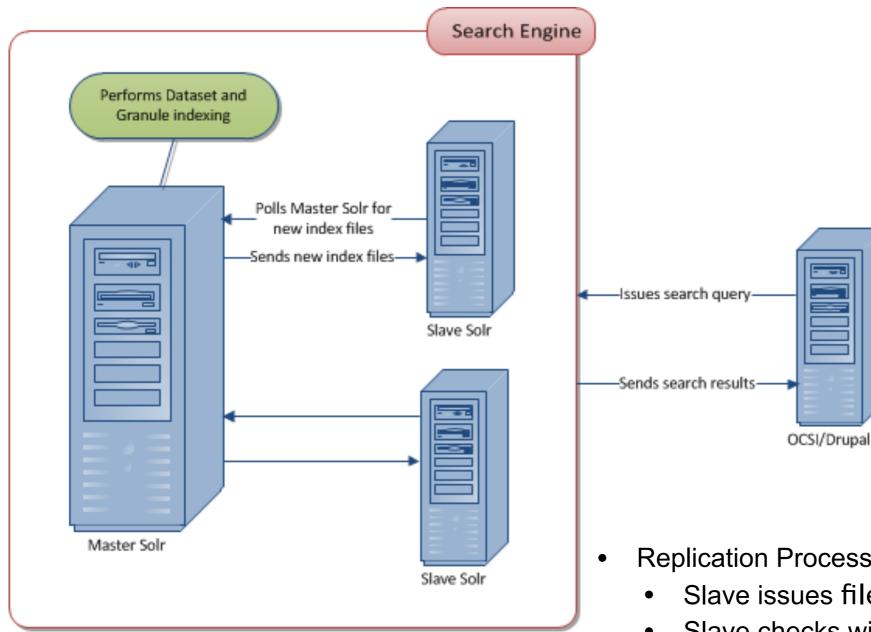
• none



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Solr: Master/Slave Model





- **Replication Process**
 - Slave issues filelist command to get list of files
 - Slave checks with its own index to see if it has an of those files and proceeds to download missing files
 - Slave downloads files into temp directory
 - New files are moved to slave's live index directory
 - Slave's ReplicationHandler issues commit command and new index is loaded



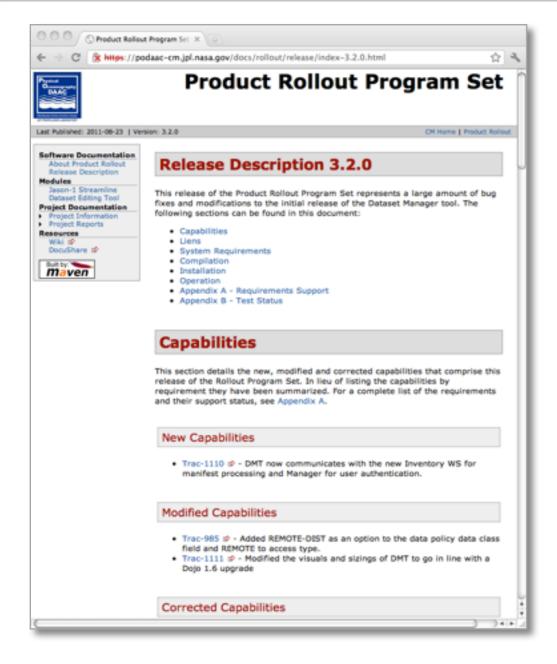
OCSI: FGDC Genereation



```
// Groovy code
// File: s5.groovy
// Get FGDC records for GHRSST L2P datasets that started after January 1, 2010
// for August 18, 2011
def download(output, address) {
    def file = new FileOutputStream(output)
    def out = new BufferedOutputStream(file)
    out << new URL(address).openStream()</pre>
    out.close()
}
def url = 'http://seastorm.jpl.nasa.gov:8890/dataset/opensearch.atom?'
url += 'keyword=GHRSST&processingLevel=2P&startTime=2010-01-01T00:00:00Z'
def xml = new XmlSlurper().parse(url)
xml.declareNamespace(
   podaac: "http://podaac.jpl.nasa.gov/opensearch/",
   openSearch: "http://a9.com/-/spec/opensearch/1.1/")
def items = xml.entry
items.each{node ->
   download((node.'podaac:Dataset-PersistentId').toString()+".xml",
      "http://seastorm.jpl.nasa.gov:8890/granule/fgdc?startTime=2011-08-18T00:00:00Z" +
      "&endTime=2011-08-18T23:59:59Z&dataset=${node.'podaac:Dataset-PersistentId'}")
   println "Downloaded ${node.'podaac:Dataset-PersistentId'}.xml"
}
```



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Product Rollout



New Capabilities

 Trac <u>1110</u> - DMT to communicate directly to Inventory web service

Modified Capabilities

- Trac 985 new data_class and access_type
- Trac <u>1111</u> Dojo 1.6 upgrade

• Corrected Capabilities

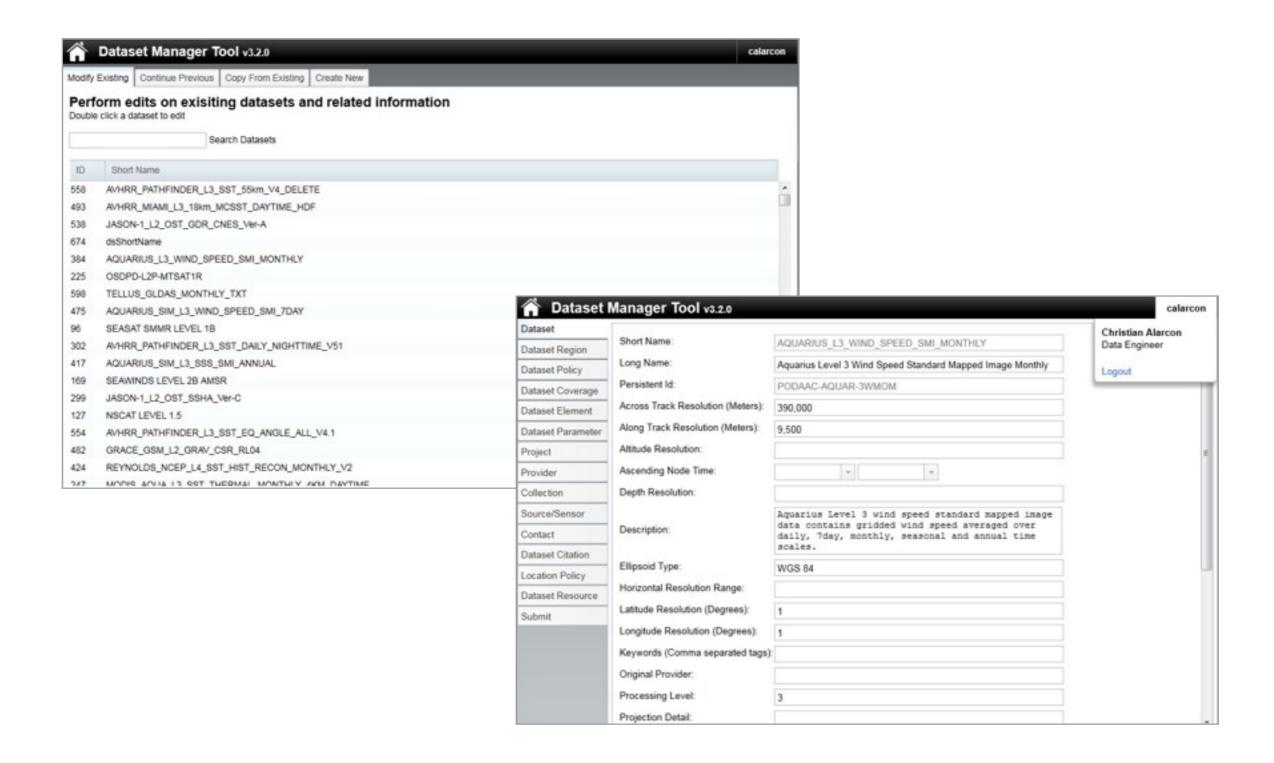
 Trac <u>1048</u> - DMT: adding backslashes when apostrophe's are added



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Product Rollout (cont.)

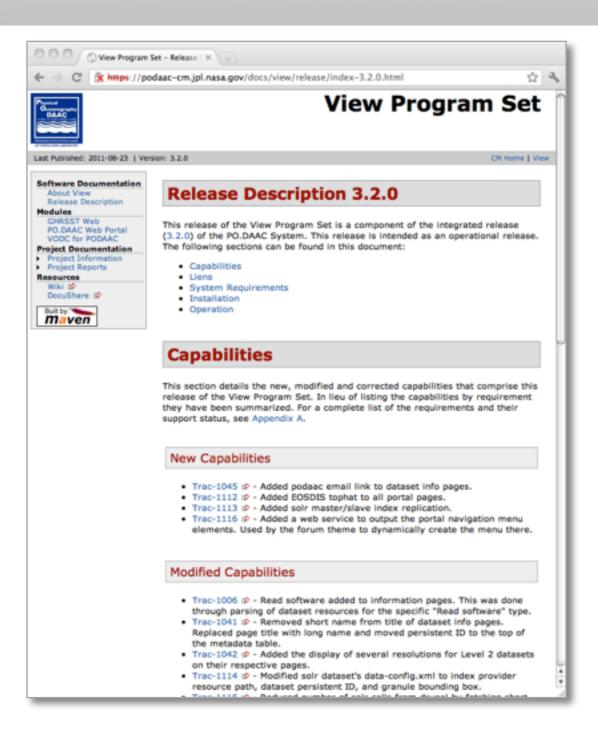






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View



New Capabilities

- Trac 1045 General changes to web pages
- Trac 1112 Add EOSDIS menu banner to all portal pages
- Trac 1113 Solr to support master/slave replication
- Trac 1116 Web service to sync navigation menus

Modified Capabilities

- Trac 1006 Recognizing 'Read Software' as Attribute in **DMT Dataset Resource tab**
- Trac 1041 Remove Short Name and reorder
- Trac 1042 Changes to the Resolution field
- Trac <u>1114</u> Solr to index additional fields
- Trac 1115 Reduce number of calls to Solrs

Corrected Capabilities

• Trac 1065 - Resolving End-Characters of curly braces in Hyperlinks within Dataset Descriptions in Web Portal

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Trac Summary



Trac Originator	Title
613 cchen	Need visibility on what DE modified via the DMT
860 cchen	DMAS manager OutOfMemoryError
871 jhausman	Jason-1 TRSR1280
917 Irodrig	SIG EVENT: add capability to save customized view
970 cchen	new OPS tool to re-associate existing granule from one dataset to another
985 cchen	new data_class and access_type
1003 cchen	SigEvent enhancement - Resolved issue should clear notification to allow notification resent
1004 cchen	SigEvent enhancement - Need reminder notification
1033 Irodrig	fix archive_tool.sh -delete option to handle access type simulated and location policy type archive-simulated
1051 finch	Zero-valued ECHO bounding boxes for ASCAT data
1052 finch	Zero-valued ECHO bounding boxes for Merged Altimeter Data
1053 finch	Bad ECHO collection bounding box for ASCAT-L2-Coastal
1065 Irodrig	Resolving End-Characters of curly braces in Hyperlinks within Dataset Descriptions in Web Portal
1069 cchen	GHRSST Website's MMR search function has multiple 'High' risk vulnerabilities
1074 Irodrig	archive_tool verify should not change state from deleted to missing if verify is run on rolled off data
1078 cchen	Need uniform maven repository for DEV vs CM build for non PO.DAAC jar files
1080 finch	Aquarius Data Sets ECHO Problems
1081 gfoti	Determining MODIS daily data dates
1083 qchau	Use OCSI to query for dataset/granule metadata and to create FGDC
1084 Irodrig	OCSI: support for persistent/permanent ID
1085 qchau	Set optional officialName for possible versioning
1093 nchung	Product stuck in ARCHIVED/RESERVED during dev regression testing
1094 nchung	OCSI search on format, status and processingLevel parameter should be case-insensitive
1096 thuang	Extract unique host metic for archive popularity
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1104 thuang	Manager to communicate with Inventory web service
1109 thuang	Remove JMS dependency from SigEvent
1111 thuang	Dojo 1.6 upgrade
1117 thuang	Manager to monitor InventoryWS
1120 thuang	Upgrade to use Java 1.6.0 update 27

36 delivered
33 remain



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