

Data Distribution System (DDS)

DW Architecture Deliverables

DDS Requirements Document

- Overview provided business case for new DDS architecture
 - Requirements, Mission Objectives & Critical Success Factors
 - Standardization, Scalability and Data Request Workflow
- Identified 3 DDS components
 - DDS Web Page & Metadata
 - DDS Filter, Split & Format
 - DDS Data Transmitter
- Proposed Work Plan
- Review of DW Data Files & File Types
- Review of Data Distribution Methods
- Functional Requirements for DDS Web Page & Metadata
 - Entity / Relationship Metadata Logical Data Model
 - Functional Screen Designs for Web Page Capability

Engineering Approach Document

- Requirements, Functional and Detail Design for:
 - DDS Component #2: Filter, Split & Format
 - DDS Component #3: Data Transmitter
- Design Specifications Provided for Parameter Driven Solutions
 - Reduce Hard-Coded Scripts and Programs
 - Centralized Metadata for Consistent Data Warehouse Operations

Web Site Functional & Technical Detail Design

- Requirements, Functional and Detail Design for:
 - DDS User / Client Web Functions
 - DW Administrator Web Functions
- 3 Phase Implementation Plan
- DDS Metadata File Definitions
 - Logical Data Model – High Level View
 - Data Tables and Field Level MetaData Descriptions

DW Data Management Services PowerPoint

- Overview of Proposed DDS for DW
 - Client Driven Solution for Data Distribution
 - DDS Web Page Mock-Up
 - DDS Web Page Screen / Function Review
 - Data Distribution Architecture Alternatives Review
 - Alternative Implementation Strategies & Work Plan

Data Distribution System (DDS)

DW Architecture Deliverables

DDS Data File Request Form

- Data Request Form (Word) for Standard Data Files
- PowerPoint Overview of DDS Data Request Process
 - 6 step process identified
 - Complete Request Form
 - Submit Request
 - DDS Review, Approval, Sign-Off
 - DDS Sets-Up Data Job & Delivery
 - DDS Tests Data Job & Delivery
 - Regular Data Transmission Begins
- Standard Data Files Identified (Long & Short Versions)
- Standard Data File Filters Identified
 - Sub-Firm, Branch Code, Rep Code, Account Number, Managed Account Number

DDS / DataSvcs FTP Transmission Form

- Instructions and Request Form (Word) to Set-Up FTP Data Transmissions to/from External Data Clients via DataSvcs
 - Outbound FTP – DDS Data Analyst Obtains Transmission Parameters, Completes Transmission Request Form and Coordinates Data Client Requirements with Data Analyst – Sets-Up FTP Transmission
 - Inbound FTP – DW Production and Test System FTP Host Name, Login and Password Documented

DW Data File Inventory

- DW Data File Inventory for All Inbound/Outbound Data Files is Documented in Excel Spreadsheet
 - Organized by Data File Subject Area
 - One Record per Data File / Data Destination
 - Inbound/Outbound File Names and Data Paths
 - Source/Destination System Identities
 - Frequency, Type, Encoding, Format, Delimiter
 - Intermediate Data Paths and Data File Names

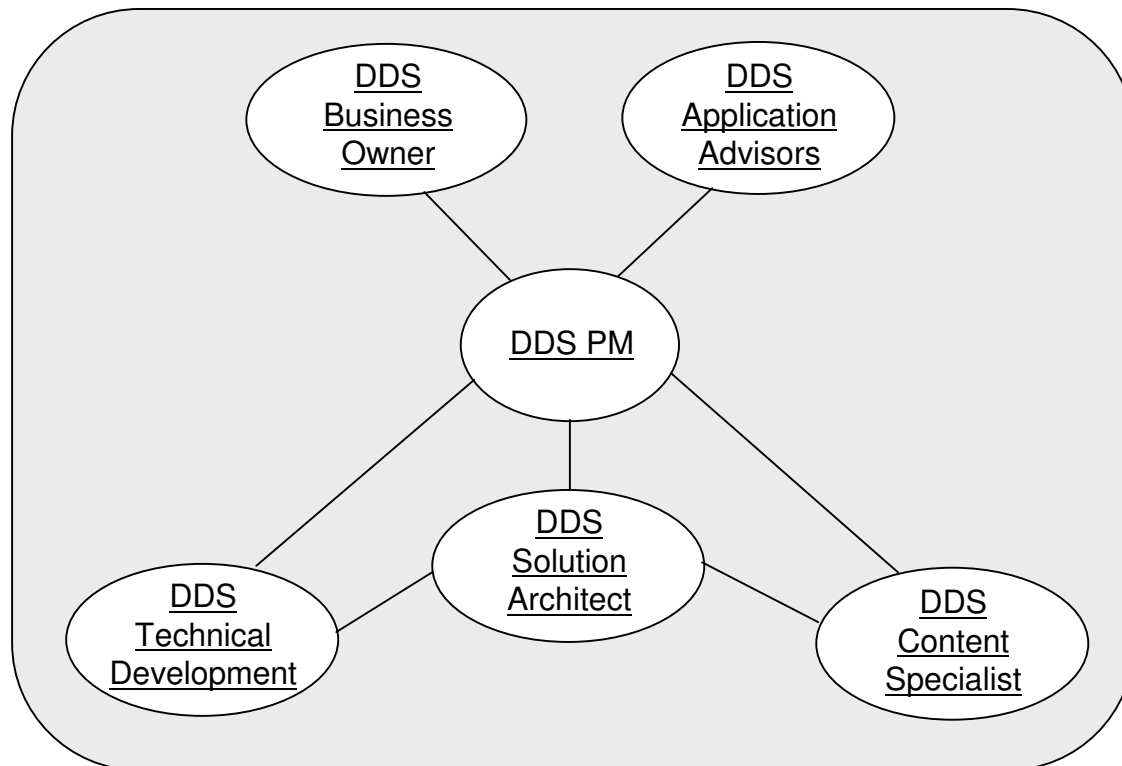
DDS Data Dictionary & Standard File Layouts

- Standard Data File / Data Field Cross Reference Derived from Data File SSA's, Data File Layouts and Create Table SQL and Saved to DBase, Access RDB, and an Excel Spreadsheet
 - Field Name, File Name, Business Name, Screen Name, Business Description, Data Transformation Explanation, Record Layout Field Position, Field Start/End Positions, Field Length, Field Type, Field Format/Picture

Data Distribution System (DDS)

DDS Team

Team Roles / Resources



Direction

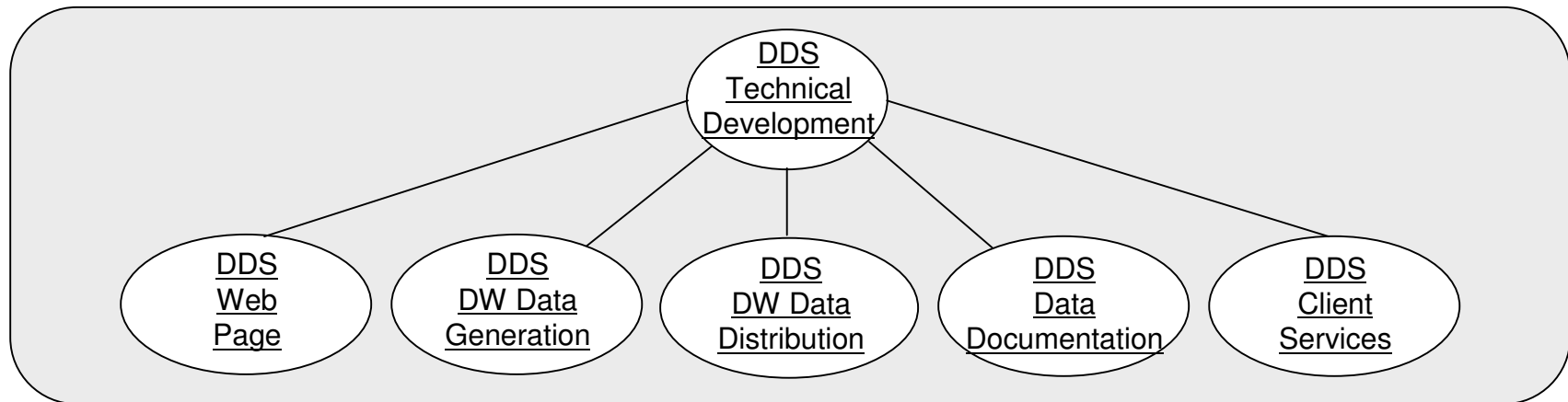
Coordination

Execution

Data Distribution System (DDS)

DDS Team

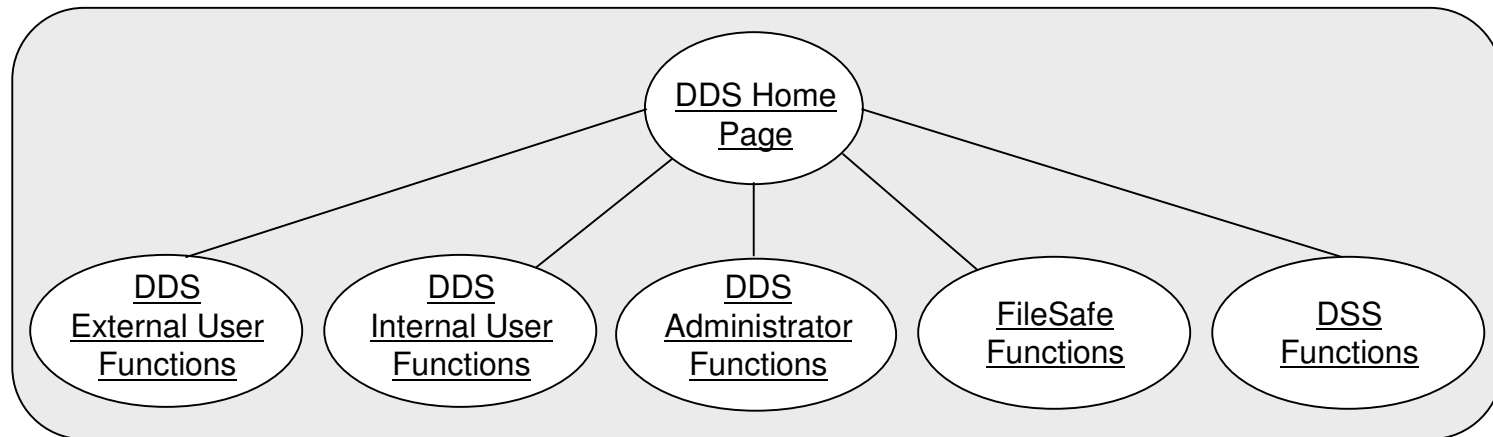
Technical Resources



Data Distribution System (DDS)

DDS Web Site

Web Hierarchy -- Proposed



Data Distribution System (DDS) – Web Site Development

Web Site Deployment Schedule

PHASE I-A

User / Client Web Functions

- 1. Establish Infrastructure
- 2. Code DDS Home Page / Menu
- 3. Develop Content
- 4. Test With Intranet Only

PHASE I-B

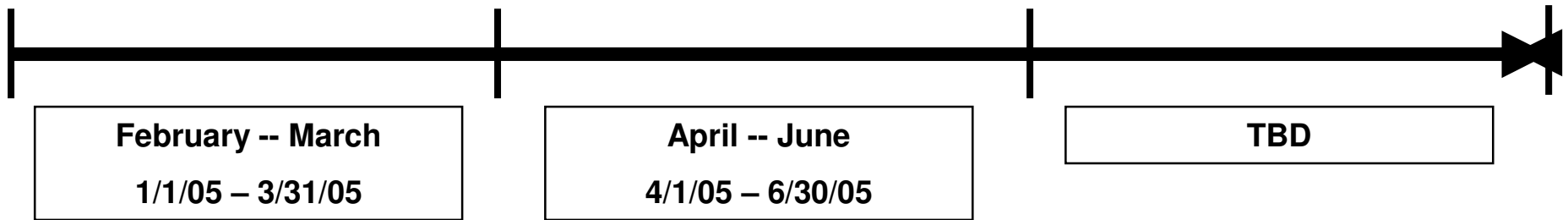
DW Administrator Web Functions

- 1. DDS Administration / Data Entry
- 2. Organization / Client Data Schedule
- 3. Seamless Link to FileSafe
- 4. Test / Put in Production

PHASE x

File Status & Data Request Workflow

- 1. Automated File Status Reporting
- 2. Client Request/Service Management
- 3. DW Management Reporting
- 4. Test / Put in Production



Data Distribution System (DDS) – Web Site Development

DDS Web Site Deployment Phases

PHASE I-A

User / Client Web Functions

1. Establish Infrastructure

- Development/Test Platform
- Oracle Database Schema
- Application Security Access
- Source Code Version Control
- Coding Standards / Language
- Web Site Branding / Graphics
- Web Site Navigation Design

2. Code DDS Home Page / Menu

- DW Subject Areas/Files with Documentation Links
- Data Request Instructions and Form for Email Delivery to DW
- DW Daily Load Status Alert
- DW News/Operations Content
- Link Web Login to DDS Web Site
- DDS Administrator vs. Client User Type Login Identification

3. Develop Content

- Determine List of Subject Areas and Standard Data Files
- Document Standard Files with Description, Record Layout and 'Clean' MetaData Dictionary

PHASE I-B

DW Administrator Web Functions

4. DDS Administration / Data Entry

- User / Client Maintenance
- File Inventory & Definition
- Delivery Destination Definition
- Delivery Schedule Assignment
- File Delivery List
- Web Content – News Messages & Operations Document Definition

5. Organization / Client Data Schedule

- File Inventory with Scheduled Files
- Delivery Schedule Assignments
- Delivery Destination with Schedule
- User / Client Profile for Organization

6. Seamless Link to FileSafe

- User Authentication
- DDS Becomes Home Page for FileSafe Users

7. Test / Put in Production

PHASE x

File Status & Data Request Workflow

1. Automated File Status Reporting

- Post data file date/time/size stamps
- Data File Status Screen
- Delivery Schedules with File Status

2. Client Request/Service Management

- File Inventory with Data File Request
- Data Request Response & Tracking
- Data Client Customer Service Log

3. DW Management Reporting

- Post DDS Statistics / Metrics
- DDS Statistics Reports
- DDS Metadata Reports / Listings

4. Test / Put in Production

Data Distribution System (DDS) – Web Site Development

Web Site Phase I-A

User / Client Web Functions

Capabilities:

- 1. Access**
 - Intranet
 - Internet
- 2. User Type Control**
 - DW Administrator
 - End User / Data Client
- 3. Standard Content**
 - List of Available Data Files
 - Data File Documentation
 - DW General Documentation
- 4. Basic Request Handling**
 - Download Data Request Form
 - Enter Request with Online Form
- 5. DW Load Status Verification**

Solution For:

- 1. What data does DW offer?**
- 2. What is the data file definition?**
- 3. How can I request data?**
- 4. Has the DW loaded data today?**
- 5. What should I know about the DW?**

Data Distribution System (DDS) – Web Site Development

Web Site Phase I-A

User / Client Web Functions

Content Development

1. Define Data Subject Areas
2. Inventory Input / Output Data Files by Subject Area (Excel Spreadsheet)
3. Identify Standard Data Files
4. Document Standard Files
 - Data Record Layouts
 - Data Dictionary MetaData
 - English Description
5. Document Data Request Process
 - DW Data Fulfillment Policy
 - Standard vs. Custom Requests
 - Information Requirement Flow
 - Data Request Form
6. Author Web Page Text
 - Home Page
 - Standard File Page
 - Data Request Page
 - Documentation Page

Metadata Definition

1. Define DDS Metadata:
 - Table Names
 - Field Names
 - Field Definition / Codes
 - Table Joins / Key Fields
 - Table Indices
 - Document with ERwin
2. Construct Oracle Tables
3. Import / Add File Inventory

Programming

1. DDS Home Page
 - Graphics / Branding
 - Navigation Links
 - DW Load Status messages
 - Menu / Buttons / Tabs for:
 - Standard Files
 - Data Requests
 - Content Viewer

Data Distribution System (DDS) – Web Site Development

Web Site Phase I-B

DW Administrator Web Functions

Capabilities:

- 1. Database for Metadata**
 - File Inventory
 - Users / Data Clients
 - Data Delivery Destinations
 - Date Delivery Schedules
 - Web Site Content Index
- 2. Data Distribution Administration**
 - File Delivery List
 - Connectivity Parameters
- 3. Data Client Personalization**
 - Organization View of Data Usage
 - Organization View of Users
 - Data Delivery Schedules by Organization and Data Client
- 4. Data Portal Interface**
 - Main Home Page for DDS

Solution For:

- 1. What data files does a client receive?**
- 2. Where is a data file delivered?**
- 3. Who are the users of DW data?**
- 4. How is data delivered to a destination?**
- 5. Which users can use FileSafe?**

Data Distribution System (DDS) – Web Site Development

Web Site Phase I-B

DW Administrator Web Functions

Content Development

1. Define Delivery Destinations
2. Define Data Client Users
 - Organization
 - Group
 - Contact Information
 - User Type
3. Identify Data Client Delivery Schedules
 - Match Data Files to Destinations
 - Match Delivery Destinations to Data Users
4. Other Documentation
 - Prudential Integration
 - Integration Testing
 - DW Schedules / News
5. DDS Test Plan

Metadata Definition

1. Import / Add Data:
 - Users / Data Clients
 - Organization Names (Links)
 - Group Names
 - Delivery Destinations
 - Data Delivery Schedules
 - Additional Documentation

Programming

1. DDS Administrator Web Pages
 - DDS Administrator Home Page
 - User / Client Entry
 - Data File Definition Entry
 - Data Destination Entry
 - Data Schedule Assignment
 - DDS Content Entry
 - User / Client Search
 - File Delivery List

Data Distribution System (DDS) – Web Site Development

Web Site Phase x

File Status & Data Request Workflow

Capabilities:

- 1. File Status Monitoring**
 - Date / Time / Size
 - Delivery Schedules with File Status
- 2. Data Request Tracking**
 - Integrated Data File Inventory, Schedule and Request Entry
 - Client Based Data Request Log
 - Response to Request Log
 - Request Status Inquiry / Review
- 3. Customer Service Tracking**
 - Client Based Customer Service Log
 - Customer Service Inquiry / Review
- 4. Management Data Collection**
 - Metrics for Users, Web Usage, Data Files, Data Requests, Client Service

Solution For:

- 1. Are the files I receive updated?**
- 2. What file can I request I do not receive yet?**
- 3. What is the status of my data request?**
- 4. Who spoke with the data client recently?**
- 5. Is DDS activity increasing?**