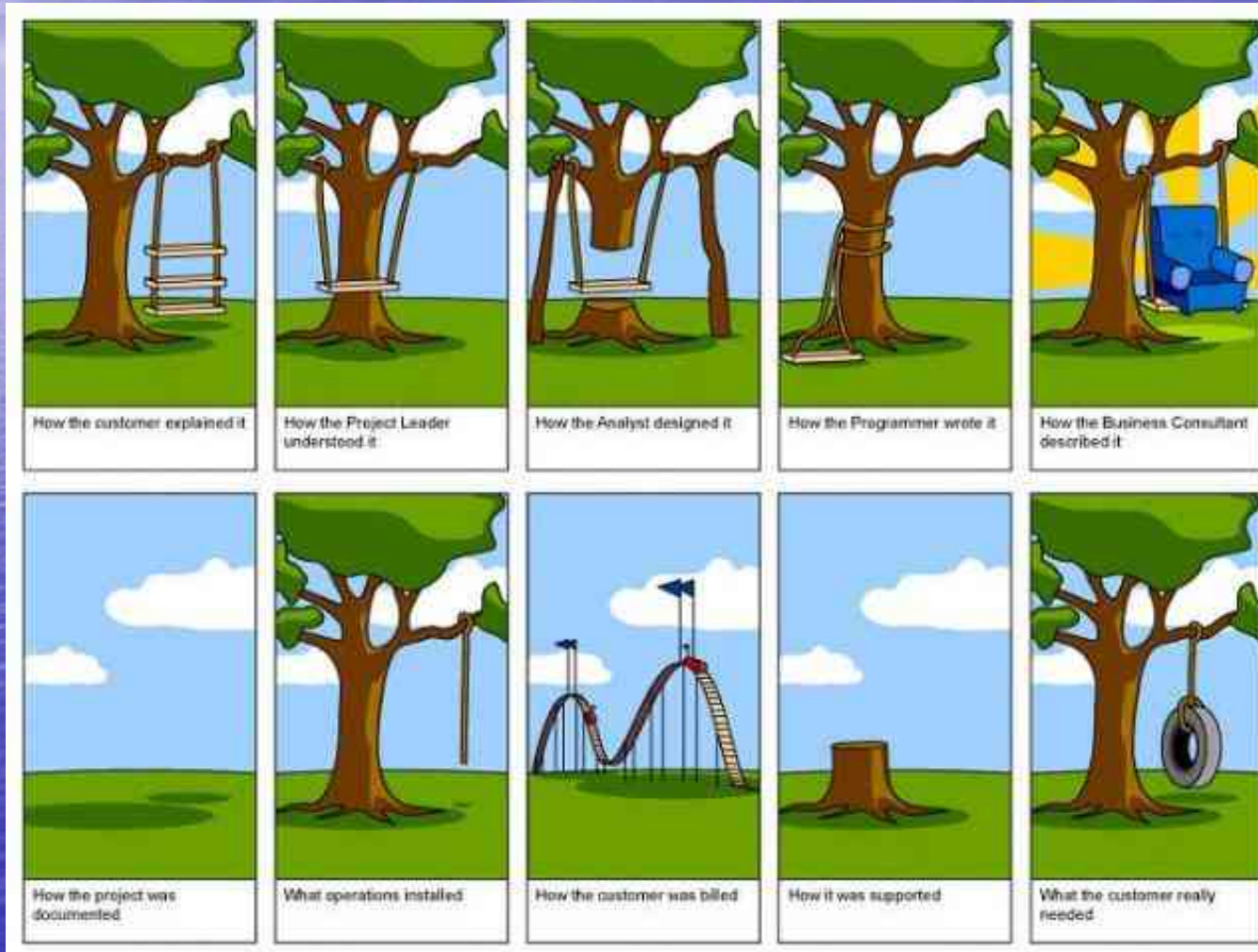


Syspedia

**Leveraging your Embedded
Metadata**

Sales@syspedia.com

Typical Systems today



How is Syspedia better?

- Metadata from all platforms

- This means it is able to parse your data and information across your many networked hardware platforms. It can do this because Syspedia is 100% Java and based on open standards and runs everywhere.

- Understand your business rules

- In support of security, system integration, and software migrations
 - Parses applications and JCL to the element level for relationship analysis across platforms, systems, applications and file systems.

- Easy self-service analysis

- With a Google-like an intuitive web interface, open data model, plus endless ad hoc report capability.

Automatically builds metadata

- Built through change management process
- Syspedia scans at the element detail level
 - Builds repository of existing elements
 - Names, definitions, attributes and more....
 - Query/analyze existing standards information
- Shows existing relationships and attributes
 - Allows further standards documentation
 - Build additional naming standard relationships
 - Understand domain and range relationships

Standards Administration

- Setup standard to tie definitions together
- Associate master names & definitions
- Relate other element names to master name
 - Relate to Groups, Business, Subject or Class
 - Enhance descriptions and comments
 - Associate to non-standard names
- Master definition related to:
 - Set of libraries
 - Codes or specific values
 - Other definitions

Standards Administration

Main Menu - PSI Syspedia - Windows Internet Explorer

http://192.168.0.104:9080/psi20/PSI_20_logon

File Edit View Favorites Tools Help

Main Menu - PSI Syspedia

Systems Envir/Apps Modules Elements Help

- Administration
 - Environment Administration
 - Application Administration
 - Support Contact Administration
 - Data Discovery Administration
 - Standards Administration

View.. Alpha List Relationships Standards Data Sets Reports Libraries Definitions Values

Standards Administration - Syspedia - PSIInc. - Windows Internet Explorer

http://192.168.0.104:9080/psi20/psi_20_462.jsp

File Edit View Favorites Tools Help

Standards Administration - Syspedia - PSIInc.

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Systems Envir/Apps Modules Elements Help

Standards Administration Main Menu

Standard: ISO11179-STANDARD Support: DAVE
Created: 2005-06-01 17:09:42.921001

Group: OVERALL STANDARD

Subject: Standards Administration - Syspedia - PSIInc. - Windows Internet Explorer

Business: http://192.168.0.104:9080/psi20/psi_20_467.jsp

Class: Standards Administration - Syspedia - PSIInc.

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Standard Names

Description: Standard: STANDARDCUSTOMER List From Element1: CNAME

To Element: CUST_NAME

Created: 2005-01-17 14:47:29.843001

Support: DAVE

Group: GRUP

Business: BUSIN

Subject: SUBBS

Class: CLASS

Updated: 2005-06-03 17:33:35.078001

By: DAVE

Applied: 2005-01-17 14:47:29.843001

Description: THE STANDARD ABBREVIATION FOR THE CUSTOMER NAME

Comments: ALL CUSTOMER NAME MIGRATED TO THIS

Add
 Change
 Delete
 Retrieve

[Return to the main menu](#)

Retrieval complete.....

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Done

Standards Listing - Syspedia PSIInc. - Windows Internet Explorer

http://192.168.0.104:9080/psi20/psi_20_461.jsp

File Edit View Favorites Tools Help

Standards Listing - Syspedia PSIInc.

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Systems Envir/Apps Modules Elements Help

Standard Listing Standards Inquiry Main Menu

Standard Name>> %

Standard Name	Created	Updated	Element	Sub
ISO11179-STANDARD	2005-06-01 17:09:42.921001	2005-06-01 17:09:42.921001	OVERALL STANDARD	OVERALL ISO11179-ENTERF ELEMENT DICTIO
NEWSTANDARD	2005-01-08 13:38:17.796001	2005-04-29 11:27:13.515001	CUSTOMER	CUSTOMER
PRODUCTSTANDARD	2005-01-20 10:01:41.312001	2005-01-20 10:02:46.656001	PRODUCT	GOODS SERVICE
STANDARDCUSTOMER	2005-01-17 14:19:13.031001	2005-04-29 12:32:38.515001	CUSTOMER	PURCH

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Done

Internet 100%

Standards Administration

- Standards reflect the past problems
 - Discover and augment existing standards
- Setup Master Standard to associate all element characteristics
 - Many different standards
 - Associated to
 - Different corporate initiatives
 - Projects
 - Departments

Standards Administration

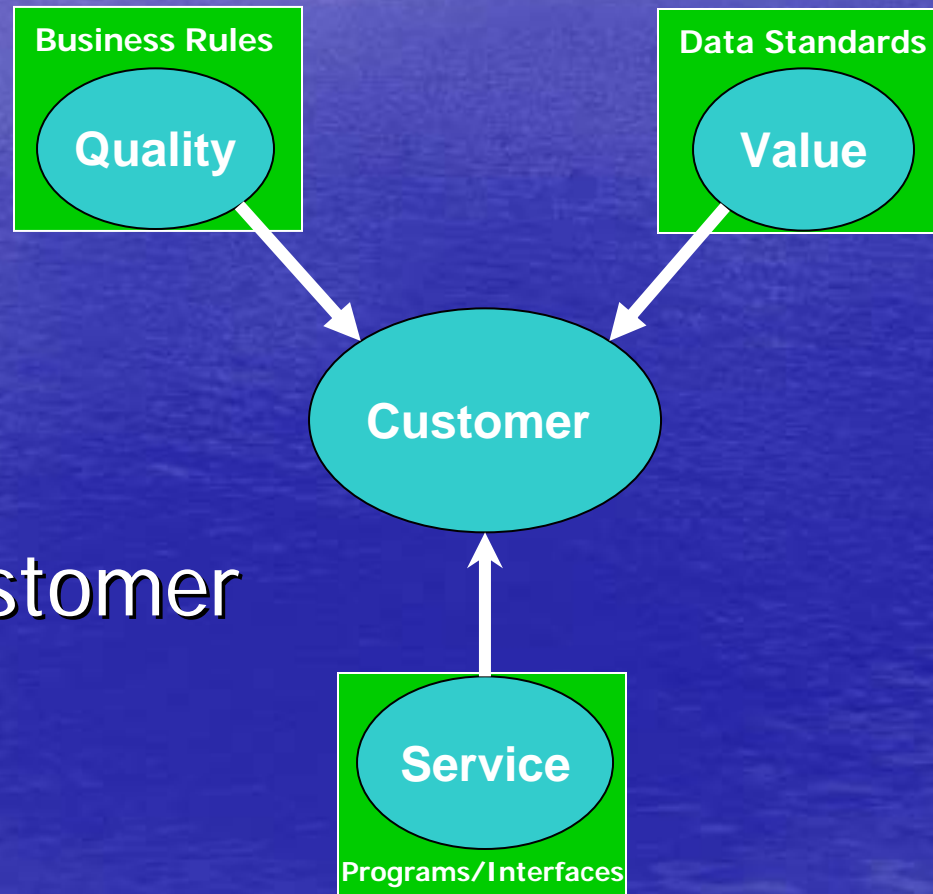
- Associate master names to other names
 - Master element name desired
 - Other elements that have same meaning
- Relate other element names to master name
 - Relate to Groups, Business, Subject or Class
 - Enhance descriptions and comments
 - Associate to non-standard names

Database & File Relationships

- Researches all Database/File attributes & usage
 - Understand cross platform database and file lineage
 - Applications and programs using your data
- Reconcile application database/file dependencies
 - Understand other definitions and the data's travels
 - Research its business rules and interfaces
- Quickly understand operational data aspects
 - Scope the integration effort and application conflicts

Database & File Relationships

- Quickly annotate, augment or relate metadata
 - Databases
 - Files
 - Elements
 - Standards
 - Applications
- 360° view of customer



Comprehensive Metadata

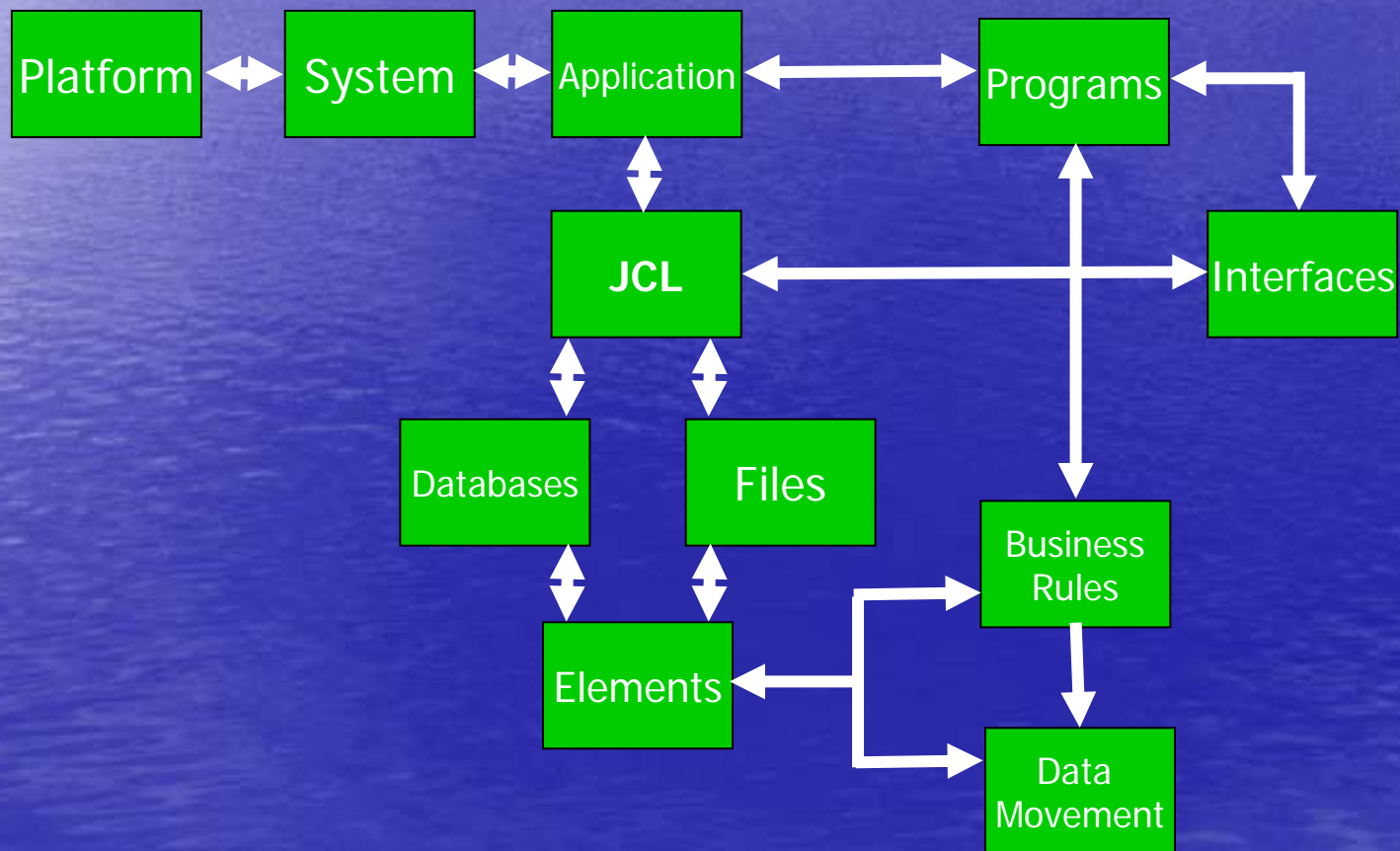
- Business Rules and Data Quality
 - Application source captured
 - Capture IF and other logic statements
 - Where and what quality is verified against
 - Drive logic of your business rules and process
 - Capture all MOVE statements
 - Sending and Receiving elements and files
 - Logic processes on these business rules
 - Data quality is ensured by these tests
 - Data lineage through all the data movement

Element level details

- JCL provides many relationships
 - Between program, database and files
 - JCL gives all DSN and DBMS information
 - Between platform, system and application
 - Schedule provides frequency

Architecture for customization

- Comprehensive metadata
 - What other items do you need?



JCL – The first problem

- Job Security – Simplicity

```
//OEST130P JOB (OES,PROD),'CALCULATE TAX AMOUNT',  
//          CLASS=D,  
//          COND=(0,NE),  
//          MSGCLASS=W  
//*****  
//*      THE MAIN FUNCTION OF THIS JOB IS TO :  
//*          1. PROCESS THE ORDERS AND CALCULATE THE TAX AMOUNT  
//*****  
//OESSTEP1 EXEC OEST13P,SUB=DSNP  
//*  
//
```

JCL – Runs the environment

```
//OEST130P JOB (OES,PROD),'CALCULATE TAX AMOUNT',  
//          CLASS=D,  
//          COND=(0,NE),  
//          MSGCLASS=W  
//*****  
/** THE MAIN FUNCTION OF THIS JOB IS TO :  
/** 1. PROCESS THE ORDERS AND CALCULATE THE TAX AMOUNT  
/** 2. SELECT THE TAX AMOUNT PPERCENTAGE FROM THE TAX_RATE_T TABLE  
/** 3. OR CALL THE STORED PROCEDURE FOR FOREIGN COUNTRIES.  
/** 4. BASED ON THE LOCATION OF THE ORDER CALCULATE THE AMOUNT  
/**    AND WRITE THE INFORMATION TO THE OUTPUT FILE  
//*****  
/**  
//JOBLIB DD DISP=SHR,  
//         DSN=SYS3X.DB2.DPL0.LOAD  
/**  
//OESSTEP1 EXEC PGM=OEST130,COND=(4,LT),REGION=0M  
/**  
//STEPLIB DD DISP=SHR,DSN=SYS3.DPL0.DSNEXIT  
//         DD DISP=SHR,DSN=SYS3X.DB2.DPL0.LOAD  
/**  
//INTRANS DD DSN=OEST.ORDERS.DAILY.EOD,DISP=SHR  
/**  
//OUTTRANS DD DSN=OEST.ORDERS.DAILY.SALETAX,DISP=(NEW,,DELETE),  
//         SPACE=(CYL,(500,30))  
//SYSPRINT DD SYSOUT=*  
//SYSOUT DD SYSOUT=*  
//
```

Legend:

- OEST130P** = KEYS-JOB PROGRAM
- DD** = DATA RELATIONSHIPS
- DSN=SYS3X.DB2.DPL0.LOAD** = DATABASES & FILES

So much metadata to be harvested

IDENTIFICATION DIVISION.

PROGRAM-ID.

OEST130.

* ** VERSION 01 **

AUTHOR.

BEULKE.

INSTALLATION.

PSI-PROCESSORS.

*REMARKS. THIS PROGRAM COMPUTES THE SALES TAX
* FROM THE MASTER TRANSACTION FILE-
* AND PUTS OUT THE TOTAL SALES FIGURES
* IN THE OUTFILE.

ENVIRONMENT DIVISION.

CONFIGURATION SECTION.

SOURCE-COMPUTER. NCR-VRXE.

OBJECT-COMPUTER. NCR-VRXE.

INPUT-OUTPUT SECTION.

FILE-CONTROL.

SELECT TRANSDATA ASSIGN TO EXTERNAL INTRANS.

SELECT CALCOUTFILE ASSIGN TO EXTERNAL OUTTRANS.

DATA DIVISION.

FILE SECTION.

FD TRANSDATA RECORD CONTAINS 697 CHARACTERS.

01 DATA-RECORD.

03 IN-DRMEMBER-TYPE PIC X.

03 IN-REGISTER-NUMBER PIC 9(7).

03 IN-DRSSAN PIC 9(9).

03 IN-NAME-FIRST PIC X(20).

 = KEYS-JOB PROGRAM
 = DATA RELATIONSHIPS
 = DATABASES & FILES

Values, Codes and Databases

WORKING-STORAGE SECTION.

```

01 WS-USA PIC X(03) VALUE "USA".
01 WS-COMPUTE-FIELDS.
   03 WS-SALE-AMT PIC 9(5)V99 VALUE ZEROS.
   03 WS-SALE-TAX-AMT PIC 9(5)V99 VALUE ZEROS.
   03 WS-SALE-TAX-RATE PIC 9(2)V99 VALUE ZEROS.
   03 WS-SALE-TOT-AMT PIC 9(6)V99 VALUE ZEROS.
01 COMAST-MASTER.
   05 COMASTM-FINAL-DEST PIC X(01) VALUE SPACES.
      88 COMASTM-FINAL-DEST-FED VALUE 'F'.
      88 COMASTM-FINAL-DEST-COMM VALUE 'C'.
      88 COMASTM-FINAL-DEST-STATE VALUE 'S'.
      88 COMASTM-FINAL-DEST-ENGR VALUE 'O'.
      88 COMASTM-FINAL-DEST-JIM VALUE 'J'.
      88 COMASTM-FINAL-DEST-IR VALUE 'I'.
      88 COMASTM-FINAL-DEST-MC VALUE 'M'.
      88 COMASTM-FINAL-DEST-ENG-REQ VALUE 'E'.
   05 COMASTM-IO-SW PIC X(01) VALUE 'N'.
      88 COMASTM-IO VALUE 'Y'.
   05 COMASTM-AIR-GRND-SW PIC X VALUE SPACE.
      88 COMASTM-AIR VALUE 'A'.
      88 COMASTM-GROUND VALUE 'G'.

```

 = ELEMENTS
 = DEFINITION
 = VALID VALUES/CODES
 = VALUE NAMES
 = DATABASE DEFINITION

***** COBOL DECLARATION FOR TABLE LFADBAC.CNTY_T

```

01 CNTY.
   10 TTXT-RATE-ZIP-CODE PIC X(9).
   10 TTXT-RATE-ST-CODE PIC X(2).
   10 TTXT-RATE-CNTY-CODE PIC X(3).
   10 TTXT-RATE-PCT-AMT PIC 9V9999.

```

Movement, Business Rules & Data Quality

025-GET-TAX-RATE.

IF IN-ZIPCODE NUMERIC

MOVE IN-ZIPCODE TO TTXT-RATE-ZIP-CODE

DISPLAY 'NON NUMERIC ZIP CODE '.

MOVE IN-COUNTRY-CODE TO TTXT-CNTY-CODE.

IF IN-COUNTRY-CODE = WS-USA

DISPLAY 'CALLING DB2 DIRECT'

EXEC SQL

```
SELECT TTXT_RATE_PCT_AMT
  INTO :TTXT-RATE-PCT-AMT
  FROM PROD.TAX_RATE_T
 WHERE TTXT_RATE_ZIP_CODE = :TTXT-RATE-ZIP-CODE
       AND TTXT_RATE_STATE = :TTXT-RATE-STATE
       AND TTXT_CNTY_CODE = :TTXT-CNTY-CODE
 WITH UR
```

END-EXEC.

MOVE IN-STATE TO OEST-STATE.

MOVE IN-ZIPCODE TO OEST-ZIPCODE.

MOVE IN-CODE-S TO OEST-SALE-TYPE.

COMPUTE WS-SALE-TAX-AMT

= TTXT-RATE-PCT-AMT * IN-SALE-AMT

+ TTXT-RATE-CITY * IN-SALE-AMT.


IF WS-SALE-TAX-AMT > 100

COMPUTE WS-SALE-TAX = WS-SALE-TAX-AMT + 10.00

MOVE WS-SALE-TAX-AMT TO OEST-SALE-TAX-AMT.

ADD IN-SALE-AMT TO OEST-SALE-AMT GIVING WS-SALE-TOT-AMT.

 = DATA QUALITY

 = MOVEMENT

 = BUSINESS RULES

 = INTERFACES

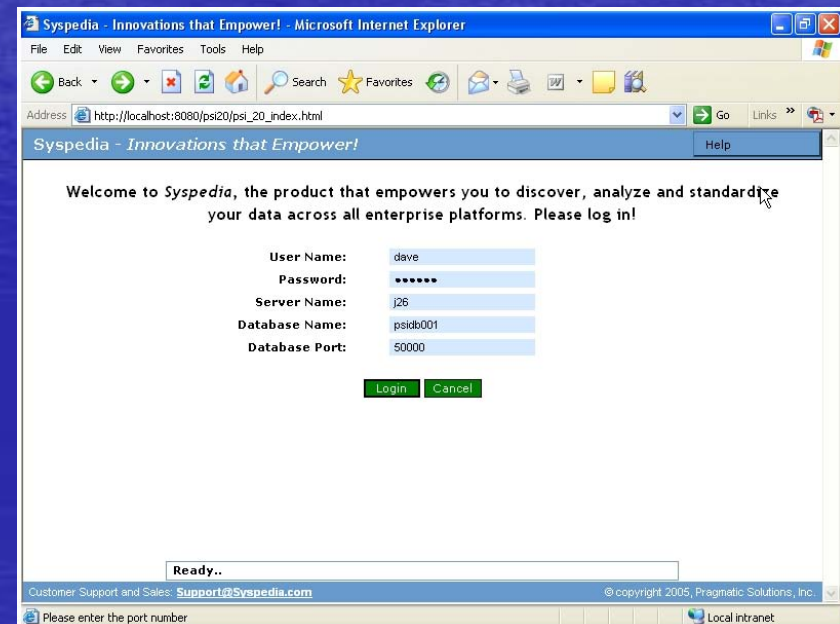
Provides quick answers – 5 Clicks

Common situation

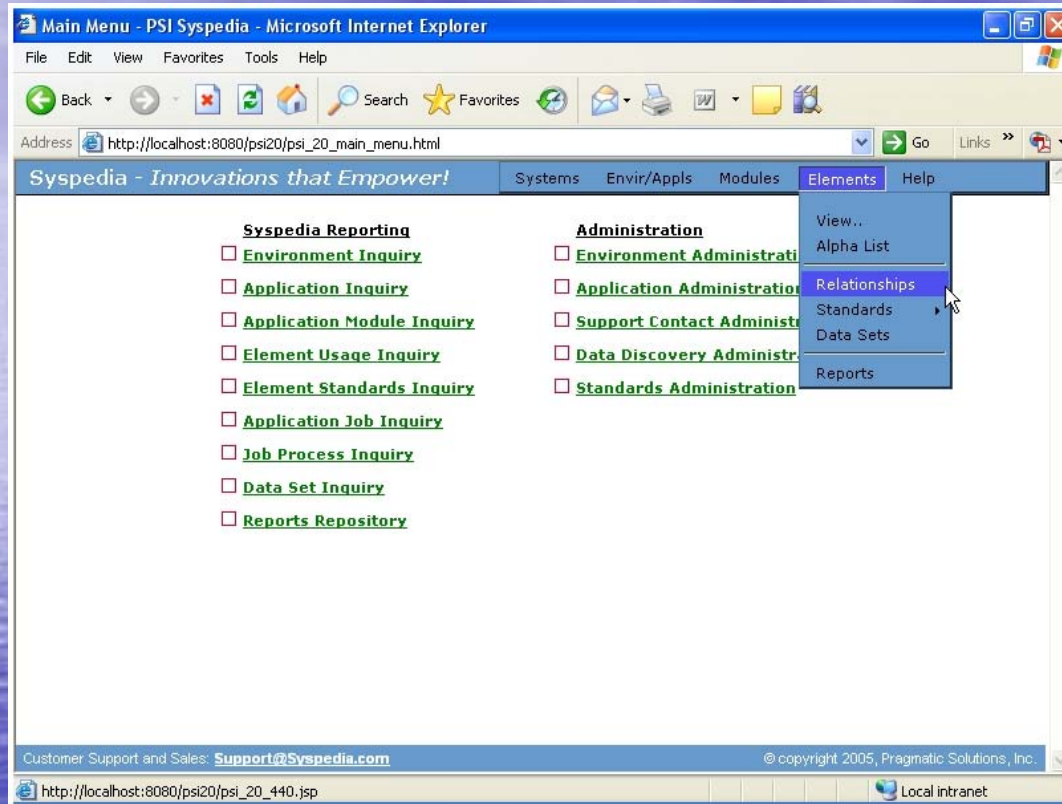
- Data relationship or quality issue
 - Data exception occurs in an application
 - Program aborts and the processing stop

- What program caused it!
 - Where is the element used?
 - It is in a lot of programs!

- Click 1 – Log on
- Security first – log on to Syspedia
 - Meets strictest regulatory requirements
- Web application
 - Web application on your company intra-net



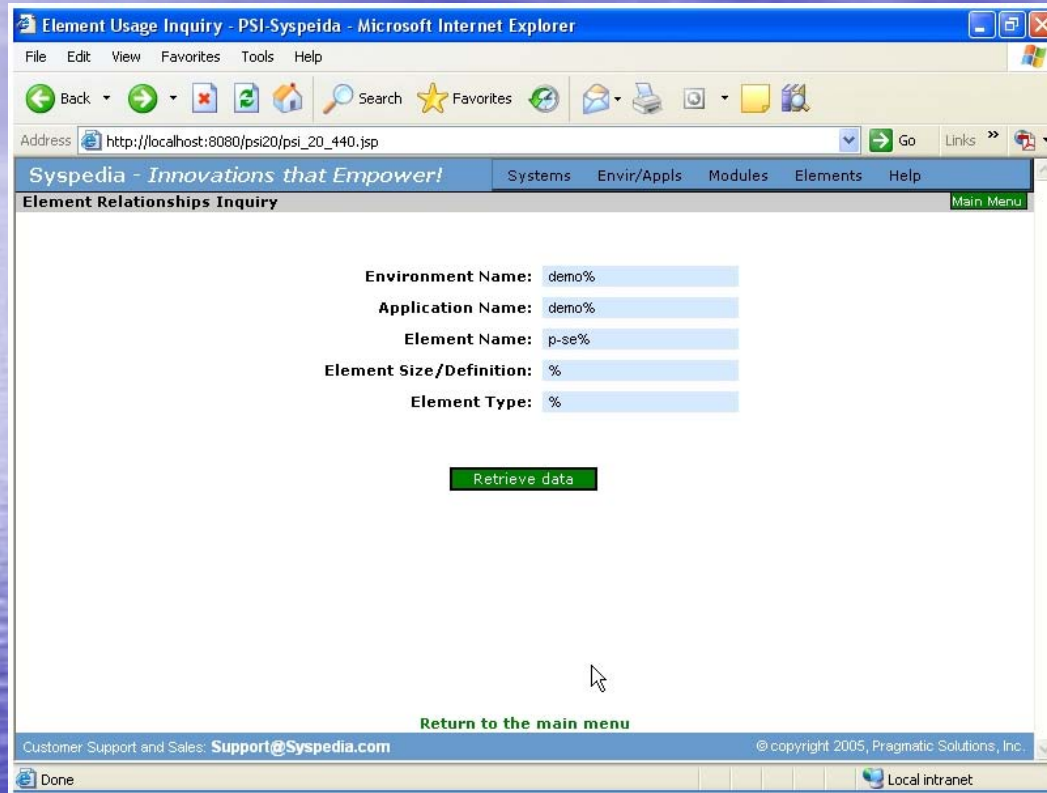
Element Relationships



Click-2

- Syspedia offers many options at your finger tips!
 - Main menu quickly gets you to the information you need!
- Since the P-SERV data element had the data exception
 - What other programs use this data element?

It is used in....



Click-3

- By entering the criteria
 - Syspedia can search across platform or applications
- You can search a wide variety of criteria in Syspedia

It is used in....

Element Relationships Listing - PSI-Syspedia - Microsoft Internet Explorer

Address: http://localhost:8080/psi20/psi_20_442.jsp

Syspedia - Innovations that Empower! Systems Envir/Appls Modules Elements Help

Element Relationships Job Listing Relationship Inquiry Main Menu

Envr>> DEMO% Appl>> DEMO% Elem>> P-SERV Defn>> % Type>> %

Element Name	Definition	In Program	Extract
<input checked="" type="radio"/> P-SERV	9(2)	C:\DEMO\LIB160\assn130d	2005-06-26 13:1
<input type="radio"/> P-SERV	9(2)	C:\DEMO\LIB160\club030d	2005-06-26 13:1
<input type="radio"/> P-SERV	9(2)	C:\DEMO\LIB164\abil70d	2005-06-26 13:1
<input type="radio"/> P-SERV	9(2)	C:\DEMO\LIB164\assn020d	2005-06-26 13:1
<input type="radio"/> P-SERV	9(2)	C:\DEMO\LIB164\assn030d	2005-06-26 13:1
<input type="radio"/> P-SERV	9(2)	C:\DEMO\LIB164\assn140d	2005-06-26 13:1
<input type="radio"/> P-SERV	9(2)	C:\DEMO\LIB164\assn141d	2005-06-26 13:1
<input type="radio"/> P-SERV	9(2)	C:\DEMO\LIB164\billn20d	2005-06-26 13:1
<input type="radio"/> P-SERV	9(2)	C:\DEMO\LIB164\cbil110d	2005-06-26 13:1
<input type="radio"/> P-SERV	9(2)	C:\DEMO\LIB164\cbil110e	2005-06-26 13:1
<input type="radio"/> P-SERV	9(2)	C:\DEMO\LIB164\cbil115d	2005-06-26 13:1
<input type="radio"/> P-SERV	9(2)	C:\DEMO\LIB164\club080d	2005-06-26 13:1
<input type="radio"/> P-SERV	9(2)	C:\DEMO\LIB168\assn130d	2005-06-26 13:1
<input type="radio"/> P-SERV	99	C:\DEMO\LIB164\assn952d	2005-06-26 13:1
<input type="radio"/> P-SERV	89(1) ↔	C:\DEMO\LIB164\assn212d	2005-06-26 13:1

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Click-4

- List of programs using P-SERV element
 - Shows one program with a different definition
- By choosing the program we see the data element relationships and the business rules

It is used in....

The screenshot shows a web browser window titled 'Element Usage Job Listing - PSI-Syspedia - Microsoft Internet Explorer'. The address bar shows 'http://localhost:8080/psi20/psi_20_444.jsp'. The page content includes a navigation menu with 'Systems', 'Envir/Apps', 'Modules', 'Elements', and 'Help'. Below this is a section for 'Element Relationship Listing' with sub-links for 'Program Listing', 'Relationship Inquiry', and 'Main Menu'. The main content area is titled 'Element>> P-SERV' and contains several tables and text blocks:

- Receiving Element Name** table: 'Element is not involved as a SENDER in any movements in this module.'
- Sending Element Name** table:

Sending Element Name	Stmnt #	Sub #	Statement
PC-SERV	57	1	MOVE PC-SERV TO P-SERV
- Comparer Element Name** table: 'Element is not involved as a COMPAREER in any decisions in this module.'
- Comparee Element Name** table: 'Element is not involved as a COMPAREE in any decisions in this module.'

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Click-5

- Syspedia shows the application code that effects P-SERV
 - List all movements, business rules and comparisons
- We quickly understand the data element mismatch issue
 - We quickly understand what program caused the problem
 - We quickly understand where in the application code the element is used

Syspedia provides quick answers

- Syspedia provides Cross Platform analysis of data elements
 - Syspedia 100% Java
 - Data elements standards, dictionary
- Syspedia easy to use
 - Intuitive web interface
- Answers for everyone
 - Business analysts
 - Application developers
 - Database administrator

Syspedia can help you build it!

- Extract all the program/file components
 - Evaluate in-depth information
 - Leverage the web interface
 - Wikipedia – Crowd source your metadata
- Implement capabilities needed now!
 - Setup is quick and easy
- Setup up your metadata repository today!
 - Nothing is as unique as your business
 - Inform and transform your business for performance!

Success Stories

- Full service repository
 - Shares metadata with all in-house and out sourced development staff
 - Common understanding, domain and range
- Full 360 view of customer
 - Needed to find all customer addresses
 - Where is the data used?
 - What data validation criteria is used?
- Project Conversion
 - Understand where and what IDMS/Adabase calls

Imagine what you could do with all those colors?

