PathPoint Software

Dynamic Discovery for Mainframe Applications

Mainframe Application Success

Complex code, high support costs and shrinking mainframe application expertise characterize the mainframe application environment.

PathPoint offers the keys to success for current and future mainframe application projects, by helping people understand:

- HOW the applications really work
- WHERE in the applications to investigate

Preparing Applications for the Future

PathPoint simplifies and accelerates the transition of legacy mainframe applications into flexible, functional and nimble applications. PathPoint does so by providing transition features and functionality to support:

- Service Oriented Architecture (SOA)
- Modernization and Transformation
- Componentization

Managing the Present

PathPoint provides a means to reduce the time and effort associated with managing the day to day mainframe application maintenance project workload, including:

- Change Requests
- Problem Determination
- Performance Assessment

PathPoint – A New Dynamic Approach

PathPoint is a *dynamic* mainframe application *discovery* tool that provides a *new execution-based* approach for understanding how mainframe applications "really work".

PathPoint traces and captures the sequential application-processing path followed by specified, user entered, business transactions - *as they execute*. Captured information provides unparalleled insight into execution-based application facts.

PathPoint's dynamic approach eliminates the need to analyze static source code and "play computer" as you try to find the right code.

No more guess work. PathPoint helps you find the right code.

Accelerate and Fund Projects

Personal productivity gains will result from the use of PathPoint and, in turn, save time. This timesaving has significant value and provides a unique vehicle to accelerate, as well as fund, present and future projects.

- Mainframe application maintenance cost savings can fund new projects
- Greater efficiency accelerates solution delivery

Sequence Number | CICS System/Trans | Program Name | Call Stmt Number | Call Statements | Status Code | Response Time | Interim Time

Seq	Subsystem	Trans/Step	Pgm/Pkg	Stmt #	Statement ‡	Status	Resp †	Interim †
1	CTVB	OE05	CICS		CALL OPOE005C (INIT) IN CO2 ← Program		0.000000	0.005117
2	CTVB	OE05	OPOE005C	10452	SELECT ORDER_STATUS_CODE INTO :WORK-FETCH.WK-ORDER-STAT	100	0.001151	0.007457
3	CTVB	OE05	OPOE005C	10459	SELECT ORDER_STATUS_CODE INTO :WORK-FETCH.WK-ORDER-STAT	0	0.000803	0.003816
4	CTVB	OE05	OPOE005C	x'192D6'	CALL OPCO020O (LINK) IN CO2 ← Program		0.000000	0.003344
5	CTVB	OE05	OPCO020O	993	OPEN ISBN-CURSOR	0	0.004950	0.002917
6	CTVB	OE05	OPCO020O	1026	FETCH ISBN-CURSOR INTO :HV-PROD-TC			
7	CTVB	OE05	OPCO020O	1015	CLOSE ISBN-CURSOR			
8	CTVB	OE05	OPOE005C	13254	SELECT GROUP_NUMBER , BO_RELEAS			
9	CTVB	OE05	OPOE005C	13113	SELECT ACCOUNT_NUMBER , GROUP_N			
10	CTVB	OE05	OPOE005C	13201	SELECT ACCOUNT_NUMBER , GROUP_N			
11	CTVB	OE05	OPOE005C	12743	OPEN PROMO-CURSOR			
12	CTVB	OE05	OPOE005C	12752	FETCH PROMO-CURSOR INTO :PROMOTI			
13	CTVB	OE05	OPOE005C	12773	CLOSE PROMO-CURSOR			
14	CTVB	OE05	OPOE005C	8136	SELECT PROMOTION_STATUS , PROMOT			
15	CTVB	OE05	OPOE005C	8213	SELECT PROMOTION_KEY , ORDER_NUI			
16	CTVB	OE05	OPOE005C	12114	SELECT COUNT (*) INTO :WS-DATA-COU			
17	CTVB	OE05	OPOE005C	14084	OPEN PROMO-PRODS			
18	CTVB	OE05	OPOE005C	14088	FETCH PROMO-PRODS INTO :PROMOTIO			
19	CTVB	OE05	OPOE005C	14099	CLOSE PROMO-PRODS			
20	CTVB	OE05	OPOE005C	14121	SELECT PUB_DATE_TO INTO :PROMOTIC			
21	CTVB	OE05	OPOE005C	14041	SELECT PRIMARY_SERV_CNTR INTO :WS			
22	CTVB	OE05	OPOE005C	14239	SELECT DISC_NET_PRINT_IND , FREIGHT			
23	CTVB	OE05	OPOE005C	x'1ECBC'	CALL OPCO015O (LINK) IN CO2 ←			
24	CTVB	OE05	OPCO110B	301	SELECT PACK_QTY INTO :HV-FIELDS.HV			
25	CTVB	OE05	OPOE005C	x'1F050'	CALL OPCO005O (LINK) IN CO2 ←			

Captured Call Path Information – Process View

Files Accessed and How Accessed

Type	Table/File Name ‡	Identifier	C ‡	R ‡	U ‡	D ‡	Total
DB2	TOPACCOUNTSCHEDULE	DVT2		1			1
DB2	TOPBOOKORDHEADER	DVT2		1			1
DB2	TOPCOTIMPRINTPRFL	DVT2		1			1
DB2	TOPDISCOUNTACCUM	DVT2	2	2	2		6
DB2	TOPDISCOUNTMATRIX	DVT2		1			1
DB2	TOPFACILITYID	DVT2		1			1
DB2	TOPFPBACKLOG	DVT2			1		1
DB2	TOPGROUPPROFILE	DVT2					
DB2	TOPGRPACCTPRFL	DVT2					
DB2	TOPISBNPACKTYP	DVT2					
DB2	TOPPDACCTPRFL	DVT2					
DB2	TOPPRBKLINEITEM	DVT2					
DB2	TOPPRBKORDHEADER	DVT2					

Columns Accessed and How Accessed

Table/File ‡	Name ‡	Identifier	C ‡	R ‡	U ‡	D ‡	All Stmts
TOPDISCOUNTACCUM	ACCOUNT_NUMBER	DVT2	2				6
TOPDISCOUNTACCUM	BACKLIST_QUANTITY	DVT2	1	1	1		3
TOPDISCOUNTACCUM	COMBIN_BL_NEW_IND	DVT2	1	1			2
TOPDISCOUNTACCUM	DISC_ACCUM_CODE	DVT2	2	1			3
TOPDISCOUNTACCUM	DISC_SCHEDULE_CODE	DVT2	2				6
TOPDISCOUNTACCUM	FRONTLIST_QUANTITY	DVT2	2	2	2		6
TOPDISCOUNTACCUM	GROUP_NUMBER	DVT2	2				6
TOPDISCOUNTACCUM	ORDER_NUMBER	DVT2	2				6

Call Statements Accessing a Specific File

	Inst #	Pgm/Pkg	Stmt #	Statement ‡
+	63	OPCO005O	1642	SELECT FRONTLIST_QUANTITY INTO :HV-DA-TOPDISCOUNTACCUM.H
+	63	OPCO005O	1655	INSERT INTO TOPDISCOUNTACCUM (ORDER_NUMBER , GROUP_NU
+	63	OPCO005O	1786	SELECT COMBIN_BL_NEW_IND , DISC_ACCUM_CODE , FRONTLIST_
+	63	OPCO005O	1804	INSERT INTO TOPDISCOUNTACCUM (ORDER_NUMBER , GROUP_NU
+	63	OPCO005O	1937	UPDATE TOPDISCOUNTACCUM SET FRONTLIST_QUANTITY = :HV-DA
+	63	OPCO005O	1967	UPDATE TOPDISCOUNTACCUM SET FRONTLIST_QUANTITY = :WS-V/

Captured Call Path Information – Data View

IBM Business Partner

PathPoint Software, Inc.
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PathPoint Software

Dynamic Discovery for Mainframe Applications

Breakthrough Dynamic Technology

Without any change to application source code, PathPoint *dynamically* captures the application-processing path followed by a specified, *user-entered*, business transaction(s) as it executes on the mainframe. In minutes, application information is captured on the mainframe and downloaded to a PC relational warehouse. Users are provided with factual information about the application, including, in the actual sequence of execution:

- Input and output screens
- Programs called
- Call statements issued
- Tables/files accessed
- How tables/files are accessed

Access to accurate information provides an unmatched understanding of mainframe applications – knowledge based upon *dynamic* execution-based fact.

Step 1 – Enter Business Transactions

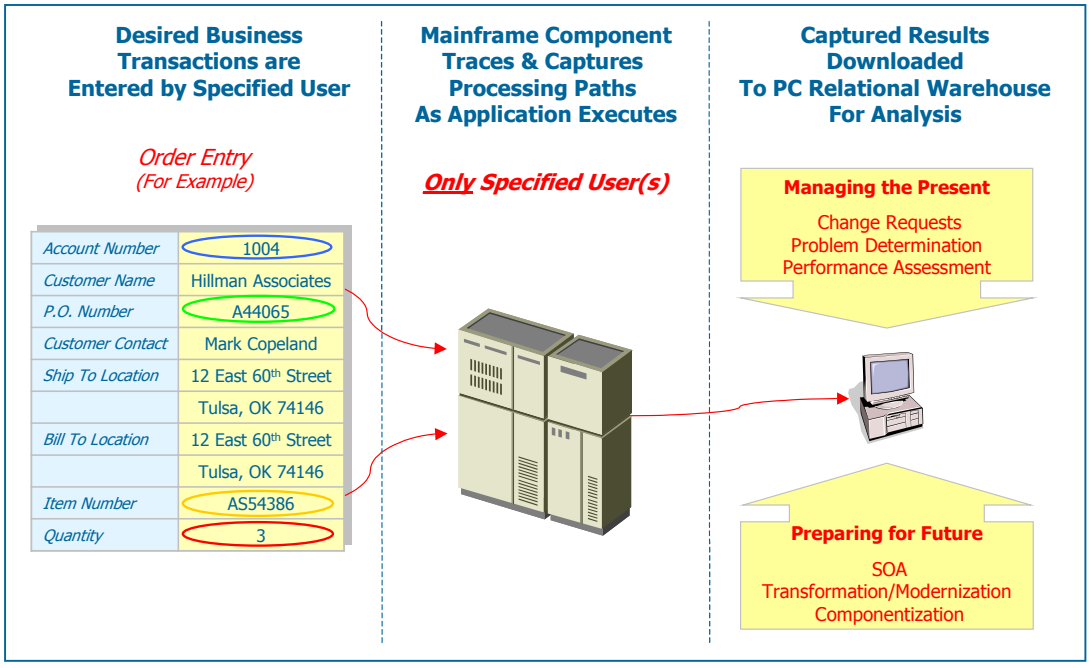
A specified (by user-id) mainframe user simply enters a desired business transaction (enter an order, for example) in either the test or production environment. The PathPoint Mainframe Component *dynamically* traces and captures the application processing paths followed by the entered business transaction. Captured information is then downloaded to the PathPoint PC Analyst Workstation relational warehouse for analysis.

Step 2 - Analyze Captured Information

The PathPoint PC Analyst Workstation, with its relational database, enables users to gain rapid point-and-click access to mainframe application processing information – users now understand how the application really works. Information is organized hierarchically in business terms, simplifying access and understanding:

Features at a Glance

- Captures, in sequence, the application processing activity for user-specific business transactions
- Programming language independent
- No change to source code required
- Supports online and batch environments
- Provides application performance information at the call statement level
- Captures terminal and non-terminal entered business transactions
- Follows application processing activity across multiple CICS regions
- Provides CRUD matrix of call activity to tables/files and field/column level



Platform Support

Operating Systems
- *MVS (z/OS and OS/390)*

TP Monitors
- *CICS*
- *IMS*

Data/File Access
- *DB2*
- *IMS*
- *VSAM*
- *Temp Storage*
- *Transient Data*

Batch Environments
- *DB2 Batch*
- *IMS Batch*

PathPoint is Easy to Use

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