OCFS CONNECTIONS OPERATIONAL DATA STORE (ODS)

Overview Presentation

Introduction

The purpose of this slide presentation is to:

❑ Describe how the ODS differs from the Data Warehouse

❑ Share the CONNECTIONS ODS Solution

❑ Describe End-user Responsibilities & Requirements

Including:

➡ The creation of a data repository

➡ The "pulling" of data from the repository

➡ Local processing of incremental data sets

How is the CONX ODS Different from the Data Warehouse?

OCFS Data Warehouse	Operational Data Store
➡ **Contains current and historical data**	➡ **Contains current data only**
➡ **Data from multiple data sources (CCRS, CONNECTIONS, WMS)**	➡ **Data from a single data source (CONNECTIONS)**
➡ **Data is stored centrally on a NYS-operated server**	➡ **Incremental data files are sent to a Local District- or Agency-operated server**
➡ **Database(s) are maintained by OCFS staff**	➡ **Files and data are maintained by District/Agency staff**
➡ **Participating Districts/Agencies are required to have a Data Warehouse password**	➡ **Participating Districts/Agencies are required to have an ODS password and an OFT-approved secure server**
➡ **Data is provided in the form of reports and report tables**	➡ **Data is provided in raw format (delimited or .xml file)**
➡ **Data supports analysis, policy decision making, and trending types of reporting**	➡ **Data supports tactical, day-to-day decision making and operational needs**

ODS is Optional

➡ The ODS is an optional source of data for VA's & LDSS.

➡ If you are interested and don't have the capacity, you can always participate later.

➡ The Data Warehouse is still the primary source for reporting and information at a strategic level.

➡ The ODS is for providing the Agencies/LDSS with raw data to support their day to day operational needs.

Concepts of an Operational Data Store (ODS)

Purpose of an ODS

The primary purpose of an ODS is to collect, integrate and distribute a current view of information.

AN ODS:
- Supports tactical or day-to-day decision making.
- Facilitates the sharing of detailed current information.

Definition of an ODS

The ODS is a subject-oriented, integrated, current-valued and volatile collection of detailed data that provides a true enterprise view of information.

Subject-orientation : The ODS is organized around major subjects of interest to the organization.The subjects can be any that are important to the organization. *For example, the CONNECTIONS ODS may house the most current information on subjects like client, case, assessment, and service.*

Integration : In many cases information pertaining to a particular subject resides in multiple operational and informational systems. To provide an enterprise view, current data across these systems need to be consolidated and integrated. *(The initial CONNECTIONS ODS will likely have very little integration as we are dealing with a single data source).*

Current Valued : The ODS carries little or no versioned historical data. Unlike the data warehouse, which is a series of snapshots of information used for strategic analysis, the ODS is a current picture of the subjects in question and is used to drive necessary and desired actions.

Volatile : The data in an ODS will change frequently, and these changes are typically reflected as updates to fields in a record. Change history is not captured.

Detailed : The ODS contains mostly detailed data about the subjects it includes. *The CONNECTIONS ODS will consist of detailed CONNECTIONS data. Ownership at the Organization & Voluntary Agency levels will be designed into the physical structures.*

Technical Overview
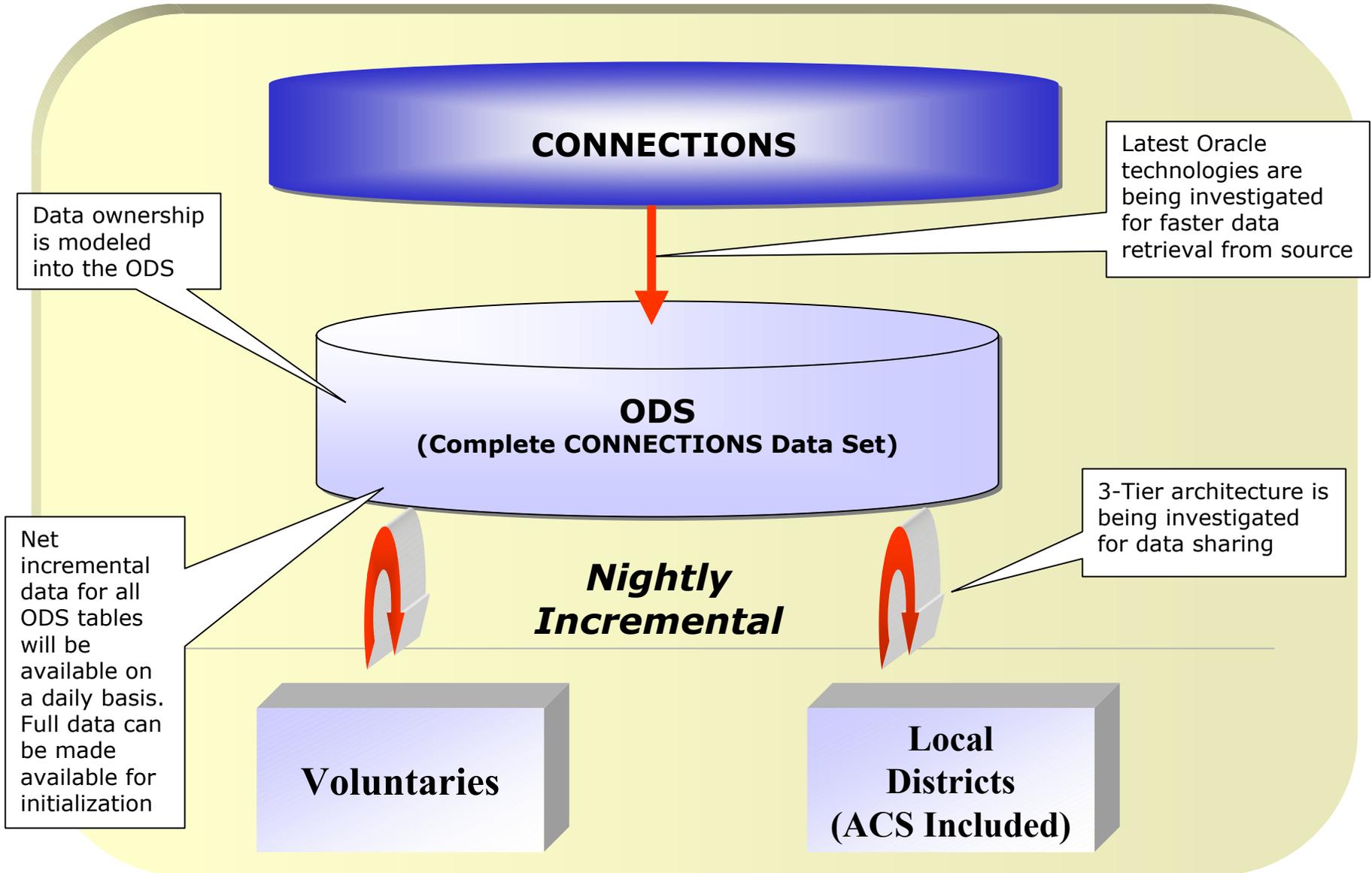
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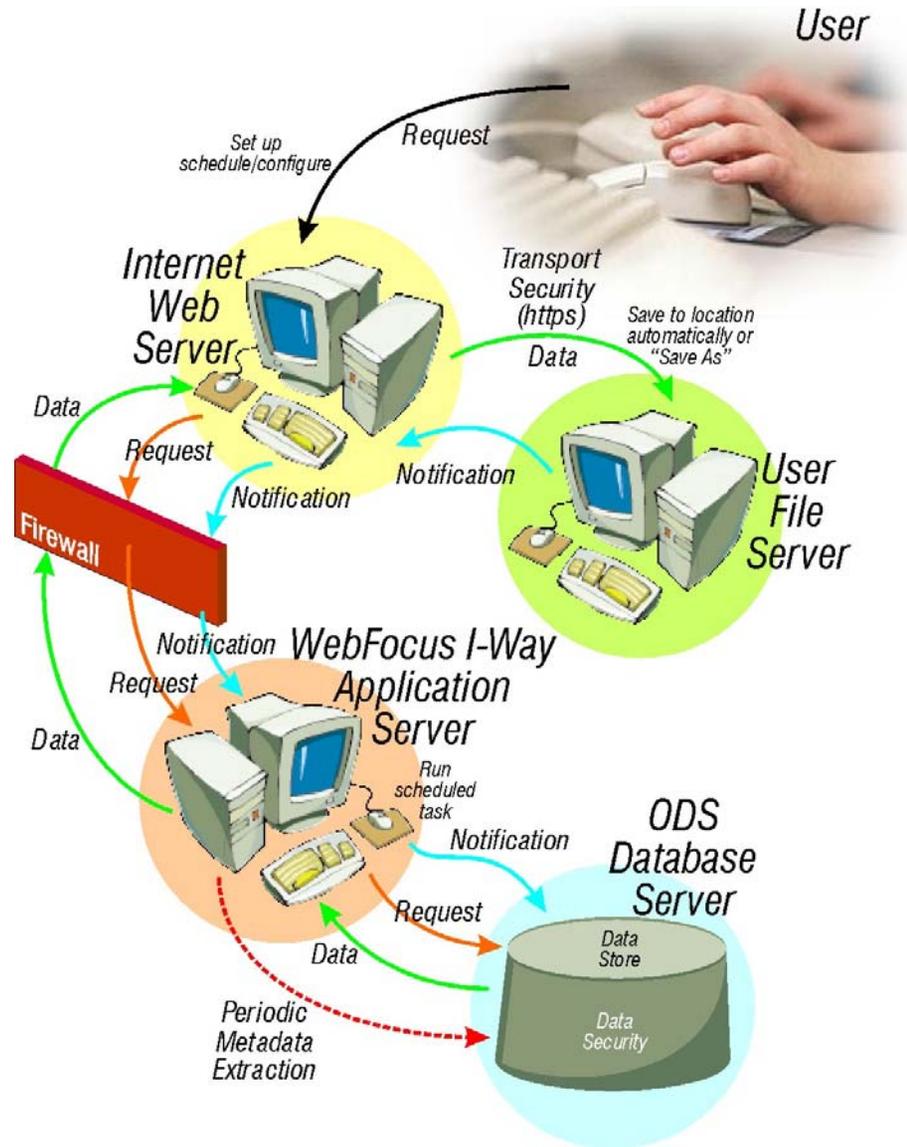
ODS Solution Details

➡ *Global Solution* for interested Local Districts and Voluntary Agencies.

➡ *Detailed CONNECTIONS data* will be made available for extraction by registered users.

➡ Full data sets will be provided for initialization.

➡ Incremental data will be available on a daily basis which can be applied to local repositories. (*Net Incremental data* accumulates based on last successful retrieval).

➡ *Data will be secured* allowing Local Districts & Voluntary Agencies access to only their respective information.

➡ The latest Oracle tools & techniques will be used for ETL from CONNECTIONS into the ODS (reducing processing time and failure points).

➡ The ODS will be *maintained* with each CONNECTIONS BUILD.

➡ This solution provides for *one-way data sharing* and will not receive external feeds.

➡ Initially *no narrative fields* will be available for extraction.

ODS Stakeholder Options

Stakeholders Can

- **Feed local applications from their local repository.**

- **Replace existing CONNECTIONS feeds with data available in the ODS**

- **Maintain a historical data perspective in their local database. (As frequently as daily snapshot).**

Stakeholders Cannot

- **Rely on the ODS to provide historical data.**

- **Use the ODS as the backend database for application and reporting systems.**

- **Use the ODS for strategic analysis and trending analysis.**

ODS Data Currency Example

DAY 1

ID	FIRST	LAST	UNIT
100	JOHN	SMITH	005
200	PAUL	PRESSLER	010

The ODS contains a single current snapshot of available data

DAY 2

ID	FIRST	LAST	UNIT
100	JOHN	SMITH	**100**
200	PAUL	PRESSLER	010
300	**DANA**	**COHEN**	**030**

DAY 3

ID	FIRST	LAST	UNIT
100	JOHN	SMITH	**045**
200	PAUL	PRESSLER	010
300	DANA	COHEN	030
400	**WILL**	**GRACE**	**060**

RED   : MODIFIED DATA (UPDATE)

BLUE : NEW ADDED DATA (INSERT)

Processes for handling deleted records need to be explored

WEEK

ID	FIRST	LAST	UNIT
100	JOHN	SMITH	045
200	PAUL	PRESSLER	010
300	DANA	COHEN	030
400	WILL	GRACE	**080**
500	**TOM**	**HALL**	**075**
600	**ERIC**	**RICE**	**010**
700	**KYLE**	**ORTON**	**030**

ODS Incremental Data Example

"Daily" User

"Weekly" User

Week 1 Day 1

ID	FIRST	LAST	UNIT
100	JOHN	SMITH	005
200	PAUL	PRESSLER	010

ID	FIRST	LAST	UNIT
100	JOHN	SMITH	005
200	PAUL	PRESSLER	010

Week 1 Day 2

ID	FIRST	LAST	UNIT
100	JOHN	SMITH	100
300	DANA	COHEN	030

Net Incremental data accumulates based on last successful retrieval.

Week 1 Day 3

ID	FIRST	LAST	UNIT
100	JOHN	SMITH	045
400	WILL	GRACE	060

Week 2 Day 1

ID	FIRST	LAST	UNIT
400	WILL	GRACE	080
500	TOM	HALL	075
600	ERIC	RICE	010
700	KYLE	ORTON	030

ID	FIRST	LAST	UNIT
100	JOHN	SMITH	045
300	DANA	COHEN	030
400	WILL	GRACE	080
500	TOM	HALL	075
600	ERIC	RICE	010
700	KYLE	ORTON	030

RED : MODIFIED DATA (UPDATE)

BLUE : NEW ADDED DATA (INSERT)

What is Required to Utilize the ODS?

➡ Provide a local server for receiving files/data (Preferable on CONNX network). Server must have Security Certificate.

➡ Register for CONNECTION ODS Data Sharing

➡ Configure/Schedule data pulls via an OCFS web server (with OCFS assistance)

➡ Locally develop incremental processing routines

➡ Establish a local database to maintain/store the data

➡ Understand local backup & recovery processing requirements and risk factors

➡ Develop a local understanding of the data content and interpretation

Still Have Questions about the ODS?

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