

Data Distribution Detailed Design

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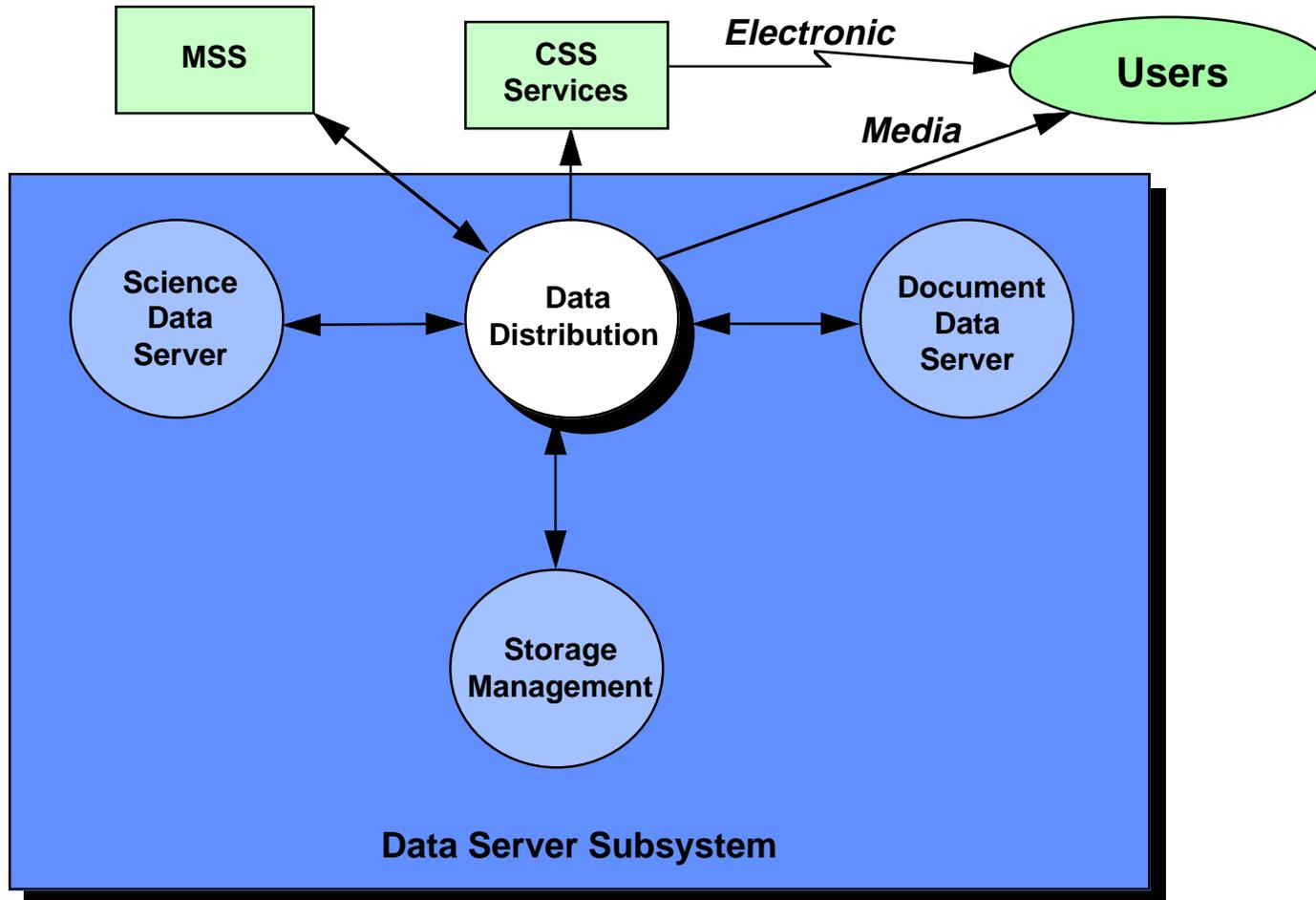
Data Distribution Agenda



- **Context**
- **Release B Capabilities**
- **High Level Physical Design**
- **Status**
- **Detailed Design**



Context





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Release B Capabilities



All current Release A functionality

Cost Estimation & Utilization

New Media

- **3480/3490**

Label Generation

- **Media Labels**
- **Shipping Labels**

Compression



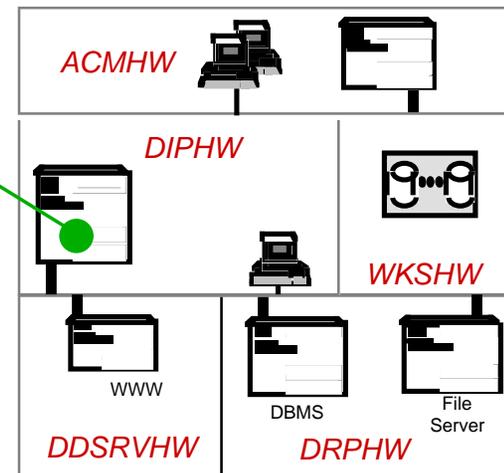
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High Level Physical Design

- 1 process, **Distribution Server**
- 1 library, the Client Interface





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Status



- **Design Updates**
- **Action Item Resolution**
 - **IDR-B RID #5 Meeting**
 - **Operations Workshop**
 - **IDR-B Promises**
 - **Detailed Design Inspection**



Updates and Enhancements

Updates

- Automatic generation of media labels
- Automatic generation of shipping labels
- Distribution on 3480/3490 tape
- Compression

New

- Cost estimation
- Cost accounting
- Infrastructure insertion

Documentation Errata

- Cost Utilization Event Trace Figure
- Object Model Updates



RID #5 Meeting Action Items

Action Item	Title	Description	Assignment	Contract	Due Date	Comments
2 2	Requirements to Fax	No one could recall the details of the requirements to distribute by FAX (part of Release B)	ESDIS	B. Kobler	CDR	ESDIS wants to evaluate the usefulness of this requirement. ESDIS will send a questionnaire to the DAACS asking importance. Current ESDIS guidance is use an operational procedure and the hardware
3 2	Response Time as Function of Granule Size, Subsetting, and Compression	In reporting performance, include granule sizes of real granule and use. Merge the analytical with reality	ECS	DDIST	5-Apr	Table Generated and will be handed out during CDR
3 3	Substitute DD for CPIO	Query the rest of the DAACs about formats at the Ops Telecon. Chris' Lynnes & Harris requested DD to be added to the formats listed and suggested the removal of CPIO	ESDIS	B. Kobler	CDR	Open; ESDIS provided an update during the 4/5 DDM



Ops Workshop Action Items

Ops Workshop Actions

DDIST Action Items Number	Title	Description	Status	Due Date	Document Trace
Action Item #12	Notification of Partial Failure	Is requestor notified of a partial failure of a request?	Rejected - A request may only have a failure status. That is, a request can not be considered to have a partial failure.	5-Mar	N/A
Action Item #50	Volume Amount	Volume amount per request segment should be given to the user.	Rejected - Not a requirement; however, we are addressing the issue as a part of the packing list.	10-Apr	N/A
Action Item #52	Segmentation By File	Look into how problematic segmentation by file (vs. segmentation by granule) will be.	Open	1-Jun	N/A
Action Item #53	ASF Needs	ASF needs capability to write multiple requests on a single medium.	Rejected	10-Apr	N/A
Action Item #86	Distribution Failure	The distribution failure notification tool should be able to retrieve user profiles to obtain user contact information (e-mail, address, etc.)-- but, don't want message automatically sent.	Considering, need to know what the concern is regarding automatic notification. Requested DE for information about a contact person.	15-Jun	N/A
Action Item #100	Segmenting Order	Look into segmenting order based on the timeliness of being able to ship in an automated fashion.	Rejected - Timeliness issues are addressed as User Request Priority, not system performance.	5-Mar	N/A
Action Item #101	Granules written for Convenience	Granules should be written to a tape for the convenience of the user, not written to tape for the convenience of the system (should be user driven versus system driven).	Closed	5-Mar	N/A
Action Item #102	Un-Segment a Segmented Order	Look into the capability to un-segment a segmented order.	Rejected - Not a requirement.	5-Mar	N/A

IDR-B Promises



IDR-B Promises				
DDIST IDR-B Promise				
Number	Description	Status	Due Date	Document Trace
16	Lesson of Rel. A Request Management/Partitioning Model for Rel. B	Closed, presented a distribution request during the Ops Telecon	Ops Telecon	DID-305-CD-24-002
16	Discuss Automated Approach Via Telecons	Closed, presented during the Ops Telecon	Ops Telecon	N/A



Detailed Design Inspection

DDIST Design Inspection		
Action Item Number	Description	Status
1	Change all occurrences of ExStatus to EcUtStatus	closed
2	Change all occurrences of String to RWCString, and all occurrences of char* to the appropriate Ec Standard type	closed
3	DsDsDistRequestS should also be shown as a generalization of DsDdDistSubRequestB on the DsDdInterfaceClass Object Model	open; does not make sense
4	Open multiplicity should be specified on DsDdDistSubRequestB	closed
5	Declare methods and attributes to be public or private	closed
6	DsDdDistFile, CompressB():should be shown as an operations rather than an attribute	closed
7	Evaluate the usage of the Server Request Framework in Request Manager	depends on infrastructure
8	Evaluate the usage of the MSS Managed Process Framework in Request Manager	depends on infrastructure
9	More detail in terms of return types and signatures in the OMT Object Models	closed
10	Resolve TBDs for outstanding PDL	closed
11	Add utilization and utilization factor attributes found in the DsUZResourceCostB base class to the specialized cost classes	closed
12	Get detailed request tracking design to Mike Burnett in usable state	depends on infrastructure



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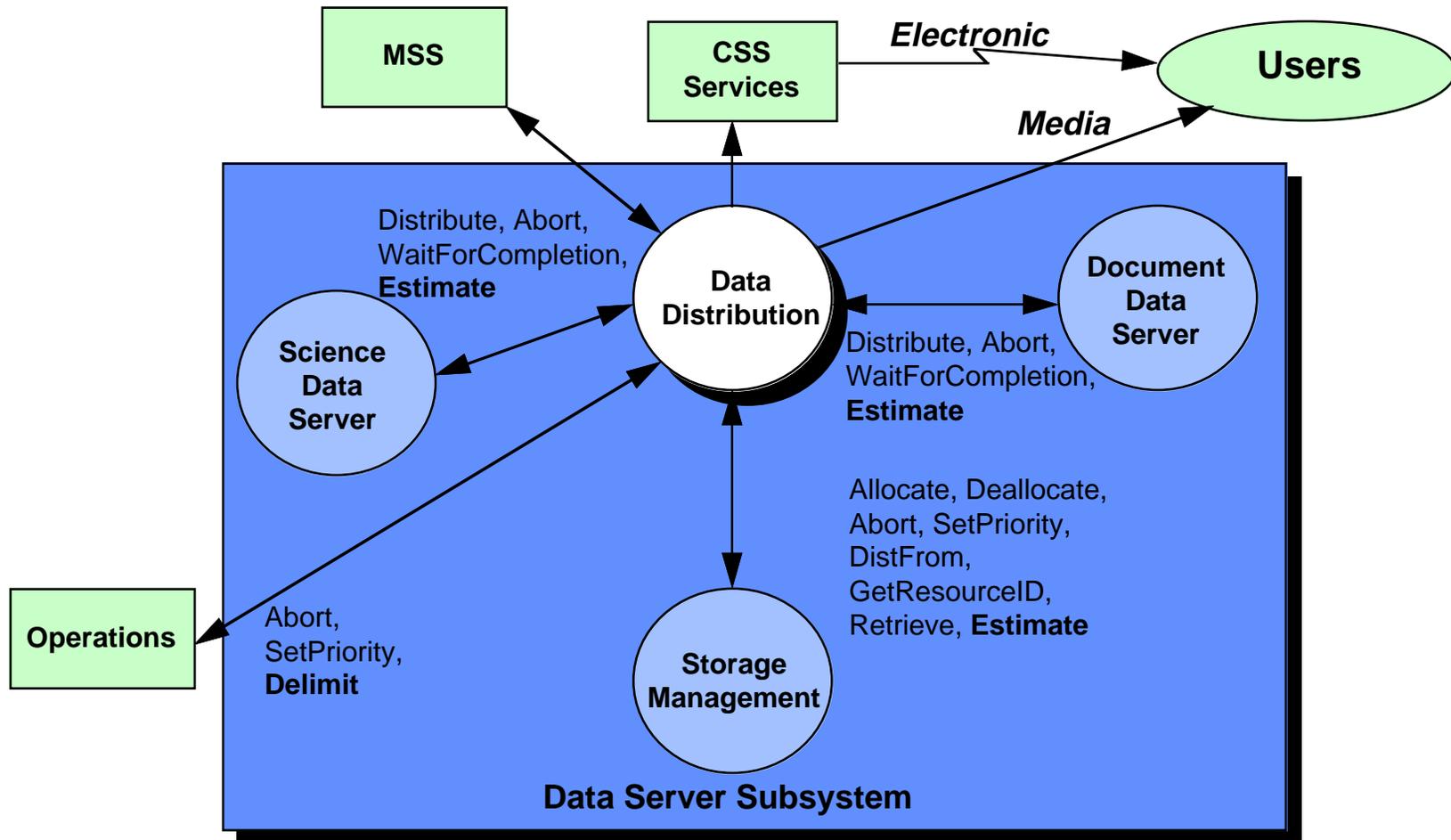
Detailed Design



- **Context**
- **Object Models**
- **Dynamic Models**



Context



Object Models



The following object models in document CD-305-024-002, Section 7 will be reviewed:

<u>Name</u>	<u>Figure</u>
Interface Classes	*
Utilization Classes	*
DsDdRelease_B	*
DsDdRequest	7.3-2

* DID 305 (CD-305-024-002) Errata. Diagrams included in CDR handouts.



Dynamic Models

The following event traces in document CD-305-024-002, Section 7 will be reviewed:

<u>Name</u>	<u>Figure</u>
Estimation	7.4.7-1*
3480 Distribution and Media Labeling	7.4.8-1
Detection of a Large Volume Data Distribution Request	7.4.9-1
Operator Intervention into a Large Volume Data Distribution Request	7.4.10-1

* DID 305 (CD-305-024-002) Errata. Incorrect diagram was inserted in document. Correct Event Trace included as a CDR handout.