

# System v1.3.2

## Release Description Document (RDD) Review

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July 30, 2009

# What

ghrsst mmr

echo interface

core performance

# Speeeeeeed Improvement



# v1.3.1 Performance

<b>Ingest</b>	2 (26 parallel jobs)
<b>Archive</b>	2 (26 parallel jobs)

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<b>Ingest</b>	2 (26 parallel jobs)
<b>Archive</b>	2 (26 parallel jobs)

6,000  
granules/24hr  
4 minutes/granule

“premature optimization is the root of all evil.”



Donald Knuth  
“The Art of Computer Programming”

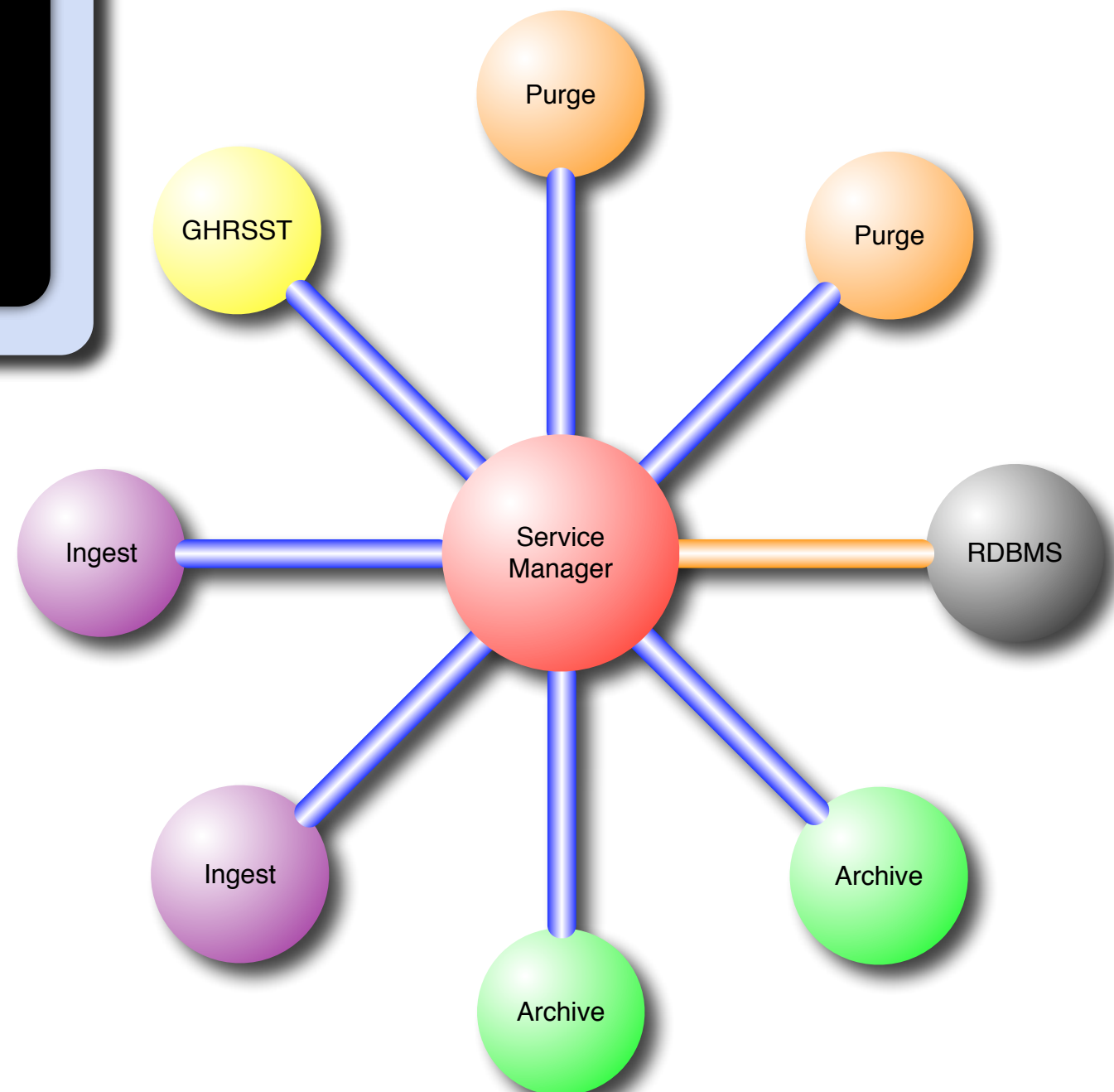
# Performance Upgrade

- ✓ Source Code Optimization
- ✓ Offload Purging Jobs
- ✓ Database Performance Turning



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# Performance Upgrade



<b>Ingest</b>	2 (26 parallel jobs)
<b>Archive</b>	2 (26 parallel jobs)
<b>Purge</b>	1 (10 parallel jobs)

index

index

# Performance Upgrade



<b>Ingest</b>	2 (26 parallel jobs)
<b>Archive</b>	2 (26 parallel jobs)
<b>Purge</b>	1 (10 parallel jobs)

index

index

17,482

granules/24hr

5 seconds/granule

# Performance Upgrade



<b>Ingest</b>	3 (36 parallel jobs)
<b>Archive</b>	3 (36 parallel jobs)
<b>Purge</b>	2 (20 parallel jobs)

*index index*  
*index*  
*index index*  
*index*



# Performance Upgrade



<b>Ingest</b>	3 (36 parallel jobs)
<b>Archive</b>	3 (36 parallel jobs)
<b>Purge</b>	2 (20 parallel jobs)

index index  
index  
index index  
index



21,254

granules/24hr

4 seconds/granule

# ECHO Workaround

```
<OnlineAccessURLs>
  <OnlineAccessURL>
    <URL>ftp://...</URL>
    <URLDescription>The OPENDAP location for the granule.</URLDescription>
  </OnlineAccessURL>
  <OnlineAccessURL>
    <URL>http://...</URL>
    <URLDescription>The OPENDAP location for the granule.</URLDescription>
  </OnlineAccessURL>
  <OnlineAccessURL>
    <URL>ftp://...</URL>
    <URLDescription>The FTP location for the granule.</URLDescription>
  </OnlineAccessURL>
  <OnlineAccessURL>
    <URL>ftp://...</URL>
    <URLDescription>The FTP location for the granule.</URLDescription>
  </OnlineAccessURL>
</OnlineAccessURLs>
```

Duplicate URLs





# ECHO Workaround



Duplicate URLs



# GHRST MMR Validation

UPA-L2P-ATS-NR\_2P

✓ Invalid XML element ordering

```
<Metadata_History>
  <FR_File_Version>1</FR_File_Version>
  <FR_Creation_Date>20090511T164615Z</FR_Creation_Date>
  <FR_Revision_History>Created from: /data/l2pdir/input/
  ats_nr__2p_nrt/
  ATS_NR__2PNPDK20090509_071720_000043002078_00464_37592_0827.N1 at
  processing centre: UPA</FR_Revision_History>
  <FR_Last_Revision_Date>20090511T164615Z</FR_Last_Revision_Date>
</Metadata_History>
```



# GHRST MMR Validation

UPA-L2P-ATS-NR\_2P

✓ Invalid XML element ordering



```
<Metadata_History>  
  <FR_File_Version>1</FR_File_Version>  
  <FR_Creation_Date>2009-07-27T10:46:15Z</FR_Creation_Date>  
  <FR_Revision_History>  
    ats_nr_2p_nrt/  
    ATS_NR_2PNPDI0464_37592_0827.N1 at  
    processing center  
  <FR_Last_Revision_Date>2009-07-27T10:46:15Z</FR_Last_Revision_Date>  
</Metadata_History>
```

# What is the dataset name?

UPA-L2P-ATS-NR\_2P  
before 2009-06-25 04:15:03

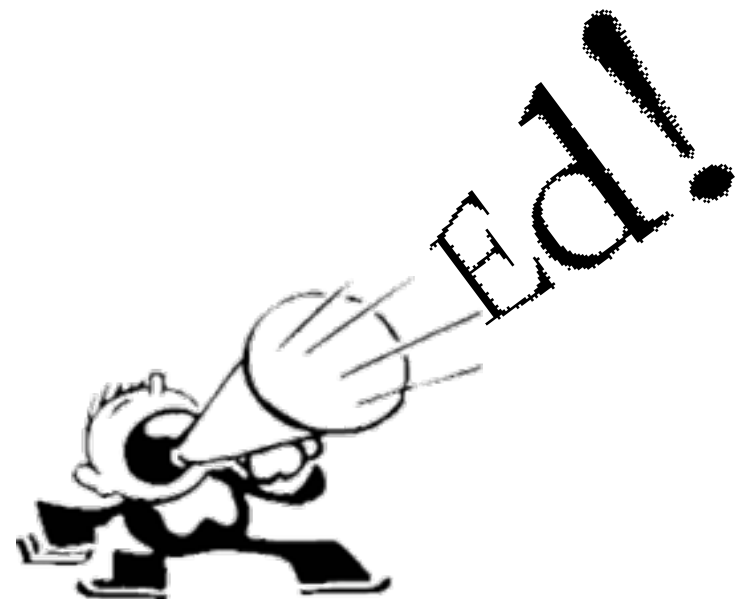
UPA-L2P-ATS\_NR\_2P  
after 2009-06-25 04:15:03



# What is the dataset name?

UPA-L2P-ATS-NR\_2P  
before 2009-06-25 04:15:03

UPA-L2P-ATS\_NR\_2P  
after 2009-06-25 04:15:03



# v1.3.2 Affected Components

- *common/common-mmr*
  - *mmr\_fr.xsd*
- *distribute/distribute-main*
  - *ECHO* workaround
- *ingest/ingest-api*
  - new PURGE stereotype
- *inventory*
  - new *create\_index.sql*
- *middleware/manager*
  - support new PURGE engine
  - *ingest/archive* jobs to process every 1 sec
  - optimized Transaction Service
- *data-handlers/ghrsst*
  - *pom.xml* to refer to v1.3.2 *common-mmr*

