

CA Product Demonstrations: Show and Tell

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Abstract

Along with developing new features for CA IDMS itself, the CA IDMS team has been busy integrating CA IDMS with other CA and vendor products to help you get the most value from CA IDMS. Come to this session to see how you can use CA Data Content Discovery to identify Personally Identifiable Data in your CA IDMS databases to improve security and privacy compliance. Also get a sneak peak of the new CA IDMS MQ Adapter feature that is being developed.



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Agenda

- 1 DATA-CENTRIC MAINFRAME SECURITY AND THE GDPR
- 2 DATA CONTENT DISCOVERY DEMONSTRATION
- 3 CA IDMS MQ SNEAK PEAK



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Data-Centric Mainframe Security and the GDPR

Data content discovery demonstration



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Agenda

- 1 IT'S ALL ABOUT THE DATA
- 2 WHAT'S THE DEAL WITH MAINFRAME DATA
- 3 THE IMPACT OF REGULATIONS
- 4 THE MAINFRAME AND THE GENERAL DATA PROTECTION REGULATION
- 5 CA'S DATA-CENTRIC TAKE ON MAINFRAME SECURITY AND COMPLIANCE



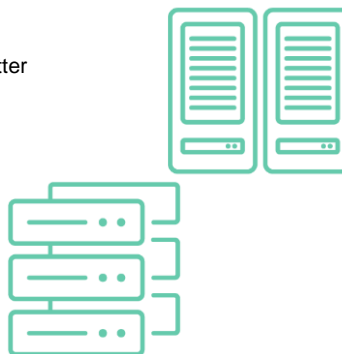
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Data is an asset

- Data *is* business value
 - Consider Facebook, Google, Uber, Twitter
- Industries depend on data
 - Banking, Insurance, Healthcare
- By 2020 there will be:
 - 44 zettabytes of data
 - Over 6 billion smart phones
 - 50 billion smart devices



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But, data is also a Liability

- Highly regulated
 - Industry, National, International
 - Data Protection Act, GDPR, Privacy Shield
- It gets personal, quickly!
 - PII must be managed
 - Who owns it? What are you allowed to do with it? Delete it when requested
- Data - the keys to the future
 - Business strategy, digital secrets, financial posture



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Here's the challenge with data:

3,141

Breaches with confirmed data loss in past year



146

Days infiltrated before detection



\$20

Average price for Credit Card on Black Market



10,490

Incidents from privilege misuse



- Mandiant Mtrrends report 2015
- Verizon Data Breach Investigations Report 2016



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And don't forget about those industry regulations

GDPR

- Prove that data is being protected
- Appoint a data protection officer
- Fines of 4% of annual turnover

UK Data Protection Act 1998

- Information Commissioners Office
- Wide scope
- Consent
- Cross industry



PCI DSS

- Protect stored cardholder data
- Encrypt transmissions
- Maintain InfoSec policy

EU-U.S. Privacy Shield

- U.S. Department of Commerce and European Commission
- Individual choice & control
- Security



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80% of all corporate transactional data still reside on mainframes

The mainframe acts as **the enterprise IT server** and has more entry and exit vectors.

We must protect the mainframe and all business critical data as the strategic assets that they are, plus ensure easily confirmed regulatory compliance.

Years in the making...



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Why locating data on the mainframe is a problem

CHALLENGES

- ❑ Copies of sensitive production data exist
- ❑ Files with possible sensitive data are accidentally sent to outside parties without validation
- ❑ The Mainframe was processing transactions before many compliance regulations were introduced
- ❑ Large portions of PII data were collected and distributed with no tracking



REALITY

Existing mainframe content discovery tools migrate off the mainframe to PCs or other devices to scan



RESULT

Organizations are neither prepared for or confident in an audit!



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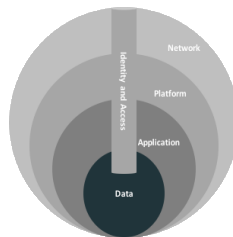
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How data-centric mainframe security helps

Start with the Data



Understand What Data Is At Risk



Monitor Access To the Data



Limit Access



- Security often views the world from the edge inward - maintaining defenses from external threats
- Mainframe is usually deep within the network under several layers of security, but vulnerable to credential theft and insider threat
- Examine Mainframe Security from the bottom up



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The solution: CA Data Content Discovery

Find, classify, and protect to effortlessly facilitate regulatory compliance



Review the Regulations

GDPR and EU-US Privacy Shield



Understand the Risks

Of not knowing where sensitive data resides



Know How to Comply

To protect mission essential data



Find, Classify and Protect

To effortlessly facilitate regulatory compliance

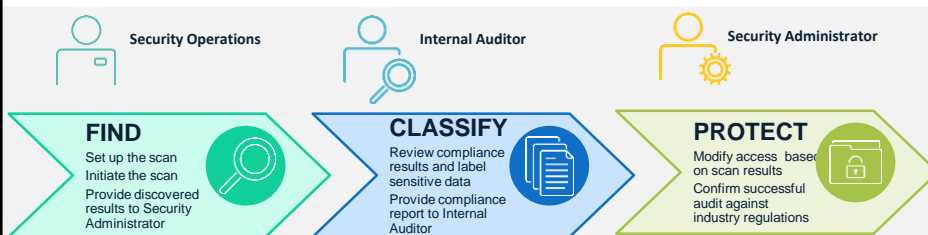


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CA Data Content Discovery



10+ Filetypes

130+ Classifiers out of the box:

- PCI, HIPPA, PII, etc.

Custom classifiers

- Identify who has access to what data
- Identify who accessed data



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Protect it: Who has access to the sensitive data?

CACD.TEST.DATA

ESM Name	Response Message	Request Date and Time
ACF2	DCD2300I - WHO HAS ACCESS BASED ON THE ACF2 "ACCESS" SUBCOMMAND	5 Oct 2015, 3:08:31 pm

User Id	User Name	Execute	Read	Update/Write	Alter/Alloc
ALLJE05	JEFF ALLMAN	✓	✓	✓	—
BAYJO02	THE BAY	✓	✓	✓	—
CHEJE18	CHERRINGTON, JEF	✓	✓	✓	—
DCDADM		✓	✓	✓	—
DCDUSER	DCD MINION	✓	✓	✓	—
GUUSA02	SAI	✓	✓	✓	—
HANVI09	VIRVA	✓	✓	✓	—
HARDE10	FULL COURT	✓	✓	✓	—



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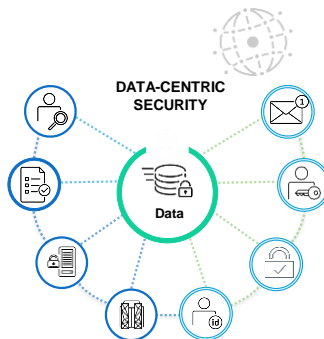


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Data-centric security as a competitive advantage

CA Data Content Discovery

- **Find** sensitive data, that may be lost hidden or abandoned
- **Classify** discovered data based on sensitivity level for compliance
- **Protect** the enterprise and mitigate data breach risks



CA Compliance Event Manager

- **Alert** in real-time to violations of critical security systems and resources
- **Inspect** security issues deeper, with comprehensive reporting and forensics
- **Protect** to simplify regulatory compliance and mitigate negative security events



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Questions?



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Demo

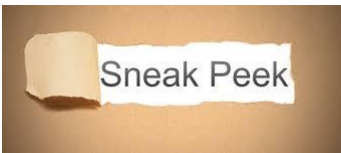
4854980601822184	John	Smith	JohnSmith@gmail.com
377701267044004	Mike	Wilson	Mikew@gmail.com
343381482396868	Bob	Dole	Bdole@gmail.com
376885764163762	Hank	Anderson	hankson@gmail.com
376885764163762	Hank		
		Anderson	
			hankson@gmail.com



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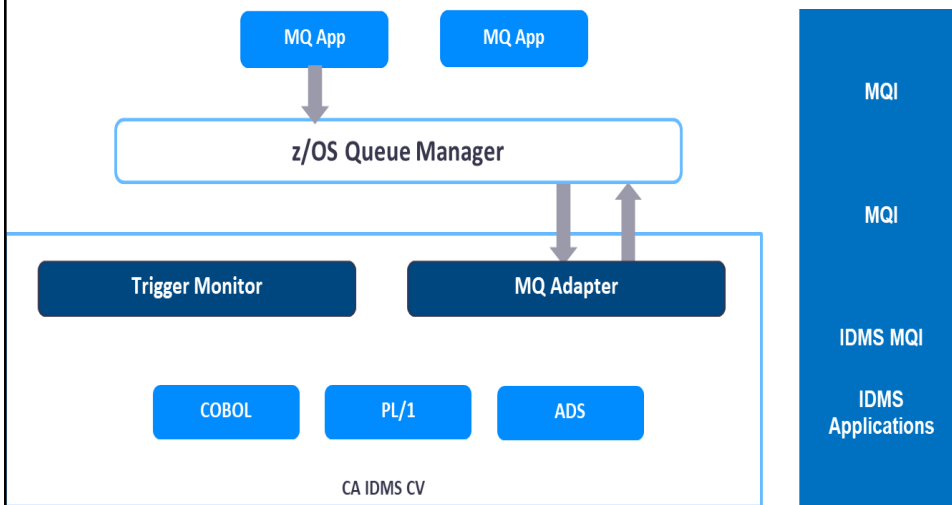
CA IDMS 19.0 MQ



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CA IDMS MQ Adapter



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CA IDMS MQ Project Status

- Agile development process
- Validation customers
- Deliver working code for customer feedback
 - Test APAR
 - Documentation in PDF format
- Initial validation



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CA IDMS MQ Adapter API

Included in Initial Validation APAR

- | | |
|-----------|----------------------------|
| • MQBACK | • Back out changes |
| • MQCLOSE | • Close object |
| • MQCMIT | • Commit changes |
| • MQCONN | • Connect queue manager |
| • MQDISC | • Disconnect queue manager |
| • MQGET | • Get message |
| • MQOPEN | • Open object |
| • MQPUT | • Put message |



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CA IDMS MQ Adapter MQ CV Startup changes

- During CV startup, MQ initialization for the CV is performed

```
IDMS DC013017 V197 T0 SECURITY SYSTEM INITIALIZATION COMPLETE
IDMS DC131000 V197 T0 MQ: Initialization starting
IDMS DC131001 V197 T0 MQ: Initialization is complete. MQ is active
IDMS DC088071 V197 T0 Initialization TCP/IP environment started.
```

- An MQ Queue manager is defined in SYSGEN

```

                                SYSGEN 19.0      NO ERRORS      DICT=SYSTEM
DIS MQ.
*+   ADD MQ
*+   STATUS IS ENABLED
*+   QUEUE MANAGER IS IDM2
*+   .
```



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CA IDMS MQ Adapter

IDMS ADS dialog demo using IDMS MQ API



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CA IDMS MQ Adapter MQ ADS Demo

- MQOPEN using Output option

```

tpx.ca.com
QW53270 Edit View Options Tools Help
IDMSMQMM IDMS MQ DEMO

-----
FUNCTION      : MQOPEN      FUNCTION OPTION  : 00000016 PF1 FUNCTION HELP
QUEUE MANAGER : IDM2
QUEUE         : CAMQTS.SID.SYS0197

MSG DATA     :

1-INPUT AS Q DEF  16-OUTPUT  8192-FAIL IF QUIESE

-----

QUEUE MANAGER : IDM2
FUNCTION       : MQOPEN
COMPLETION CODE : 00000000
REASON CODE    : 00000000

MSG DATA      :

HIT ENTER TO EXECUTE FUNCTION
  
```

CA IDMS MQ Adapter MQ ADS Demo

- MQPUT using Syncpoint option

```

tpx.ca.com
QW53270 Edit View Options Tools Help
IDMSMQMM IDMS MQ DEMO

-----
FUNCTION      : MQPUT      FUNCTION OPTION  : 00000002 PF1 FUNCTION HELP
QUEUE MANAGER : IDM2
QUEUE         : CAMQTS.SID.SYS0197

MSG DATA     : TESTING MQPUT WITH SYNCPOINT

-----

QUEUE MANAGER : IDM2
FUNCTION       : MQPUT
COMPLETION CODE : 00000000
REASON CODE    : 00000000

MSG DATA      : TESTING MQPUT WITH SYNCPOINT

RETURNED FROM MOPUT
  
```

CA IDMS MQ Adapter MQ ADS Demo

- Browsing Queue contents after MQPUT

```

tpx.ca.com
QW53270 Edit View Options Tools Help
SYSVIEW 15.0 CA11 --- MQBROWSE.DETAIL, MQ Message Browse ---- 04/25/18 13:44:03
Command =====>
-----
Jobname IDM2MSTR ASID 0380 Jobid STC41757 MQ 8.0.0 Qmgr IDM2
Queue CAMQTS.SID.SYS0197 Seqno 1
Options CONFIRM DLH XQH DEFCONTEXT
-----
MQMD_PUTAPPLNAME MQAT_ZOS
MQMD_PUTDATE CL28'SYS0197'
MQMD_PUTTIME CL8'20180425'
MQMD_APPLORIGINDATA CL8'17432942'
CL4' '
-----
Message Data
37DE52A0 00000000 E3C5E2E3 C9D5C740 D4D8D7E4 E340E6C9 *TESTING MQPUT WI*
37DE52B0 00000010 E3C840E2 E8D5C3D7 D6C9D5E3 40404040 *TH SYNCPOINT *
37DE52C0 00000020 40404040 40404040 40404040 40404040 * *
37DE52D0 00000030 40404040 40404040 40404040 40404040 * *
37DE52E0 00000040 40404040 40404040 40404040 40404040 * *
37DE52F0 00000050 40404040 40404040 40404040 40404040 * *
37DE5300 00000060 40404040 40404040 40404040 40404040 * *
-----
1-HELP 2-SPLIT 3-RETURN 5-EXIT 7-UP 8-DOWN 9-SWAP 10-LEFT 11-RIGHT 12-RECALL

```

CA IDMS MQ Adapter MQ ADS Demo

- MQGET using No Wait option

```

tpx.ca.com
QW53270 Edit View Options Tools Help
IDMSMQMM IDMS MQ DEMO
-----
FUNCTION : MQGET FUNCTION OPTION : 00000000 PF1 FUNCTION HELP
QUEUE MANAGER : IDM2
QUEUE : CAMQTS.SID.SYS0197
MSG DATA :
0-NO WAIT 1-WAIT 8-SET SIGNAL
-----
QUEUE MANAGER : IDM2
FUNCTION : MQGET
COMPLETION CODE : 00000000
REASON CODE : 00000000
MSG DATA : TESTING MQPUT WITH SYNCPOINT
-----
HTT ENTER TO EXECUTE FUNCTION

```

CA IDMS MQ Adapter MQ ADS Demo

- MQCLOS closing the queue

```

tpx.ca.com
QW53270 Edit View Options Tools Help
-----
IDMSMQMM                                IDMS MQ DEMO
-----
FUNCTION          : MQCLOS  FUNCTION OPTION : 00000000 PF1 FUNCTION HELP
QUEUE MANAGER     : IDM2
QUEUE             : CAMQTS.SID.SYS0197

MSG DATA         :

-----

QUEUE MANAGER     : IDM2
FUNCTION          : MQCLOS
COMPLETION CODE   : 00000000
REASON CODE       : 00000000

MSG DATA         :

RETURNED FROM MQCLOS
Connected to tpx.ca.com port 23                               5/22      NUM      13:46:30 IBM-3270-2- A35T2358

```

CA IDMS MQ Adapter MQ ADS Demo

- MQDISC disconnecting from Queue Manager

```

tpx.ca.com
QW53270 Edit View Options Tools Help
-----
IDMSMQMM                                IDMS MQ DEMO
-----
FUNCTION          : MQDISC FUNCTION OPTION : 00000000 PF1 FUNCTION HELP
QUEUE MANAGER     : IDM2
QUEUE             : CAMQTS.SID.SYS0197

MSG DATA         :

-----

QUEUE MANAGER     : IDM2
FUNCTION          : MQDISC
COMPLETION CODE   : 00000000
REASON CODE       : 00000000

MSG DATA         :

RETURNED FROM MQDISC

```

CA IDMS MQ Adapter MQ ADS Demo

- MQCMIT commit a message after an MQPUT

```

tpx.ca.com
QW53270 Edit View Options Tools Help
IDMSMQMM IDMS MQ DEMO
-----
FUNCTION      : MQCMIT      FUNCTION OPTION : 00000000 PF1 FUNCTION HELP
QUEUE MANAGER : IDM2
QUEUE        : CAMQTS.SID.SYS0197
MSG DATA    :

-----

QUEUE MANAGER : IDM2
FUNCTION      : MQCMIT
COMPLETION CODE : 00000000
REASON CODE   : 00000000
MSG DATA     : MESSAGE BUILT BY MQPUT TO VALIDATE MQCMIT

RETURNED FROM MQCMIT
  
```

CA IDMS MQ Adapter MQ ADS Demo

- MQBACK replacing a message following MQGET

```

tpx.ca.com
QW53270 Edit View Options Tools Help
IDMSMQMM IDMS MQ DEMO
-----
FUNCTION      : MQBACK      FUNCTION OPTION : 00000000 PF1 FUNCTION HELP
QUEUE MANAGER : IDM2
QUEUE        : CAMQTS.SID.SYS0197
MSG DATA    :

-----

QUEUE MANAGER : IDM2
FUNCTION      : MQBACK
COMPLETION CODE : 00000000
REASON CODE   : 00000000
MSG DATA     : MESSAGE BUILT BY MQPUT TO VALIDATE MQCMIT

MESSAGE RETRIEVED PLACED BACK ON QUEUE
  
```

Connected to tpx.ca.com port 23 5/22 NUM 13:47:37 IBM-3278-2 - A55T2358

CA IDMS MQ Adapter MQ ADS Demo

- Verifying that message was returned to the queue

```

tpx.ca.com
QW53270 Edit View Options Tools Help
MQBROWSE.DETAIL, MQ Message Browse ---- 04/25/18 13:48:09
Command =====>
----- Lv1 6 Row 31-45/49 Col 1-79/176
Jobname IDM2MSTR ASID 0380 Jobid STC41757 MQ 8.0.0 Qmgr IDM2
Queue CAMQTS.SID.SYS0197 Seqno 1
Options CONFIRM DLH XQH DEFCONTEXT
-----
MQMD_PUTAPPLNAME      MQAT_ZOS
MQMD_PUTDATE          CL28'SYS0197'
MQMD_PUTTIME          CL8'20180425'
MQMD_APPLORIGINDATA   CL8'17470421'
CL4' '
-----
Message Data
37DE52A0 00000000 D4C5E2E2 C1C7C540 C2E4C9D3 E340C2E8 *MESSAGE BUILT BY*
37DE52B0 00000010 40D4D8D7 E4E340E3 D640E5C1 D3C9C4C1 * MQPUT TO VALIDA*
37DE52C0 00000020 E3C540D4 D8C3D4C9 E3404040 40404040 *TE MQCMIT *
37DE52D0 00000030 40404040 40404040 40404040 40404040 *
37DE52E0 00000040 40404040 40404040 40404040 40404040 *
37DE52F0 00000050 40404040 40404040 40404040 40404040 *
37DE5300 00000060 40404040 40404040 40404040 40404040 *
-----
1=HELP 2=SPLIT 3=RETURN 5=FIND 7=UP 8=DOWN 9=SWAP 10=LEFT 11=RIGHT 12=RECALL

```

Summary

- CA Data Content Discovery enhances security and compliance for CA IDMS databases and applications
- Preview of the CA IDMS MQ Adapter that will enable on-line CA-IDMS applications to exchange messages with other applications when connected to an IBM MQ Queue Manager on z/OS
- More validation users are welcome!

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Questions & Answers





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The speaker was prepared and knowledgeable of the subjects covered	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:					
The session met my expectations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:					
The material is relevant to my current job	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:					
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Comments:					
The session length was appropriate for the content	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:					
This session could be used as a reference	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:					
General Comments:	<div></div> <div></div> <div></div> <div></div> <div></div> <div></div>				



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